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**EKONOMIKA UN SABIEDRĪBAS  
PĀRVALDĪBA**  
*ECONOMICS AND PUBLIC  
ADMINISTRATION*



## ASSESSMENT OF THE IMPACT OF THE EU STRUCTURAL FUNDS ON BUSINESS IN LATVIA

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**Abstract.** *The aim of the paper is to examine the administration of EU structural funds and their influence on business development. The main problem analysed in the paper is administration of the EU structural funds and their implementation in Latvia, the impact of the activities funded by the EU funds onto business development. In the research, information about the essence and policy of the EU structural funds is analysed, including information about the aspects of formation and influence of the EU structural funds, the basic business principles and factors influencing its development, as well as funding by the EU Structural Funds as an instrument for facilitation of business development. In the research, administration of the EU structural funds, the legal framework, and an evaluation of the funds' administration in Latvia, the activities of the EU structural funds for business development in the programming period 2007–2013, influence of the priority “Business development” upon business development in Latgale region, as well as future prospects are discussed. The aim of the paper is to examine the administration of EU structural funds and their influence upon business development. The subject of the research is the impact of EU funds onto business development. In the paper, the following research methods are used: the descriptive or monographic method, aggregation of information, analysis of documentation, statistical analysis, graphical, and the expert method. According to the obtained results, the authors conclude that the activities funded by the EU Structural Funds provide support for enterprises for innovative business development, and increase competitiveness of enterprises, as well as overall business activity.*

**Keywords:** *business incubators, business development, EU funding, EU structural funds, SMEs*

### **Introduction**

The aim of the paper is to examine the administration of EU structural funds and their influence upon business development. The subject of the research is the impact of EU funds onto business development. In the paper, the following research methods are used: the descriptive or monographic method, aggregation of information, analysis of documentation, statistical analysis, graphical, and the expert method. The following tasks are set to achieve the

objective:

1. To explore the programmes of the EU Structural Funds that focus on business development and their impact in Latgale region.
2. To carry out a survey of experts and to analyse the survey data on the measures funded by the EU Structural Funds and efficiency of activities during the EU planning period 2007 – 2013.
3. To define the strengths and weaknesses of the EU Structural Funds' Responsible Authorities in absorption of EU structural funds in the planning period of 2007 – 2013.
4. To define the opportunities and threats of the EU Structural Funds' Responsible Authorities for effective absorption of EU structural funding in the planning period of 2014 – 2020.
5. To draw conclusions and make proposals on introduction of business support tools in Latvia in the planning period of 2014 – 2020 and to recommend the most necessary activities for ensuring business development in Latgale region.

The hypothesis: the EU Structural Funds' activity “Business incubators” is one of the three activities that have left a significant impact on business development.

Latvia became a member of the EU in 2004, and it created opportunities for sustainable development. In ten years from joining to the EU, Latvia had access to more than 10.4 billion euro from the EU Structural Funds and Investment Funds that could be attracted for development. As the result, important infrastructure, transport, communications, water, energy, environmental, cultural, educational and business support projects were implemented, which contributed to the quality of life, prosperity and economic growth. During these years, serious challenges were seen such as the financial crisis of 2008 – 2009, the consequences of which we feel even today, the geopolitical and refugee crisis, world countries' strained relations with Russia and Ukraine. All of these events are topical, because, they have both direct and indirect consequences on business, and businesses have to withstand not only competitiveness in the free market conditions, but also aggravating factors that restrict business operations and development, which, in their turn, have a significant impact on the national economy. Nowadays, it is not enough to have a great product that can be traded for a long time without controlling its life cycle and to expect that it will always be in demand. Today, a consumer of goods and services has become queasy, but it has set the competition between manufacturers. In order to enhance the company's competitive and innovative development, the funding is necessary to achieve the objectives, including not only the investments, internal funding, but also grants, loans, subsidies – any funding an entrepreneur can attract from

external sources. The main problem analysed in the paper is the administration and implementation of the activities funded by the EU Structural Funds, and the impact on business. The novelty of research is the assessed impact of the activities funded by the EU Structural Funds on business activity in Latgale region.

### **Background of the research study**

Regional disparities in the EU are characterized by significant differences in living standards and employment opportunities. In order to smooth out these differences, it is necessary to provide the free movement of individuals, services, goods, and capital in the EU economic space, as well as to apply the competition policy to control the company's operations and protect the interests of consumers. For each region and each sector to benefit from the single market, the European Union has set up an efficient structural policy framework that is managed and financed by the EU. The ESF is the main instrument that Europe uses to support formation of working places, help people to find better jobs and ensure equal employment opportunities for all EU citizens. Efficient and effective implementation of the actions supported by the ESF depends on good governance and partnership between all relevant territorial and socio-economic actors, taking into account players at regional and local level. Funding from the Structural Funds is usually not used for individual projects. The resources are allocated to the development programmes, and each of them has its own budget.

Across the EU28, the contribution of SMEs in the non-financial business sector is considerable. SMEs make up 99.8 % of all enterprises, 57.4 % (LV 72 %) of value added, and 66.8 % (LV 79 %) of employment. In 2015, just under 23 million SMEs in the non-financial business sector generated € 3.9 trillion of value added and employed 90 million people. In general, an economy benefits from a dynamic and constantly changing SME population, in which new products and services are brought to market by new businesses, and firms which are unable to operate on a sustainable basis cease to operate. According to the EU statistical data, the role of SMEs in the economy of the EU has growing significance. It has to be admitted that, in Latvia, SMEs make up 99.8 % of all enterprises. In accordance with the report, the most pressing problems faced by SMEs in Latvia are finding customers and access to funding.

The SMEs face particular problems due to their small size and limited resources. It is problematic to create a new business and obtain the required capital, as well as find the correct type of funding for the expansion of the established business. Due to the limited resources, SMEs, more than larger companies, suffer from bureaucracy and administrative burdens. It is often hard for the companies to keep track of information and communication technology

news and to find qualified staff, as well as to provide them with adequate training and education. In addition, for the business owners, who are retired, it is also difficult to find their successors. Currently, the European SME policy has focused mainly on the following five priority areas:

- enhancing entrepreneurial skills,
- improvement of SMEs access to markets,
- bureaucracy control,
- improvement of SMEs growth potential,
- consultations with the parties interested in SMEs (MVU rokasgrāmata, 2016).

The experts' method was applied to determine the following:

- which measures and activities funded by the EU Structural Funds in the planning period of 2007 - 2013 have had a significant effect on business development in Latvia;
- the strengths and weaknesses of the responsible authorities in absorption of EU structural funding in the planning period of 2007 - 2013;
- the opportunities and threats of the responsible authorities for effective absorption of EU structural funding in the planning period of 2014 - 2020;
- introduction of activities, which would be necessary for business development in Latgale region.

The introduction of innovations in small and medium-sized enterprises is hindered by the lack of own resources; as well the companies face a number of obstacles and greater uncertainty than large enterprises. The studies by economists Wang and Costello show that the level of SME innovation depends on the company's financial and human resources (Wang & Costello, 2009); however, Todtling and Kaufman indicate that these problems can be partially solved by the integration of enterprises in the networks, innovation systems and reliance on external partners (Todtling & Kaufman, 2001).

## **Results and discussion**

Latvia, as the EU member since 2004, actively uses the financial support of the EU Funds for the country's economic and social policy development. In the planning period of 2007 – 2013, Latvia's national economy had access to 4.53 billion euro, while the total available amount of 4.4 billion euro was available in the planning period of 2014 – 2020 (ES Struktūrfondu..., 2015). The business environment is gradually improving in Latvia, which is proved by the economic growth and increased business activity – increase in the number of

entrepreneurs, investment in fixed assets, and direct foreign investment. However, the Latvian entrepreneurs will be able to maintain the pace of development and create new well-paid working places only if they become competitive at international level, engage in the innovation process, accrue knowledge, and learn new technologies, as well as capture a high added-value niche in the European and global market. The competition of supply, existing in the market, for satisfaction of demand is the most important prerequisite for innovation and technology development, but the current competition is not effective if the business activity is low and the market is composed of small, static number of businesses. In order to promote these essential market characteristics, including the development of competitiveness, the government policy is required to be implemented in a targeted way. Competition policy in Latvia is focused on the minimization of consumers and market participants' loss of potential market distortion, but it should not be limited only to its identification in the activities of market participants. It is important to pay more attention to the national support measures, including the activities funded by the Structural Funds, in order to avoid the possible distortions of competition at this level as well. With the introduction of the national support measures for entrepreneurs funded by the Structural Funds in 2007-2013, it was determined that the activities must have a clear justification and demonstration that they focus on prevention of the existing market failures and support measures are relevant with the importance of the problems to be solved (Darbības programma..., 2007). In the planning period of 2007-2013, the SF support is primarily provided for society's education, technological excellence, and flexibility of businesses, as well as development of science and research in order to promote the knowledge-based economy development in the country and strengthen other necessary preconditions for sustainable economic growth and people's life in Latvia as a whole. Programming of Structural Funds (SF) and the Cohesion Funds (CF) is implemented at three levels: the EU-level strategy or the Community Strategic Guidelines, the strategy of Member States or the National Strategic Reference Framework (NSRF), and the Operational Programme of the Member States. NSRF, on which is based the distribution of 4.53 billion euro worth SF and CF funding available to Latvia in the planning period of 2007-2013, has been approved by the Cabinet on 19 June, 2007. It was confirmed also by the EC on September 20, 2007. According to the decision of the EU Council of Ministers on the EU's multiannual financial framework for the planning period of 2007-2013, Latvia has received 4.53 billion euro for implementation of the cohesion policy objectives by the means of the EU funds (ERDF, ESF) and the CF (Ziņojums..., 2015).

The following 4 priorities have been included in the operational program “Entrepreneurship and Innovations”:

1. Priority “Science and Innovations” was focused on strengthening of the country's scientific and research potential, enhancing of the international competitiveness, as well as the knowledge transfer and its commercialization. In the measure “Innovations”, support was provided to 187 projects and the development of a knowledge based economy, promoting the technology transfer in national economy, establishment of Riga Science and Technology Park, and manufacturing of new products, in accordance with the following activities – Commercialization of science and technology transfer, Development of new products and technologies, Science and Technology Park, High-value investments (Darbības programma..., 2007).
2. Priority “Access to Finances” was focused on promoting access to finance for business development. The objective can be achieved by formation of a comprehensive system of financial instruments, including guarantees, loans, venture capital, and other financial instruments. The only one measure “Accessibility of Financial Resources” has been implemented within the framework of the priority in order to improve the approach of newly created, small, medium, and large businesses to the loan capital by providing guarantees, high-risk financial instruments, as well as to develop the financial market (Darbības programma..., 2007).
3. Priority “Promotion of Entrepreneurship” was focused on stimulation of economic activity and growth of competitiveness by forming new and strengthening existing businesses. The formation of new businesses, as well as contribution to the competitiveness of enterprises, both nationally and internationally, were promoted in order to achieve these goals. Two measures have been implemented within the framework of the priority (Darbības programma..., 2007).
4. The support to the provision of the program's management functions was provided within the framework of the priority “Technical Assistance”. In order to improve the management of the ERDF, ensure its simplification, efficiency, and reliability of the management system at the same time, it was necessary to provide the attraction of the technical assistance to the insurance of the program's management functions, as well as to support functions. The measure “Assistance for the Management of the Operational Programme “Entrepreneurship and Innovations”” has been implemented within the framework of the priority (Darbības programma..., 2007).

In order to assess the achieved results, efficiency of implemented activities, and process of the funds' administration and implementation, the Experts' survey was carried out. The objective of the survey was to determine, which measures and activities financed by the EU Structural Funds in the planning period of 2007 – 2013 have left a significant impact on business development in Latvia and which should be continued to implement in the planning period of 2014 – 2020. The activities, included in the experts' questionnaire, were asked to be ranked in ascending order of importance from 1 to 12 (1 – major impact). Based on the obtained and summarised data on the Question 1, in which experts had to rank the EU funded activities by their importance to business development (Table 2.3), the authors conclude that the experts consider the following activities having the greatest impact on business development in Latvia: conquering the external markets; business incubators; investment support for micro, small and medium-sized enterprises in especially supported areas.

**Table 1 Experts' rank of activities, listed by importance and based on the Experts' Survey** (Source: compiled by the authors)

Activity No.*	Activity**	Rank***
1	Conquering external markets	2-3
2	Measures to increase motivation, innovation and starting a business	5
3	Business incubators	2-3
4	Investment support for micro, small and medium-sized enterprises in especially supported areas	1
5	Cluster programme	9
6	Commercialization of science and technology transfer	7-8
7	Development of new products and technologies	4
8	Science and technology park	12
9	Investments of high added value	7-8
10	Support for science and research	10
11	Support for international cooperation projects in science and technology	11
12	Development of science and research infrastructure	6

\* Activity No. – activity's sequence number in the Question 1 of the Experts' questionnaire.

\*\* Activity – Title of the activity for business development funded by the EU SF.

\*\*\* Rank – Activities' significance rank, formed by collecting each expert's assessment for each activity, listing them in order of importance.

Although business activity takes place mainly in national and regional development centres, inhabitants have access to the state and municipal services in electronic form at any place in Latvia, as well as in single customer service centres. Even though the publicity measures of the activities implemented are reflected in the information space, the authors believe that a relatively narrow circle of society is aware of the results achieved and the opportunities provided by the EU Structural Funds, so the achieved performance indicators could be higher.

According to data obtained from the experts' survey, it can be concluded that the greatest contribution of the activities funded by the EU funds are of those, which have been implemented directly for business activity stimulation and provision of entrepreneurship in the regions, such as conquering of external markets, business incubators, and investment support for micro, small and medium-sized enterprises in especially supported territories. According to the experts' replies, the authors conclude that the EU Structural Funds' support for the development of innovations is significant, which, as mentioned above, is a business' driving force nowadays. According to experts, the activity of business incubators can be considered as a major and significant contribution to business provision in Latgale region. In order to promote formation and development of micro, small, and medium-sized enterprises, Latvian Investment and Development Agency (LIAA) implemented a co-funded project "Development of Business Incubators in Latvia" together with the ERDF from 2009 to the end of 2014. In 2014, a new procurement of transitional period for business incubator operators was announced, which prolonged the incubation service availability period until 31 October, 2015. The total available public funding of the activity was 28.4 million euro, which was formed by 24.43 million euro (85 %) of the ERDF and 4.31 million euro (15 %) of the national budget of Latvia. The activity "Business Incubators" in Latgale region was implemented by the association "Latgale Machinery and Technology Centre" (LMTC) and the Business Incubator "Ideju viesnīca" that was a business incubator network in Latgale, established in 2009 in order to promote the establishment and development of new, viable and competitive enterprises in Latgale region. The Business Incubator "Ideju viesnīca" was the activity realized by LMTC in the region of Latgale (in the Latgale Planning Region 1 and 2) within the framework of the project carried out by the LIAA.

During the period from 2009 to 2014, Business Incubator "Ideju viesnīca", managed by its operator "Latgale Machinery and Technology Centre", reached the number of 193 SMEs, which meant an increase rate of 13.79 since 2009, that is, up to 88 businesses in Rezekne and 105 in Daugavpils (see Figure 1) by

2014. As a result, the number of working places has increased, which amounted to more than 323 in BI companies by the end of 2014.

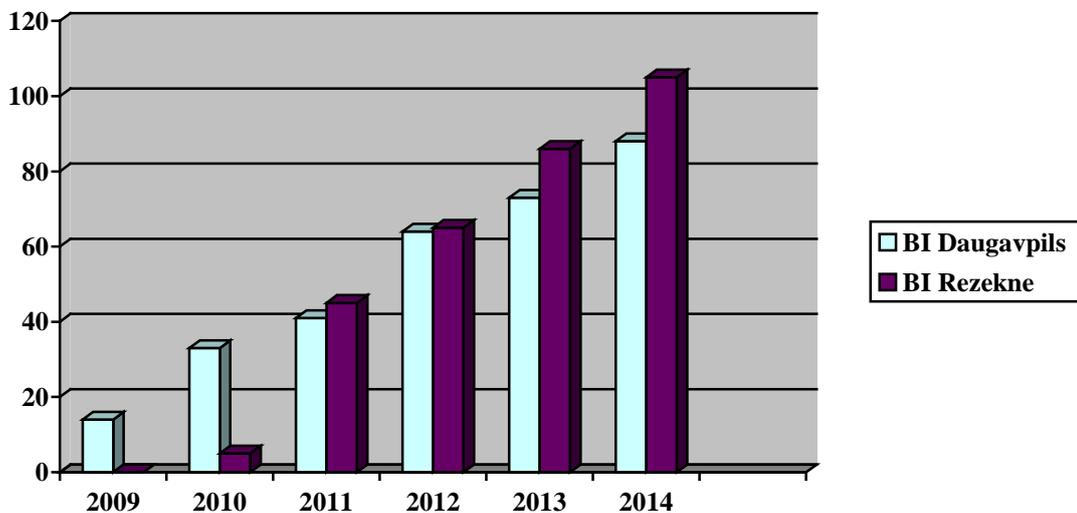


Figure 1. The number of small and medium-sized enterprises in BI “Idea hotel” in Rezekne and Daugavpils from 2009 to 2014 (Source: BI “Idea hotel”)

It can be concluded that the number of businesses was 1.17 times higher in the BI Daugavpils area than in the BI Rezekne area. An important factor is that there is a larger number of population and higher business activity in Daugavpils BI area. New companies widely used the range of services provided by BI, subsidies, aid intensity for specialized or minimum services, absorption of *de minimis* aid amount, support for business start-up, additional funding opportunities, consultation on financial and legal issues or technological processes, participation in international exhibitions and fairs. Essentially, SMEs not only received support for the implementation of their ideas, but also “refunded” that amount by the taxes paid.

The total amount of taxes paid from 2009 to 2014, that is, within the timeframe of the activity, was 393 567.66 EUR, or just by 13.39 % smaller than the amount of *de minimis* received by SMEs. However, the amount of tax payments was 1.79 times higher than the amount of the received *de minimis* in 2014, and it can be concluded that, starting with that moment, the finances committed started to return to the State Treasury in form of tax payments. The companies involved in the activity “Business Incubators” were able to carry out production in a more productive way and to focus on the products' availability on the market with the support and subsidies, using, for example, marketing services. The start of exports is the most popular, fast and easy way for a small company to start international operations; compared to other market acquisition

models, it requires less administrative resources, provides greater leeway and is associated with a lower risk.

The companies of BI "Ideju viesnīca" reached a total turnover of 22 783 729 EUR in the period from 2009 to 2014, 36 % of which are exports to the other countries. The companies of Rezekne's BI have exported by 989 923 EUR more than Daugavpils' BI.

Taking into account experience of the EU funding period of 2007 – 2013, as well as opinions provided by the municipalities and entrepreneurs, the business incubators' implementation model has been changed in the planning period 2014 – 2020. The program's implementation in the previous period demonstrated that the incubation services for new entrepreneurs are needed in whole Latvia, but they were available only in certain regions and of very different quality. In the future, the incubation services to the regions will be provided by LIAA, developing structural units outside Riga.

The EU funds provide support for new SMEs directly at early stages of development and when they are shifting to other markets, introduce new products and innovation, in the case of precarious economic situation in the country and the world; the BI services help to find solutions to the problems or provide ideas for new directions of development.

Based on the Experts' replies on what should be done to develop business in the region of Latgale effectively, the authors conclude that the most important activities are the following:

- implementation of infrastructure development projects in the cities of national significance and regional centres, including infrastructure of streets and roads, engineering communications;
- provision of the financial resources' availability for regional businesses (co-funding and pre-funding of projects);
- provision of support for new micro and small businesses for manufacturing and development of new services (investment in modernization of production facilities, investment in business infrastructure, investment in production equipment);
- introduction and promotion of private accelerators;
- attraction of new investors in order to ensure the development of technology, IT and manufacturing;
- successful implementation of the Latgale Special Economic Zone to encourage business development and investment attraction;
- support and promotion of the creation of new jobs as well as the establishment of business with the use of grants;
- provision of quotas for regions when planning the resources, thereby ensuring smooth resource allocation throughout the country.

### **Assessment of EU structural fund administration in Latvia**

In order the EU Structural Funds' statistics on the funding spent would show not only the amount of money invested in co-funding of various projects, but as well the indicators achieved by, for example, an increase in production and exports, the strictly designed administration procedure and set out obligations and responsibilities of the EU fund management institutions are required. The Ministry of Finances as the managing authority of the EU fund administration continuously has carried out the EU funds management system upgrades in the planning period of 2007 - 2013, and the State Control office's audit in addition is a positive assessment of the external auditor that allows improving the system even more significantly. Due to the fact that the duties of the Responsible Authority for the EU funds was carried out by 8 ministries and the State Chancellery in the planning period of 2007-2013, each of these institutions was responsible for ensuring that the project activities and implementation of the activities facilitate the development of the sector represented by the ministry and it would be implemented, based on the sector development policy. Based on the Expert's Survey and collecting the responses to the questions on the strengths and weaknesses of the Responsible Authorities in the EU Structural Funds planning period of 2007-2013, the authors have carried out SWOT analyses.

#### Strengths:

- Clear system and methodology for fund resources' administration;
- Informative campaign, workshops, etc. on calls for project proposals;
- Experience in the administration of the EU funds;
- Teams of specialists who coordinate the implementation of activities;
- Knowledge of the sector;
- Electronic management information system;
- Ensured access to the Structural Funds in all the territory of Latvia.
- Weaknesses:
- Exaggerated bureaucratic requirements;
- Incompetence of officials;
- Delayed or late project implementation deadlines;
- Requirement changes during the project implementation;
- Fragmented support programme that makes the administration process difficult;
- Turnover of staff;
- Lobbying;
- Little assistance to the support beneficiaries;

- Planning of business promotion activities and measures, without taking into account regional specificities;
- Inflexibility and inability to adapt to changing business environment conditions;
- Too slow cash returns to projects' implementers.

According to the Experts' survey, the authors conclude that the experts welcome the results the Responsible Authorities' work in their responses, because, in essence, they have had a positive impact on each industry, representing the Responsible Authorities. The authors found that the greatest advantage is the competence of the Responsible Authorities and the availability of information about the industry, represented by the Ministry, and experience in the implementation of the EU funds. Although the electronic systems, which facilitated the submission of projects, reports, etc. documents, were introduced at the end of the planning period of 2007 - 2013, however, bureaucratic requirements were mentioned by the experts as the most negative aspect. The planned income often does not outweigh the investments, provided in order to obtain the EU funding. As pointed out by the experts, the excessive use of legislative norms often takes place. The authors concluded that the factor, which hinders the development of regions and does not give the expected results, is the planning of business promotion activities and measures, without taking into account regional specificities and needs. Conclusion is the following: a full research, where the region's residents, operating companies, representatives and support beneficiaries of municipalities, educational institutions, and intermediary bodies have a key role, on each region is not carried out in the development process.

The authors conclude that it is a voluminous work in the preparation, implementation, and monitoring and evaluation process. Starting the planning period of 2014 - 2020, the aspects, forming a negative impression on the EU Structural Funds' administration, must be taken into account first and foremost. On the basis of the Experts' Survey and the replies to the question on the opportunities and threats of the Responsible Authorities of the EU Structural Funds for an effective absorption of EU structural funding in the planning period of 2014 - 2020, the authors concluded that the effectiveness of structural funding absorption can be achieved by optimization of the bureaucratic requirements and project implementation procedures for the applicants, reducing the deadlines of the project evaluation, cash return, etc.

Opportunities:

- Reduced bureaucratic requirements, imposed by the national government to the businessmen' projects;
- Reduced deadlines of the project evaluation and decision-making;

- Closer cooperation with the industry associations and private sector;
- Quick response to changes in financial outturn distribution of the specific support objectives;
- Development of the interim results' achievement system;
- Consideration of the procurement process as force majeure that significantly changes the duration and sums of a well-planned project;
- Usage of the lessons learned from the previous period, planning of activities that are important for Latvian and regional business environment;
- Usage of the business support institutions established in the previous programming period in order to continue the current job successfully.

Threats:

- Lack of financial resources for pre-financing of the businessmen projects and co-funding for their businesses, reduced aid intensity for businessmen projects;
- Reduced number of applicants for the EU Structural Funds' projects due to the limited financial resources and restricted programmes;
- Lost time in connection with adoption of the Cabinet regulations;
- Amendments to the Public Procurement Law. Inability to perceive the enforcement security of the Procurement Law in municipalities as force majeure and thereby contributing to the realization of low-quality projects;
- Too diligent execution of the EU regulation norms, despite the fact that Latvia may apply only those provisions, which have been incorporated into the Latvian legislation;
- Implementation of too risky projects, thus not reaching the expected results. Reputation of the responsible authorities may suffer due to the incomplete assessment of risks;
- Falling behind the absorption of means and losing funding after the interim evaluation.

Introduction of the EC initiative's E-cohesion is set a priority in the EU funds project administration, providing the opportunity to organize the movement of all of the project related documentation electronically. Document storage, reporting and other processes and the external environment of the EU funds' Management Information System, available to the beneficiaries, are carried out electronically. The implementation of additional functionality, including the possibility to submit the project application electronically, is envisaged in the planning period of 2014 - 2020. The number of the institutions, involved in the EU funds management, is reduced in the planning period of 2014 - 2020, which will be reflected in the EU funds communication process. The

investment process of the EU funds' investment becomes simplified, decreasing the bureaucratic barriers. There is a possibility that this will ensure greater transparency, as well as effective and planned communication will lead to a higher level of understanding of different target groups on the effectiveness and benefits, implemented by the EU funds and provided to each resident of Latvia. According to the Experts' replies, the amendments in legislation, the Public Procurement Law, the rules for implementation of activities and requirements cause threats. Negative effects can be caused by falling behind the adoption of Regulations of the Cabinet of Ministers on the coordination of the European Union funds' support programmes. In the long term, it can lead to unused funding that could be invested in development by the aid applicants. Despite the positive examples and the work done by the Responsible Authorities in the previous planning period, the introduction of high-risk projects, which have been unable to achieve the necessary results, have formed negative effects. Due to inadequate assessment of risks and monitoring, reputation of the Responsible Authorities has decreased.

Based on the replies, submitted by the Experts, it can be concluded that the most important task for the effective absorption of the structural funding is to set goals, objectives and directions, where the development of the national economy will be guided. The invested funds can produce results if they are used wisely and for solving the most important issues.

### **Conclusions and suggestions**

Both the Experts and the author consider that a major and significant contribution to the business provision in Latgale region is the activity of the business incubators – a structural unit, established for the encouragement of the national or regional economy and social development, and whose task is to evaluate and support start-ups and growth of new business.

When developing the EU funds' planning documents and regulations of the Cabinet of Ministers, providing the implementation of activities or measures, the institutions involved in EU fund management (the Ministry of Finances as the Managing Authority) and the responsible authorities (sector ministries) should set guidelines that will reduce the bureaucratic requirements, the number of procedures and time in the project implementation process, deadlines of project evaluation, submission of documents in the “paper” version and money return, and will increase the number of beneficiaries who will receive EU funding for operational growth, thus increasing competitiveness in the local and export markets, sales and profits.

When developing normative acts for the administration and implementation of EU structural funding, the Ministry of Finance and sector ministries should

analyse the economic situation in the country and the world and predict the potential risks in the activities/programme implementation process and determine the guidelines and solutions precisely to ensure that no requirement changes will appear during the project implementation that would hinder the implementation of the projects, increase expenses of the aid beneficiary, and cause the delay or failure of the project implementation.

When creating the business incubators in the centres of national importance and their structural units, the Ministry of Economics and LIAA should ensure regular publicity events, *online* or off-site seminars, guest lectures in the city and regional centres, schools, higher education institutions, which will be information provided on the BI services and support opportunities in order to encourage and motivate young entrepreneurs and authors of ideas to take up economic activities. As a result, the number of employees, the amount of taxes paid, the territory's competitiveness and investment in the region will increase.

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# SCIENTIFICALLY GROUNDED CONCEPTIONS, THEORIES AND SCHOOL PRINCIPALS PROFESSIONAL DEVELOPMENT VARIATIVE MODULES

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**Abstract.** *At present, there is an objectively determined process of the formation of a new type of education paradigm that envisages both in content and in organization passage from an informational-reproductive model to that of creative search. Solution of these problems requires operative organization in Latvia of the growth of professional competence of education institution principals as managers in the sphere of education.*

*Investigation of the professional development of education institution principals sets as imperative the philosophical approach of constructivism and the communicative approach. Both conceptual approaches make it possible to elaborate a scientific conception that includes several variative modules that secure a multi-dimensional view of the professional development of education institution principals.*

*Professional competence of education institution principals is a complex notion with manifold content. It comprises a dynamic combination of knowledge and personality traits for the implementation of education institution principals' professional development.*

*The content of the variative module system and its sub-modules is tended to competence improvement in a particular sphere of education. Its aim is providing an opportunity of improving education institution principals' professional aptitude by acquiring new developments in the content and methods of education for their creative application in the process of education management in line with aims, learners' needs and interests, management philosophy, and basic principles of management.*

**Keywords:** *competences, management, module system, principal, professional development.*

## Introduction

Education is an essential determinant of the direction and perspective of society development. Education conceptions around the world as well as in Latvia are affected by the impact of democratization, globalization, optimization, and information technologies. The topicality of changes in education in Latvia also relates to its integration into the common European education space where the main mission of education is helping everyone, because the acquisition of

knowledge and skills happens simultaneously with an individual's character formation, world view development, and assuming responsibility. The future education focus has shifted from the national, where each state sets its own goals of education and means of acquiring education, to the international and global that concern all students. Global education must provide an opportunity of acquiring and developing skills and competences necessary for adjusting to the requirements and life conditions of the changing society. When we talk about a changing environment for the principal, the danger is that this may sound too abstract. Briefly, as we see the main shift towards new principalships in Europe, it basically means that the principals will move from solely being a manager towards becoming more of an educational leader. The emphasis lies on administrative and routine tasks, such as distributing resources, enforcing rules, etc. External and internal political and socio-economic changes in the 21st century have conditioned a need for further professional education of education institution principals and their deputies as well as education board and institution leaders and employees. Each country has its own experience and practice in the regulation of recruiting education leaders as well as their special education and professionalism development (e.g. Anderson, 1991, *First-time Principals Programme*, etc.).

Professional competence is to be developed during the whole of the professional action and process as life-long learning essence. Management of such a complex dynamic system as school in the period of the contradictory stage of development in Latvia requires from a principal not only adequate and quick reacting to all changes of the external and internal environment but also predicting the development of these processes (Morris, 2005).

The task of specifying the theoretical and methodological prerequisites for the complex development of personality of an education institution leader appears as an escape from aggravating the existing situation and locating the necessity, content, and conditions of the organization in the process of qualification upgrading of a school principal (Praude & Beļčikovs, 2001).

Professional development is an organized and self-driven process that includes a variety of learning content, forms, and methods as well as needs of school principals as participants of the process of education, therefore it requires support, investigation of management opportunities and their improvement (Krastiņš, 2000). In the process of the research study, it was stated that the process of education and professional development of institution principals is still fragmented and is not properly coordinated. It is not clear who is responsible for the implementation and execution of the process of professional development of education institution principals. In Latvia, there is a lack of information on the opportunities for the professional development of school principals. Major characteristics of the process of education and professional development of

institution principals are the continuity of the process that forms a single whole with the demands for education institution principals' professionalism level in the respective period of time, the harmonization of the process elements, excluding individual, though seemingly important, events, the *systemic character*, the active involvement of education institution principals and their wish for development, changes in the level of professionalism that is manifested in raising their professional competence and education quality.

In the research, for the professional development of education institution principals in Latvia it is important to suggest scientifically grounded conceptions, theories, and new professional development variative modules. It is necessary to suggest new perspectives for education institution principals in their professional development. Investigation of the professional development of education institution principals sets as imperative *the philosophical approach of constructivism and communicative approach. In the science of education they complement each other and provide the holistic view.* Both conceptual approaches make it possible to elaborate a scientific conception that includes several variative modules that secure a multi-dimensional view of the professional development of education institution principals.

### **Theoretical framework**

Over the years, three different philosophical orientations have guided the education and professional development of school administrators: traditional/scientific management, craft, and reflective inquiry. The traditional model is characteristic of preparation of programmes at universities. Principals select this model based on their desire to pursue additional coursework in the area of their professional interest; to obtain an advanced degree; to renew or upgrade their administrative licensure; or a combination of these objectives (Daresh, 2002).

Murphy J. and Hallinger P. (Murphy & Hallinger, 1992) contend that leadership in the post-modern or "post-information" age is characterized by lifelong learning, learning to learn and just-in-time learning. Their report shows the impact of culture, philosophical approaches, hierarchical structures and, particularly, technology, on leadership development.

Jones C. (Jones, 2002) argues that "the global changes now occurring demand approaches to leadership education that is profoundly different from those that have served well in the past". They contend that these changes require reversing the six traditional priorities:

- from theory to practice;
- from parts to systems;

- from states and roles to processes;
- from knowledge to learning;
- from individual action to partnerships;
- from detached analysis to reflexive understanding.

The content of school leadership development programmes has considerable similarities in different countries, “leading to a hypothesis that there is an international curriculum for school leadership preparation” (Bush & Jackson, 2002). They identify the following common elements (Figure 1):

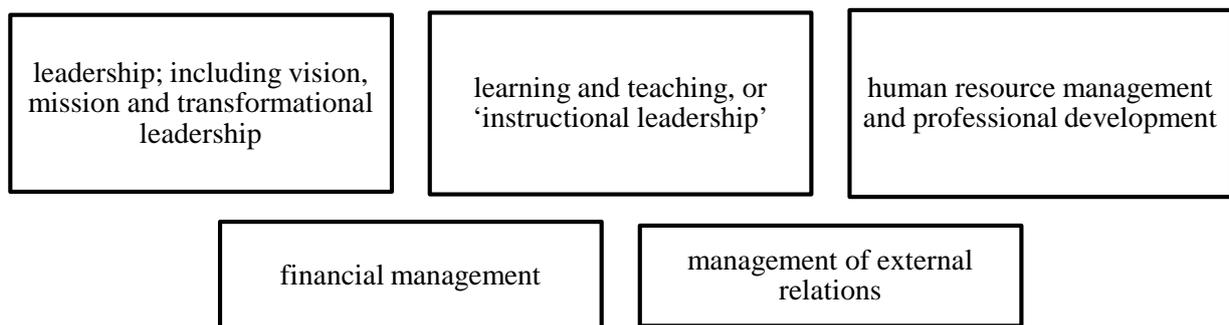


Figure 1. **Management principles** (Bush & Jackson, 2002)

Murphy K. (Murphy, 2000) provides a wide-ranging review of the American principalship within a context of “a scarcity of capable educational leaders” and claim that school systems must “reinvent the principalship” to define the role in terms of leadership for student learning:

- instructional leadership: strengthening teaching and learning,
- community leadership: big-picture awareness of the school’s role in society,
- visionary leadership: energy, commitment, entrepreneurial spirit, values and conviction that children will learn at high levels.

Mestry and Grobler (Mestry & Grobler, 2002) say that there is an urgent need to train and develop principals in four main components (Figure 2).

Based on their earlier review of the leadership literature, Bush and Glover (Bush & Glover, 2003) argue that training should include elements of both management and leadership. The reviewed literature offers no consistency in the attention to these themes. Some references incorporate both management and leadership themes, whilst others focus on only one. The Organization for Economic Co-operation and Development (OECD) produced a wide ranging review of leadership development in the public sector (2001), including chapters for the UK, the USA, Germany, Sweden, Norway and Mexico. It points to seven general trends across its member countries (Table 1.).

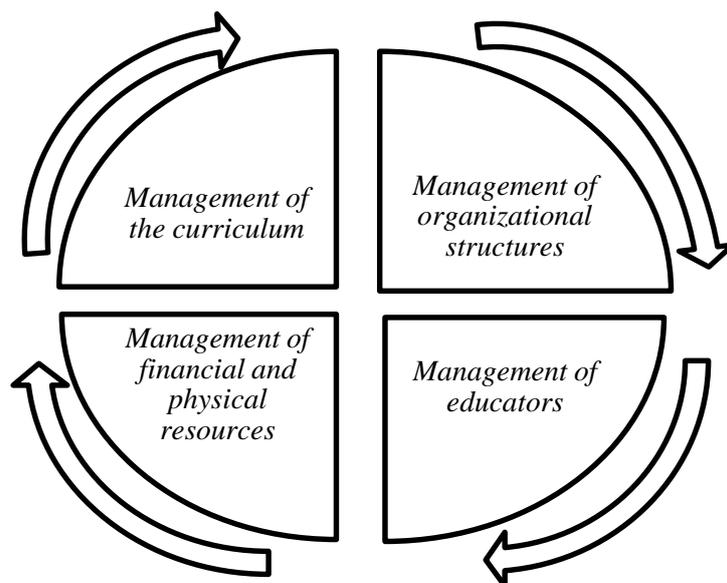


Figure 2. **Four main development components** (Mestry & Grobler, 2002)

Table 1 **Seven general trends** (Bush & Glover, 2003)

1.	Developing systematic strategies for leadership development,
2.	setting up new institutions for leadership development — this point is illustrated by reference to Sweden’s National Council for Quality and Development. England’s National College for School Leadership (NCSL) also fits this trend,
3.	linking existing management training to leadership development,
4.	defining a competence profile for future leaders — this is consistent with the approach taken by the English National Standards for school leadership and the National Professional Qualification for Headship (NPQH),
5.	identifying and selecting potential leaders,
6.	encouraging mentoring and training
7.	ensuring sustainable leadership development — this places emphasis on managers’ time being utilized to develop other leaders, an approach consistent with NCSL’s distributed leadership models.

These seven trends resonate strongly with patterns of leadership development within education, notably in England.

Crow (Crow, 2001) states that the nature of work is changing significantly in post-industrial society and that this change affects the role of the headteacher: work in the 21st century emphasises complexity rather than routinization. The dynamic nature of organizations, such as schools, where numerous individuals without close supervision make multiple decisions working directly with children, requires a different kind of leader. The acknowledgment of the changing demographics of schools, the explosion of technology, and the rapid growth and

change in knowledge require individuals who can live with ambiguity, work flexibly, encourage creativity, and handle complexity.

Drawing on empirical research into middle leadership development in North Carolina, Pettitt P. (Pettitt, 1999) adds that training should be situated in the context and experiences of the leader and be problem-solving in nature. He advocates mentoring, action-learning projects and reality-based case methods as appropriate training formats for middle level leaders.

### **Methodological framework**

The goals, content, modes, and methods of the professional improvement of education establishment leaders are determined by the education goals of the respective time period and the very process of changes. Professional improvement is to be systemic; it must not comprise a set of separate fragmented events and courses. The professional improvement of education establishment leaders is a system element that entails financing, payment, needs, schedule and certain kinds of events and their target groups (Adams, 2006). For the professional improvement process of education establishment leaders to be of high quality, it needs methodology based on characteristic and compliant ideas of adult learning. Of major significance in this process are appropriate planning, time, and arrangement of new information acquisition, practice, and self-assessment of the improvement process. Of no less importance is the precondition that education establishment leaders must try out learning activities they are going to apply in their work.

To secure the accessibility of the professional improvement of education establishment leaders, a two-fold approach is applicable: the existing offer must be made more visible, flexible, integrated, and efficient, at the same time designing new learning processes and environments. The following directions are foregrounded in the present research:

- eradicating social, geographical, psychological and other barriers, e.g. by facilitating information and communication technology development, formation of local level learning centres to implement the learning process in a suitable time and place;
- supplementing the basic events of education by goal-oriented events envisaged for the development of basic skills matching individual needs;
- recognizing that information, orientation, and counselling services constitute an important bond between needs for professional improvement and education offerings.

The research reveals that the professional improvement of education establishment leaders requires (Figure 3):

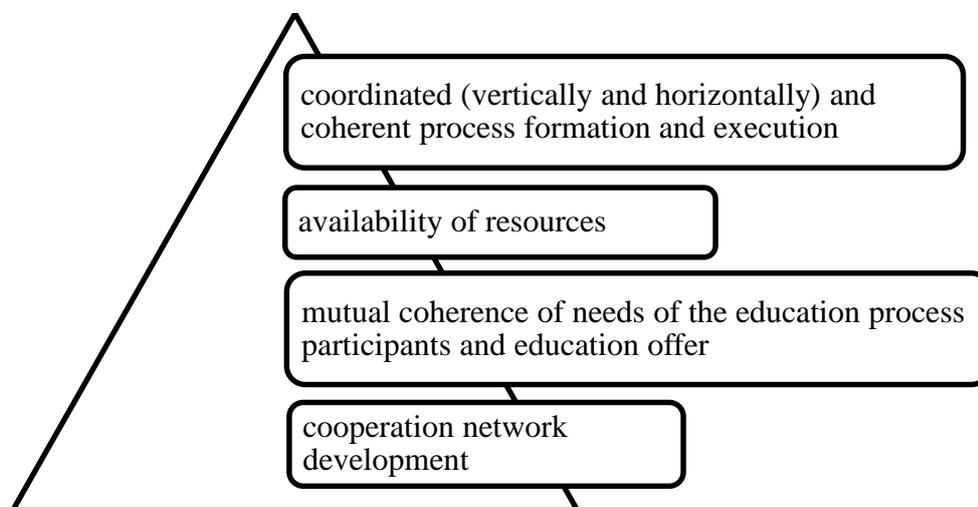


Figure 3. **Professional improvement of education establishment leaders (requirements)**  
(Bush, Bell, & Middlewood, 2010)

Table 2 **Education institution principals' competences** (Adey, 2000)

<b>Education institution principals' competences</b>	
<b>Jurisprudence</b>	<ul style="list-style-type: none"> <li>• knowledge and understanding of external laws and regulation, the development and implementation of internal rules and regulations, preparation of projects and agreements</li> </ul>
<b>Communication</b>	<ul style="list-style-type: none"> <li>• development of interrelations with the subordinates, the learners and their parents, representatives of the community, service providers and suppliers of goods, partners, clients, as well as knowledge of and skills in technologies and foreign languages</li> </ul>
<b>Management</b>	<ul style="list-style-type: none"> <li>• work with the personnel, organization and management of projects, management of various competitions, management of quality and changes</li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>• education of values, interactive methods, novelties in theory and practice, knowledge of and skills in social and special pedagogy, skills in research in education</li> </ul>
<b>Economics</b>	<ul style="list-style-type: none"> <li>• composition of the budget and its realization, attraction of sponsors, marketing of education products, ensuring assistance in the development of learners' economic competences</li> </ul>

A school principal more and more quickly will be pressed to take a full range of roles simultaneously in the future. He/she must be a very erudite person, in order to solve different questions that may apply to him/her, pupils, parents, society. If we are speaking about solution of a conflict situation, the following

skills are important: a speaker, a diplomat, a psychologist. A principal, as a team member, is a leader and with his/her personality and skills fascinates establishment employees for common aim fulfilment (Adey, 2000). A principal, as a person, wants to feel confidence about his/her competences and his/her knowledge. He/she wants to perfect himself/herself constantly, in order to understand his/her personal potential.

Table 3 **Professional education of leaders** (Dallo, 2017)

<b>Principals must be committed to</b>	<b>Principals must be able to</b>
effective working relationships	foster an open, fair, equitable culture and manage conflicts
shared leadership	develop, empower and sustain individuals and teams
effective team working	collaborate and network with others within and beyond the school
CPD for self and all others within the school	challenge, influence and motivate others to attain high goals
distributed leadership and management	give and receive effective feedback and act to improve personal performance
equitable management of staff and resources	accept support from others including colleagues within the local education authority (LEA).
sustaining personal motivation and that of all staff	establish and sustain appropriate structures and systems
developing a safe, secure and healthy school environment	manage the school effectively on a day-to-day basis
collaborating with others in order to strengthen the school's capacity and contribute to the development of capacity in other schools.	delegate management tasks and monitor their implementation
	prioritise, plan and organise himself/herself and others
	make professional, managerial and organisational decisions based on informed judgements
	think creatively to anticipate and solve problems.

A principal, who is oriented on results, is sure about his/her own possibilities, is sure, that only he/she can solve questions with unknown answers, also he/she is sure, that he/she will learn to find answers during a working process. They are ready to turn for the help to competent persons, because they are free of competition fear. Personal behavior and action of such people are well – thought – out. If it is necessary, it will be improved. Increasingly rarely - in case of troubles

and failures, circumjacent colleagues are blamed. Solutions are searched, in order to use more useful circumjacent colleagues' skills and wishes. It helps purposefully to direct the staff, as well as to coordinate with the outside world. A common language with colleagues is found as a result – the wished is achieved. Thinking of these principals is nowadays trivial - reasonableness and logic are used within most complicated and the tangliest situations. The main thought is to use possibilities without a break, in order to approach necessary aims, also to create not such direct ways (Hopkins, 2000) (Table 3).

## **Results**

### ***Variative module system***

The main features of the process of professional improvement of education establishment leaders are its endlessness, relatedness with the requirements for the professionalism of education establishment leaders in a respective time period, the cohesion of the elements of the process that makes a chain of separate, though seemingly important, events inadmissible, the *systemic character*, the active involvement of education establishment leaders and their wish to improve, change the level of professionalism that is manifested in raising their professional competence and quality of education (Dimmock & Walker, 2005). The aforementioned fact affects the goals, objectives, process duration and organization of the professional improvement of education establishment leaders, its methodology and techniques, as well as the requirements for the implementers of the professional improvement of education establishment leaders. The system of variative modules envisages the opportunities for education establishment leaders to improve their mastery and acquire knowledge in professional upgrading programmes (Bassett, 2001).

The variative module system is a part of the professional improvement of education establishment leaders. It is a process wherein education establishment leaders can acquire and build up knowledge by independently constructing the content of modules. The professional improvement of education establishment leaders may be regarded as a systemic and cyclical process. This process is included in the variative module system (VMS) that may assist and support education establishment leaders in their professional improvement process in relation to school development. VMS is a system with its own nucleus, a clearly marked beginning and end, aims, objectives, expected outcomes, goal-reaching mechanisms and monitoring of achievement formulated at the beginning of each stage. The system is variative and flexible, therefore it provides an opportunity for professional improvement to education leaders of any position and age.

Each module is a relatively independent, problem-oriented, interdisciplinary part of the professional improvement of education establishment leaders, an

especially structured complex of interdisciplinary thematic classes designed to facilitate professional upgrading. Within each module, the content of sub-modules may be varied in compliance with the needs and interests of education establishment leaders. It determines the strategic goals and expected outcomes of the respective competence improvement. The content of modules and sub-modules is aimed at competence improvement in a concrete sphere of education (Aiken, 2002). Each module may contain several subparts. Modules must be designed and organized so that the subparts and modules could be combined. As the professional improvement of education establishment leaders is a part of lifelong learning process, the modules ought to be harmonized with other kinds of formal and informal education, in order to provide wider opportunities and diversity for designing the process of professional improvement. The research outcomes are shown in a scheme of the variative module system (Figure 4.):

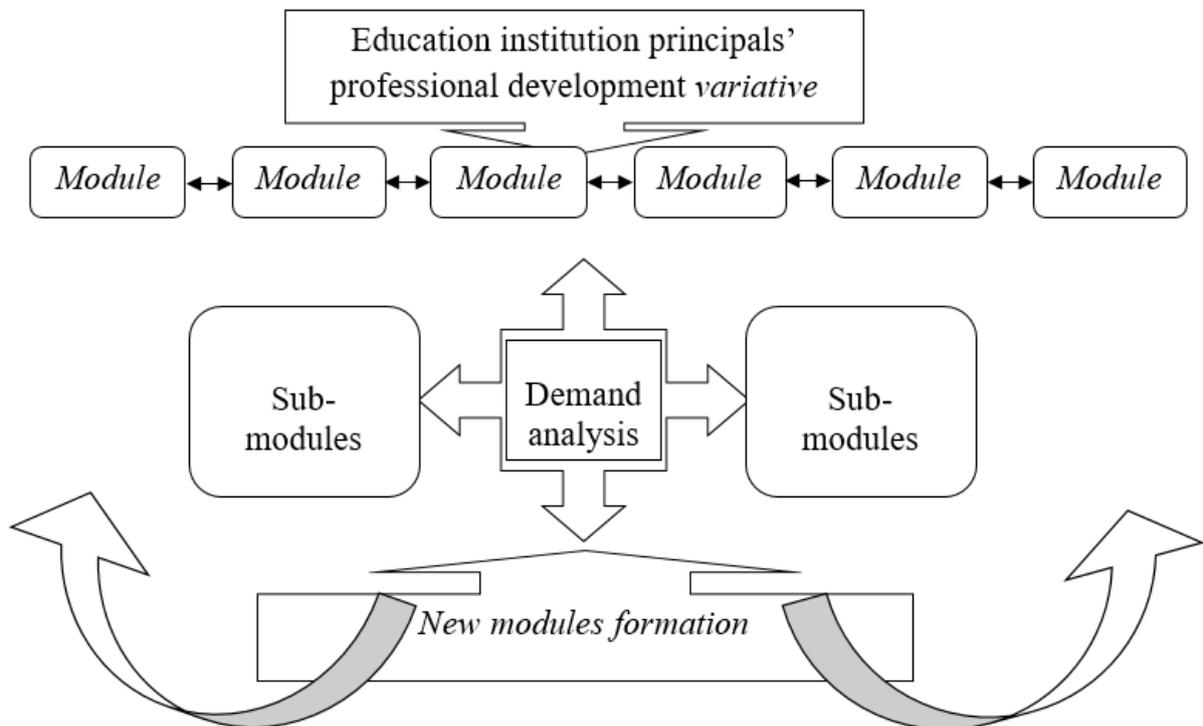


Figure 4. **Variative module system** (Arhipova & Kokina, 2017)

*The variative module system is formed with the aim to create a system of professional growth for education institution principals that facilitates constant and goal oriented management competence development throughout all the career. The opportunities of education institution principals are growing internationally– through projects, experience exchange, and practice in other countries. Greater attention must be paid to the readiness of education institution principals to make use of these opportunities and stay equally competent.*

## **Conclusions**

The professional development of principals must be based on a holistic view of the school in which the organization of the programme, its relationship with the local community, and knowledge of school conditions together constitute important elements. The literature shows the many and wide-ranging methods used to promote leadership development. There is only limited evidence of their relative effectiveness and of how they work in combination. Research on the effectiveness of main methods is essential if informed decisions are to be made, which should be used in planning and delivering leadership development programmes. The purpose of professional development is to deepen principals' knowledge and increase their understanding of the national school system, the national goals of the school and the role of the school in the society and the local community. Important starting points for the development of competence are the principals' own experience of various types of work in school. Their professional development emphasise a capacity for reflection, for critically processing information and solving problems. Ideas, concepts and theoretical models from relevant areas of research and development will provide increasing knowledge and understanding of both one's own experience as well as other's contribution to school.

Professional development will allow principals to deepen their knowledge of the role of leadership in a school system managed by objectives and results, as well as develop their ability to plan, implement, evaluate and develop school activities. The training also aims at development of the capacity of the principals to analyse and draw conclusions from the outcomes of such activities and be able to share their views.

The content of the variative module system and its sub-modules is tended to competence improvement in a particular sphere of education. Its aim is providing an opportunity of improving education institution principals' professional aptitude by acquiring new developments in the content and methods of education for their creative application in the process of education management in line with aims, learners' needs and interests, management philosophy, and basic principles of management.

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# APPLICATION OF THE THEORY OF LATENT VARIABLES TO PERSONNEL MANAGEMENT METHODS

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**Abstract.** *One of the main tasks of the human-resources (HR) department is the qualitative management of personnel, which is the basis for effective work of the organization. The paper presents models of personnel management based on the theory of latent variables. Research objective is to use the Rasch model for assessing latent variables to evaluate the competence of employees and their suitability for certain positions and also quality control of their work.*

*Three problems of personnel management are considered.*

*Organization of qualitative selection of candidates for vacancies by objective assessment of the degree of professional suitability of candidates with a view to selecting the best employees.*

*Multilateral monitoring as the quality of performance of duties of each employee on the one hand, and the efficiency of the work of the whole team on the other. A dynamic comparison is made between the quality of performance of their duties in different periods of time.*

*Effective appointments of specific employees to certain positions. Based on the criteria of the employee's suitability for certain positions, the integral degree of the employee's suitability for each vacancy is calculated. In addition, the model makes it possible to assess the degree of influence of the criteria on the evaluation of employees.*

*The models proposed in the paper allow obtaining estimates on a linear interval scale, which can be translated into any other scale, for example, probabilistic. Estimates do not depend on a set of criteria and the set of evaluated employees.*

**Keywords:** *competence assessment, latent variables, mathematical model, personnel management, personnel monitoring, the Rasch method, vacancy selection.*

## Introduction

At present, no one doubts that the most important resource of any company is its employees. On how effective the work of employees will be, the success of any company depends. The task of managers is to make the best use of the capabilities of the staff. And this can happen only if the personnel policy of the organization is successfully developed. All this confirms the relevance of research

in the field of labour management, the importance of developing new methods of personnel management.

To solve the problem successfully, it is necessary to evaluate the competence of employees, their suitability for certain positions and constantly monitor the quality of work. However, traditional methods of assessing employees are subjective and depend on the opinion of managers. Research objective is the development of methods for an objective assessment of the basic indicators of the employees' work quality.

Research objective is to use the Rasch model for assessing latent variables to evaluate the competence of employees and their suitability for certain positions and also quality control of their work. The choice of this approach is due to the fact that many indicators of personnel policy are latent, they cannot be directly measured, but can be estimated using criteria. As will be shown below, methods based on the theory of latent variables have several advantages over traditional methods.

To obtain estimates of latent parameters, a criterial approach was used. Estimation of indicators based on the Rasch model allows to obtain estimates on a linear scale, the estimates do not depend on a set of criteria and on the set of evaluated employees.

The following tasks of labor management are solved in the paper:

1. Organization of qualitative selection of candidates for vacancies by objective assessment of the degree of professional suitability of candidates for vacancies in order to select the best employees.
2. Multilateral monitoring as the quality of the performance of duties of each employee on the one hand, and the efficiency of the work of the entire workforce on the other.
3. Effective appointments of specific employees to certain positions.

### **Model of selection of candidates for vacant positions**

The task of qualitative selection of personnel for vacant positions is becoming especially relevant at the present time, in view of the new professional standards that have entered into force and the approval of the rules for conducting an independent evaluation of employees. However, there are no clear recommendations on the methodology for assessing the quantitative indicators of professional suitability, standard methods of expert evaluation are usually used for these purposes. As practice shows, the evaluation of competencies for which ballroom behaviour scales are currently used is of a qualitative nature and depends, in many respects, on the experience and qualification of the evaluator (Averina et al., 2011).

From this, it follows that the main difficulty in assessing the professional suitability of candidates for vacancies is that the concept of a complex assessment of professional suitability is, from the point of view of mathematics, a latent variable, that is, a qualitative and subjective indicator (Barkalov et al., 2014).

In this part, we propose an approach to the organization of qualitative selection of candidates for vacancies by evaluating the generalized assessment of the professional suitability of workers based on the Rasch method of estimating latent variables (Andrich, 1988; Engelhard, 2013).

Let us consider a mathematical model for solving the problem.

Let there be  $N$  candidates for vacant positions:  $A_1, A_2, \dots, A_N$ , from which the best  $n$  are to be selected. To solve this problem, it is necessary to quantify the professional suitability of all candidates. For estimation  $M$  criteria are defined:  $K_1, K_2, \dots, K_M$ .

The choice of criteria depends on the kind of professional activity of the team, in which the selection of candidates is made. Criteria can be arbitrary, they can be changed or supplemented over time, candidate scores obtained for each criterion can be measured on different scales.

In the future, we will give the solution of the problem in general form, without reference to specific criteria.

We denote by  $U_{ij}$  - evaluation of a candidate of  $i$ -th by  $j$ -th criterion,  $i=1,2,\dots, N$ ;  $j=1,2,\dots, M$ . These estimates can be of different nature and have different dimensions. To bring the estimates to a single scale, it is necessary to carry out the procedure for their normalization (Barkalov et al., 2015), as a result of which all normalized estimates of employees according to the criteria  $u_{ij}$  will take values from the interval (0;1).

Let us now turn directly to the Rasch model of estimating latent variables. In accordance with (Moiseev & Zenin, 2015), we introduce latent variables:

$\theta_i$  - an integral indicator of the degree of professional suitability of the candidate for the vacant position of  $A_i$ , the higher this indicator, the more attractive the candidate for the vacant position is;

$\beta_j$  - the degree of non-feasibility of the evaluation criterion  $K_j$  for the entire group of candidates for vacant seats, the lower this indicator, the more the entire set of candidates in the aggregate satisfies the criterion.

Then, according to the Rasch model, the probability that the candidate  $A_i$  satisfies the employer by the criterion  $K_j$  is described by the logistic function:

$$P_{ij} = \frac{e^{\theta_i - \beta_j}}{1 + e^{\theta_i - \beta_j}}. \quad (1)$$

These probabilities can be interpreted as normalized complex assessments of candidates according to the criteria  $u_{ij}$ .

To apply expression (1) in practice, it is necessary to find estimates of the following latent  $\theta_i$  and  $\beta_j$ . These estimates are calculated on the basis of known estimates of these candidates by private evaluation criteria  $u_{ij}$ , which are obtained empirically by means of a questionnaire or expert evaluation.

In view of the fact that the estimates  $u_{ij}$  are measured in the general case on a continuous scale from the interval  $[0; 1]$ , for this purpose it is necessary to use the Rasch model based on the method of least squares (Moiseev, 2015): latent variables  $\theta_i$  and  $\beta_j$  of model (1) are chosen so that the sum of squares of deviations of empirical data  $u_{ij}$  from theoretical probabilities 1) was the smallest. Mathematically, this reduces to solving an optimization problem of the form:

$$\sum_{i=1}^N \sum_{j=1}^M (u_{ij} - P_{ij})^2 = \sum_{i=1}^N \sum_{j=1}^M \left( u_{ij} - \frac{e^{\theta_i - \beta_j}}{1 + e^{\theta_i - \beta_j}} \right)^2 \rightarrow \min . \quad (2)$$

Estimates of latent variables  $\theta_i$  and  $\beta_j$ , calculated from the solution of problem (2), will be measured on interval and linear scales, but the origin in them will be indeterminate. The initial level of the scale can be chosen so that the values of all the estimates are nonnegative. Then the objective function (2) will be supplemented by the conditions:

$$\theta_i \geq 0; \beta_j \geq 0; i = 1, 2, \dots, N; j = 1, 2, \dots, M \quad (3)$$

For the integral estimates obtained, it is also possible to normalize them, for example, they can be normalized to a scale at which the value of the generalized indicator of a candidate's professional fitness will be equal to the fraction in the unit sum of all estimates. The normalized estimates  $\tilde{\theta}_i$  are obtained from the obtained  $\theta_i$  by the formula:

$$\tilde{\theta}_i = \frac{\theta_i}{\sum_{i=1}^N \theta_i} . \quad (4)$$

Based on these assessments, it is possible to rank candidates according to the degree of their professional suitability, as well as to evaluate the criteria by the degree of their feasibility for the entire group of candidates.

The model described above assumes that all evaluation criteria are of equal importance to the employer. However, the model can also be applied to criteria with different importance. Importance is taken into account by introducing weights for each criterion.

Let  $w_j$  – be the weight of the  $j$ -th criterion. To take into account the weights, we propose a model in which, in the residual sum (2), each term will be proportional to its weight. As a result, instead of (2), an optimization problem of the form is solved (Barkalov et al., 2014):

$$\sum_{i=1}^m \sum_{j=1}^n w_j \cdot (u_{ij} - P_{ij})^2 = \sum_{i=1}^m \sum_{j=1}^n w_j \cdot \left( u_{ij} - \frac{e^{\theta_i - \beta_j}}{1 + e^{\theta_i - \beta_j}} \right)^2 \rightarrow \min . \quad (5)$$

The solution of the optimization problems (2) and (3) or (5) and (3) can be performed both with the use of specialized software products and in MS Excel using the Solver add-on. How this is done is described in the monograph by Maslak & Moiseev, 2016.

### **Model of monitoring the quality of work of a team**

Let us now consider the issue of the organization of effective personnel management by the personnel services. For the effective work of a team, a system of comprehensive assessment of the quality of the work of individual performers and of the team as a whole is necessary, taking into account the dynamics of their change over time.

In this section, we will consider models that make it possible to comprehensively evaluate the quality of work of each participant of the team on the one hand, and on the other hand the efficiency of the team as a whole for several periods of time.

We first consider the one-criterion case of an estimate.

Let there be  $n$  qualitative participants of the team:  $A_1, A_2, \dots, A_n$ , monitoring the quality of work of which is conducted at the current moment and for  $m$  previous periods of time.

The evaluation of each employee in each period of time is carried out by a certain criterion. If the criterion is quantitative, the estimate will be in natural units:  $x_{ij}$  – an estimate of the work of the  $i$ -th performer in the  $j$ -th time period. In this case, all assessments should be measured on a single scale, to use the Rush model, this scale should be a single scale:  $x_{ij} \in [0; 1]$ . If the scale is different, then it is necessary to conduct the rationing on a single scale.

If the criterion is qualitative and one cannot accurately determine how much the quality of the performer's work has changed at a given time stage, and one can only determine whether the quality has increased or decreased, then the estimate can be made on a dichotomous scale:

$$x_{ij} = \begin{cases} 1, & \text{if the employee has improved quality in the period } j \\ & \text{compared to } (j-1); \\ 0, & \text{if the employee has deteriorated the quality in the period } j \\ & \text{compared to } (j-1), \end{cases} \quad (6)$$

$$i = 1, 2, \dots, n; \quad j = 0, 1, \dots, m-1.$$

It is convenient to use relative indicators of the increase in the quality of work as an indicator of the effectiveness of each performer at each stage of the work. If it is possible to determine the degree of change in the performance of the performer  $A_i$  at the  $j$ -th stage, then we introduce the variable  $d_{ij}$  - the relative change in the quality of the work of the performer  $A_i$  on the time period  $j$  in comparison with the period  $j-1$ :  $d_{ij} = \frac{a_{ij} - a_{ij-1}}{a_{ij-1}}$ , where  $a_{ij}$  - evaluation of the work of the  $i$ -th period of time of  $j$ -th. Let us cite the normalization of this index on the unit scale the necessary condition imposed on the initial data for the Rush model. As the normalization algorithm, let's take the one for which the largest relative increase will give a unit value, the smallest (possibly negative) will give zero, and all the others will be proportional to the relative increments. With such a normalization (Larichev, 2002), we use as  $x_{ij}$  the initial data of the form:

$$x_{ij} = \frac{d_{ij} - \min_i(d_{ij})}{\max_i(d_{ij}) - \min_i(d_{ij})} = \frac{\frac{a_{ij} - a_{ij-1}}{a_{ij-1}} - \min_i\left(\frac{a_{ij} - a_{ij-1}}{a_{ij-1}}\right)}{\max_i\left(\frac{a_{ij} - a_{ij-1}}{a_{ij-1}}\right) - \min_i\left(\frac{a_{ij} - a_{ij-1}}{a_{ij-1}}\right)},$$

$$i = 1, 2, \dots, n; \quad j = 0, 1, \dots, m-1.$$

In the simplest traditional method for assessing the quality of the work of the  $i$ -th performer for the entire observation period, the integral estimation  $X_i$  of the quality of work is the result of summation of the partial estimates of the growth of all indicators for all periods, as a result of which the integral estimates of the quality of the work of the performer  $A_i$  are given by the formula:

$$X_i = \sum_{j=0}^{m-1} x_{ij}, \quad i=1,2,\dots,n. \quad (7)$$

However, in the calculations of formula (7), all time periods give the same contribution to the overall quality of work performance and do not take into account that usually the importance of effective work in recent periods should be higher than in earlier periods. To account for this fact, we can introduce the weights  $w_j$  for the time periods on which observation was required. If we use a linear scale of weights, that is, the contribution of the partial performance measure to the integral scale should be proportional to the time interval between the measurement and the current moment, then to estimate the weight, we can use the formula:

$$w_j = \frac{m-j}{m}, \quad (8)$$

where  $j$  – lag or the number of the time period of the measurement.

Then formula (7) takes the form:

$$X_i = \sum_{j=0}^{m-1} w_j x_{ij} = \sum_{j=0}^{m-1} \frac{m-j}{m} x_{ij}, \quad i=1,2,\dots,n. \quad (9)$$

However, this approach has a number of drawbacks, for example, estimates will be non-linear, depends on the set of performers and the number of time periods. To eliminate these shortcomings, we can use an estimation model based on the method of estimating latent variables.

To assess the dynamics of changes in performance efficiency, latent variables will be:  $\theta_i$  – integral evaluation of the  $i$ -th performer for the whole observation period, and  $\beta_j$  – some indicator characterizing the cumulative change of labour efficiency for the whole group of workers in the  $j$ -th time period, and, the smaller the value of  $\beta$ , the higher the efficiency of work. In such a model, the probability  $p_{ij}$  that, in the  $j$ -th time period, the  $i$ -th employee improved the indicator of labour efficiency, will be determined by the logistic function of the form (1).

To find the latent variables  $\theta_i$  and  $\beta_j$  without taking into account the weights, it is necessary to solve an optimization problem of the form (2) and (3). If it is necessary to take into account the weights  $w_j$ , obtained, for example, by the formula (8), then instead of the optimization problem (2) it is necessary to solve the problem (5).

Let's consider now the model allowing to carry out multicriteria estimation of quality of work of executors in dynamics of their changes. In this case criteria:  $K_1, K_2, \dots, K_l$ , are used for evaluating the effectiveness of work at each stage, and at each stage a matrix of the form  $x_{ik}^{(j)}$ , equal to the quality estimate of the performance of the performer  $A_i$  for the  $k$ -th criterion in the  $j$ -th time period is formed, if the criteria are quantitative. If the criteria are qualitative, then, by analogy with (6), we can use as the initial data a dichotomous matrix of the form:

$$x_{ik}^{(j)} = \begin{cases} 1, & \text{if the employee } A_i \text{ has improved quality} \\ & \text{in the period } j \text{ compared to } (j-1) \text{ by criterion } k; \\ 0, & \text{if the employee } A_i \text{ has deteriorated the quality} \\ & \text{in the period } j \text{ compared to } (j-1) \text{ by criterion } k, \end{cases} \quad (10)$$

$i = 1, 2, \dots, n; j = 0, 1, \dots, m-1; k = 1, 2, \dots, l.$

On the basis of the data  $x_{ik}^{(j)}$  a matrix of private assessments of the quality of the performers' work is formed according to the evaluation criteria at all stages of the observations:  $\tilde{x}_{ik} = \sum_{j=0}^{m-1} x_{ik}^{(j)}$  - without taking into account the weights, and  $\tilde{x}_{ik} = \sum_{j=0}^{m-1} w_j x_{ik}^{(j)}$  - taking into account the weights. To calculate the integral estimates of the quality of work of each performer, we use formulas (2), (3), but we use the matrix as the initial data  $\tilde{x}_{ik}$ .

### **Model of selection of the optimal vacancy for an employee**

Let us now turn to the task of recruitment and placement of personnel - one of the most important functions of the management cycle carried out by the management of the organization. Consider one of its elements - choosing the best vacancy for some jobseeker. The selection of the best vacancy is based on the calculation of the degree of suitability of the employee for each vacancy, and the selection of the vacancy with the best estimate.

Suppose that in some organization there are a number of vacancies, one of which is claimed by the employee. The task is to select this vacancy for the employee, which will best match the employee's personal indicators to the requirements for the position corresponding to these vacancies. The selection of a vacancy is that for an arbitrary employee, it is necessary to obtain an assessment of the degree of compliance with the requirements of vacancies, if possible, in a

probabilistic interpretation. At the same time, it is desirable to obtain estimates of the influence of the criteria on the vacancy estimates. To solve this problem, we will also use the Rasch model of estimation of latent variables.

Let there be  $n$  kinds of vacancies, the degree of correspondence to which a particular employee needs to determine:  $B_1, B_2, \dots, B_n$ . To find the degree of employee compliance, vacancies use  $m$  criteria:  $K_1, K_2, \dots, K_m$ .

Suppose that for some employee, the degree of suitability for which vacancies should be evaluated, data are obtained on the criteria. In accordance with the requirements of the Rasch model, for the identification, criterial assessments of the employee's suitability for each type of vacancy for each criterion, normalized on a single scale, will be used. The estimates for the following scales can be used for the calculation.

If the scale is dichotomous, then the empirical data will be:

$$x_{ij} = \begin{cases} 1, & \text{if an employee satisfies vacancies } i \text{ by criterion } j; \\ 0, & \text{if the employee does not meet the vacancy } i \text{ by criterion } j; \end{cases} \quad (11)$$

$$i = 1, 2, \dots, n; \quad j = 1, 2, \dots, m.$$

Similarly, but with a greater number of gradations, a polytomic rating scale can be used.

A situation is possible when the criterion makes an estimation on a certain continuous scale. There are two possible options. If the degree of correspondence of the vacancy is known at once, then the matrix  $x_{ij}$  is equal to the fraction of employee's suitability for the  $i$ -th vacancy by the  $j$ -th criterion, and its elements should be measured on a single scale.

A more complicated situation arises if the degree of correspondence is not explicitly known, but it can be estimated by some identification feature that determines the employee's vacancy by hitting the values of this characteristic in an interval typical for each type of job. Suppose that the estimate  $U_j$  of an arbitrary employee according to the criterion  $K_j$  should fall into the interval for the vacancy  $B_i$  of the form  $(a_{ij}, b_{ij})$ ,  $i = 1, 2, \dots, n$ ;  $j = 1, 2, \dots, m$ , where the middle of this interval corresponds to the highest degree of correspondence vacancy  $B_i$  by the criterion  $K_j$ :  $x_{ij}=1$ , and with the distance from the middle, the degree of correspondence decreases. It is also possible to have a small value of the degree of correspondence  $x_{ij}$  and the output of the estimate  $U_j$  for the interval  $(a_{ij}, b_{ij})$ . Suppose that the estimate of  $U_j$  is distributed according to the normal law, its mathematical expectation is equal to  $m_{ij}=(a_{ij}+b_{ij})/2$ . We choose the root-mean-square deviation  $\sigma_{ij}$  so that the interval  $(a_{ij}, b_{ij})$  is equal to  $2l$  standard deviations, that is

$\sigma_{ij} = \frac{b_{ij} - a_{ij}}{2l}$ . The parameter  $l$  will regulate the probability of the output of  $U_j$  in the interval  $(a_{ij}, b_{ij})$ . Then, in the case of unit valuation, we obtain:

$$x_{ij} = \frac{\frac{1}{\sqrt{2\pi\sigma_{ij}}} \exp\left(-\frac{(U_j - m_{ij})^2}{2\sigma_{ij}^2}\right)}{\frac{1}{\sqrt{2\pi\sigma_{ij}}} \exp(0)} = \exp\left(-\frac{(U_j - m_{ij})^2}{2\sigma_{ij}^2} - 1\right). \quad (12)$$

According to the Rasch model, we introduce latent variables:

$\theta_i$  – assessment of the degree of the employee's suitability for the  $i$ -th kind of vacancy;

$\beta_j$  – degree of importance, dominance of the  $j$ -th criterion for the evaluation of this employee.

Then the probability that the worker will be determined as the corresponding vacancy  $B_i$  by the criterion  $K_j$  will be determined by the formula (1).

To find the values of the latent variables  $\theta_i$  and  $\beta_j$  we need to solve an optimization problem of the form (2) and (3).

After finding the estimates, we can carry out their normalization by formula (4). In view of the fact that the Rasch model gives estimates on a linear scale, the valuations normalized in this way  $\tilde{\theta}_i$  can be interpreted as the proportion of the employee's correspondence to the  $i$ -th vacancy, and the estimates  $\tilde{\beta}_j$  as a fraction of the influence of the  $j$ -th criterion on the evaluation of this employee.

## Conclusions

Some problems of estimating employees based on the theory of latent variables were considered. Employee evaluation approaches based on the Rasch method have several advantages over traditional, what follows from the papers of (Maslak et al., 2015) and (Maslak et al., 2017), which describes the estimates properties of latent variables by the Rasch model, based on the method of least squares:

1. Assessments of employees are their unique properties and do not depend on the set of criteria for evaluation.
2. Estimates are measured on linear dimensionless scales that can easily be translated into other scales, for example, in probabilistic.
3. In addition to evaluations of employees, it is possible to evaluate the properties of evaluation criteria on a linear scale.

All this will make assessments of the main indicators of personnel policy more objective. This, in turn, should provide a supportive environment in which the labor potential is realized, personal abilities of employees develop, which receive satisfaction from the work performed and public recognition of their achievements.

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# **TURBULENT BUSINESS ENVIRONMENT AND THE POSSIBILITY OF APPLYING MARKETING DECISION OPTIMIZATION ALGORITHMS USING THE EXAMPLE OF THE LATVIAN MARKET**

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***Abstract.** In this work an attempt is made to describe the experience of marketing decision development in the conditions of a turbulent business environment using the example of various Latvian enterprises. The main goal is to show the possibility of simple algorithm for strategic marketing solutions development of different business structures in Latvian market, which can be easily mastered by students of the 2-nd or 3-rd years during 100 academic hours. Using characteristic features of a turbulent business environment, the possibilities of applying marketing decisions offering algorithms both for the national (Latvian) market and for entry into international markets are discussed. This experience is part of the author's pedagogical activity at higher education institutions in Latvia (RISEBA) over the last 20 years and assumes training in new methods of marketing decision development, with use of modern marketing technologies, including matrix methods, as well as cluster, discriminant and screening analysis. The researched experience and potential for the application of the author's theoretical elaborations (the matrix “solution’s novelty – consumer’s demand for novelty”) are particularly relevant for developing creative marketing management solutions in the areas of business where the novelty of goods (services) may be an important competitive advantage in a turbulent business environment.*

***Keywords:** algorithms for marketing decision development, adapted to market conditions; consumers’ demand for creativity; marketing management; turbulent business environment.*

## **Introduction**

The concept of “organization” involves different approaches for a researcher: An organization is a group of people who coordinate their activities to achieve common purposes (Meskon et al., 1998). Organization is also a process of enterprise structure creation, which allows efficient cooperation of people to achieve goals of the enterprise (Thompson & Strickland, 1995). Organization is systematic coordination and taking actions to complete specific tasks (Atkinson & Wilson, 1996). An organization is a separate association of people who interact in achieving certain purposes and completing certain tasks (Maslow, 1966), (Porter, 2008). Based on the definition of P. Doyle (2002), situational management is management in conditions oriented towards the occurrence of

unforeseen circumstances. In this case tactics are the best option for implementation of strategy in specific conditions which consider and utilize unforeseen circumstances. One of the most important organizational features of such an approach is its **connection with the external environment**. No organization can be isolated as an “island on its own”. Organizations totally depend on the world around them – the external environment – both in relation to their resources and relative to customers, the users of their results to be achieved. Organizations exist in a surrounding environment consisting of many elements: a market with its offers and demands; shareholders with their interests in gaining dividends and implementing ownership rights; partners whom the organization is obligated to; requirements for product quality; education of assigned people; increasing demands of salaried workers; activities of competitors, consequences of economic crises, etc. (Kotler & Keller, 2012), (McDonald, 2002).

The environment influences an organization and has its requirements. The head director must consider this significant influence. These interconnected factors influence everything that happens in the organization and they change continually. The organization totally depends on the external environment; this environment, however, is out of the manager’s control. How should such a situation be handled? Via situation simulation? Even though simulation experience and possibilities in the practical field are growing (Ostervalder, 2010), the real application of these methods in the practice of small and medium-size business management is limited due to methodological and economic reasons.

The main goal is to show the possibility of simple algorithm for strategic marketing solutions development of different business structures in Latvian market, which can be easily mastered by students of the 2-nd or 3-rd years during 100 academic hours.

***Aims of the research:***

- 1) Discuss how the algorithm proposed in this article can be used for search of marketing solutions for other business environments and conditions.
- 2) Discuss whether knowledge of manager is sufficient to use proposed algorithm.

***The topics of this research:***

- 1) What would be an algorithm for training creatively thinking marketing students, if it is assumed that an algorithm is a logical sequence of steps for solution of a specific task?
- 2) What methods and technologies will teach marketing students training at higher education institutions to find and solve problems in a real market environment?
- 3) How can we instil interest in finding non-standard marketing solutions?

The author asked herself these questions in her pedagogical work at Latvian higher education institutions – RAU (from 1992), TSI (from 1994), and RISEBA (from 1997) – during the process of training control specialists.

The author agrees with N. Avdeyev, that the problem can be solved through directed teaching of modern analysis methods, quickly searching within possible marketing solutions, choosing the effective one or developing and offering one's own solution, if there are no effective solutions. To achieve this, the student must be able to undertake:

- 1) type of solution – solutions that have a specific algorithm already known to the student.
- 2) type of solution – from a variety of viable solutions, the student should choose the most correct one. The student knows the existing criteria for choosing effective solutions.
- 3) type of solution – solving non-typical tasks. The student should analyse unfamiliar situations and information and generate latest information.
- 4) type of solution – the ability to see new connections and possibilities with further generation of entirely latest information in the conditions of a turbulent external environment. The elements of creativity are objectively essential for this type of problem (Bahmane, 2015).

### **The organization and transformation of the external environment**

The conditions of business structures are complicated due to new requirements. With every year company leadership must consider not only an increasingly greater number of external environment factors, but also the fact that **they are becoming global in nature**. To succeed, companies have to compete in foreign markets and withstand competition from foreign companies in their homeland. For Latvian businesspeople, an important and objective factor is the national market volume and the development level. Based on the latest data, there are 1.97 million inhabitants at most in Latvia (2016). The new conditions require an understanding of entirely new fields of jurisprudence and marketing and recognition of new cultural values (Solomon, 2014), (Hammer & Champy, 2009). For small and medium-size businesses in small countries, this is especially difficult to achieve in management. Let us consider a few aspects of external business environment factors used in the marketing management of organizations (Kotler & Keller, 2012).

The external environment cannot remain constant; it is always changing. Thus, it is possible to distinguish an environment with slow changes of parameters and another environment with fast and unpredictable changes. In modern marketing, the factor of environmental changes considered in the management of a specific organization has been researched by multiple authors. For example,

Boddy P. and Paton R. (1998), and Michael Hammer and James Champy, in their book “Reengineering Corporation” (1998), claim that up until 1975, the external environment of organizations was stable, with rare global cataclysms and insignificant changes, i.e. at that time it was possible to talk about the existence of a “calm” external environment. Managers of that time needed to organize their enterprises so that they could utilize all the opportunities provided by such an environment around them. A **“calm” external environment** is characterized by: use of long product lifetime cycles (technologies, services); increase in the size of companies with a pyramidal structure – containing their own expert divisions; domination of mass production; large storage spaces for raw materials and finished products (Ostervalder, 2010), (Moore, 2011).

### **The turbulent business environment as a new factor of marketing management**

The same authors claim that starting from the end of the 1970s and the beginning of the 1980s, the situation became more complicated. One of the many causes was rapid scientific and technical progress, i.e. the factor of the business environment and its parameter changes led to specialists discussing organization management in the conditions of a “variable external environment”. **The variable external environment** is characterized by increased instability and unpredictability, and the behaviour of managers is significantly more complicated than their actions in a “calm” environment. Over time, quantity was replaced by new quality, i.e. there were global changes that led to a new concept of the **“global environment”**. Because of the uniform transition of the external environment from a “calm” condition to variable, global changes occurred in the main economic ratings of the environment. The following can be mentioned: a sharp reduction of products’ lifetime cycles; a reduction of products’ development time frames; unprofitable storage spaces; changes in the requirements of the technical organization subsystem; more complex products; changes in relations between the customer and the manufacturer (confidence in competency); maintenance of a company’s own unrealistic specialized science-intensive services; the customer dictates suppliers; toughened competition; prices are no longer the main requirement in cooperation. Management attempted to find new methods and forms of business management (Zagula & Tong, 2004).

Then marketing management came to scene, so in addition to P. Kotler some new marketing gurus appeared – Z. Z. Lambin (Lambin, 1994), the Swedish marketing school (Best, 2005). However, new management possibilities do not always make it to small and medium-size businesses in time, and new forms of old marketing economy problems have appeared. The crisis has become global and crisis management has appeared (Ansoff, 2007). Specialists have started to

say that during the last 10 years the business environment has changed completely (Zagula & Tong, 2004), (Moore, 2011). The concept of turbulence was borrowed from physics and soon enough it was incorporated into the concept of a “**turbulent business environment**”. (Bahmane, 2010). Not only changes in environmental factors have been forecasted, but also changes in rules based on which organizations are to operate. And these rules are changing quickly and unpredictably. The latest example – the withdrawal of Great Britain from the EU. What will happen to Latvian companies? How should small and medium-size business management of these organizations be performed?

It is thought that in such turbulent environments the highest priority is the ability of organizations to adapt quickly and survive, (Moore, 2011). A turbulent environment has these requirements, and enterprises existing in such conditions must obey. Conditions “sound” more like requirements since managers of a company, no matter how strong it is, will not “catch” changes in the environment and make changes to a company in time, so after a short period of time it will already be too late to do anything, and former positions will be lost to more advanced competitors. In short, these are the requirements: decreasing organization size; reengineering; constant tracking of the situation in the external environment; deployment of a “just-in-time” production system. It is well known that for “just-in-time” production, the parts are manufactured at precisely specified moments, so defects are found and their causes are eliminated immediately while the product moves from one position to another, ideally without storage.

Adaptability is the most important condition for an organization’s survival in an unstable/turbulent external environment| (Moore, 2011). The common external environment (macro environment) and accounting for its requirements in marketing management is becoming the most important condition for survival of small and medium-size businesses, especially in small countries. Analysis of strategic marketing decision development and adoption experience allows the author to claim that use of well-known (but not widely used) techniques for management solution development will allow one to find adequate solutions for a turbulent environment, including a strategic solution (Bahmane, 2010).

### **An algorithm as a method of marketing decision-making in a turbulent business environment**

The optimality criteria for marketing solution development are as follows: 1) decreasing risks 2) going through all possible solution variants. It is necessary to formulate an algorithm as a logical sequence of actions to solve a specific task. The Toyota Way, Principle 6 (Liker, 2003), states that standard tasks are the basis for continuous improvement and delegation of authority to employees.

During the training of specialists at higher education institutions, from the author’s point of view, solutions are required for the task of new complexity: Determine a possible algorithm for creatively thinking specialists training in the marketing field, who can find a new, i.e. creative, solution for market demands with understanding of time being a real necessity in such a solution.

***The 1st algorithm – to improve competitive positions in the Latvian market***

The experience of the author in training marketing solution development specialists (Bahmane, 2015) made it possible to formulate the 1st algorithm. Its purpose is to improve an organization’s competitive positions in the Latvian market.

Level of solution’s creativity	Maximum	2 Strategy of quality increase (company image strategy, strategy of leadership in the field)	4 Benchmarking strategy (strategy of new products’ superquality, strategy of world leadership)
	Minimum	1 Strategy of proven quality (product brand strategy)	3 Strategy of new products (strategy of innovator image, strategy of niche leader)
		Minimum	Maximum
			Consumer’s demand for novelty

Figure 1. “**Solution’s novelty – consumer’s demand for novelty**” matrix  
(source: created by author)

For this, RISEBA students of the 2nd and even the 1st years can successfully perform the following:

- 1) Choose a real company which operates in the Latvian (European) market.
- 2) Define symptoms of a problem, the basis of the problem, a research design. Construct a graph of problems and solutions.
- 3) Evaluate the influence of macro environment factors on company activities via PEST methods. Characterize the business environment. Is it stable? Variable? Turbulent? What is the company mission in these conditions?

- 4) Create a concept of the base market. Perform macro segmentation of the market through one of the standard methods (Abel method, “fish”, “net”, three-dimensional matrix).
- 5) Analyse the competition, (according to Porter) one of the most dangerous factors for a company. Construct a SWOT (Strength, Weaknesses, Opportunities and Threats) matrix.
- 6) Perform micro segmentation of the market, identify and justify the market segment which will be the most attractive for the company. Use the VALS2 (“Values and Lifestyles 2”) and GLOBAL SKAN methods. (Kotler & Keller, 2012), (Solomon, 2014). Provide the products’ overall positioning and positioning options for the selected segment by using correlation or cluster analysis.
- 7) Analyse product distribution channels – how well do they match the requirements of the target market segment – by using the semantic differential method.
- 8) Research pricing strategy and company tactics regarding the selected market segment with maximum use of the “price-quality matrix”, a common competition matrix (Porter, 2008).
- 9) Develop an improved communications strategy oriented towards the selected market segment.
- 10) Based on the McKinsey matrix (Doyle, 2002), determine the main competition strategies for the Latvian market.
- 11) Based on a “solution’s novelty – consumer’s demand for novelty” matrix (Bahmane, 2005), determine marketing strategies for the analysed company.

Matrix methods are used for finding effective and rather standard marketing solutions from the first lecture at a higher education institution. These methods provide possible variants of marketing solutions; however, application of these results is often limited since real life in business structures is more complicated than in theory. Students can see the limitations of their solutions and the necessity of creativity and trying to find something new. For most of them, this removes the fear of offering novel solutions, while support and loyal criticism of the lecturer allows them to see their mistakes and lack of information and teaches them to analyse and go beyond what they know. It is important to note that in addition to widely used and well-known matrices (Porter’s, Ansoff’s, Boston’s, McKinsey, SWOT), (Kotler, 1997), (Boddy & Paton, 1998), (Doyle, 2002), the author’s matrix “solution’s novelty – consumer’s demand for novelty” is also discussed. (Bahmane, 2005), (Figure 1).

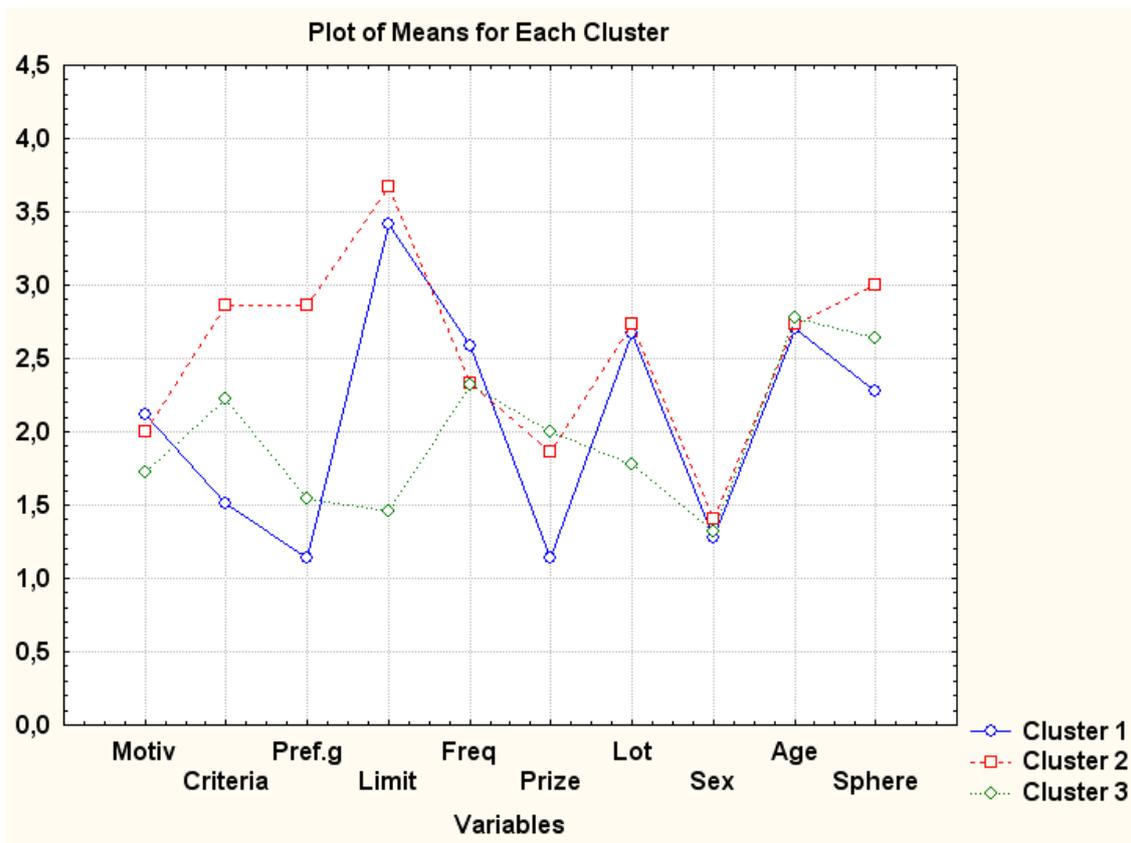


Figure 2. **Customer clusters of gambling services (Riga)** (source: created by author)

Students are taught to analyse conducted research by means of cluster analysis (Figure 2) in different situations and for different objects. Thus, use of cluster analysis (Bahmane, 2015), (Figure 2) allows them to describe gambling services' customer profiles from objective and subjective points of view, identifying the specifics of Riga and Daugavpils gamblers, determining target groups (segments) of bingo-club visitors, and identifying the specifics of customer behaviour, including an evaluation of “solution’s novelty – consumer’s demand for novelty” for strategic decisions on extending the list of offered games and required investments in a specific market and time situation. The main criteria in the choice of gambling room for Dimanta Bingo customers in Riga and Daugavpils are quality of service and a convenient location. The main motivation of customers visiting a gambling room is the desire for relaxation and then gambling excitement. By using cluster analysis, gamblers of Dimanta Bingo in Riga have been divided into “true bingo lovers” (53 %), “privileged innovators” (18.5 %) and “excited” (27.5 %). Gamblers of Dimanta Bingo in Daugavpils were divided into “partiers” (31 %), “rational enthusiasts” (32 %) and “excited optimists” (over 36 %).

It can be concluded from the “solution’s novelty – consumer’s demand for novelty” matrix that presently the organization is situated in the 1st quadrant and uses the “strategy of proven service quality”. Since the company is growing and has strong positions in the gambling market, its further development should be based on the 2nd strategy – the “strategy of increasing gambling services’ quality”, “image forming”. This means that no new investments are required.

The use of cluster analysis allows the student not only to find new solutions, but also to search for more efficient non-existing marketing solutions, i.e. creative ones. Cluster analysis and segmentation offers companies the possibility to understand their clients and customers more deeply and evaluate their priorities and necessities when making a real choice.

### **The 2nd algorithm – to conquer a strong position in a foreign market**

The 2nd algorithm – the main goal of the company is to conquer a strong position in a foreign market by researching all marketing possibilities in the quickest fashion. This method has been used at RISEBA for 5 years in a test about international marketing by students of the 3rd year for various business structures – from gambling businesses to banks. More complex variants, such as searching with optimal criteria, relative analysis of chosen countries and detailed research of competition, become part of bachelor’s or master’s theses.

Stages of the 2nd algorithm’s implementation:

1st stage. The screening analysis method allows one to solve almost any unsolvable task: how to perform a maximally complete analysis of market possibilities with limited company possibilities (personnel, time, resources).

2nd stage. The screening analysis method offers additional possibilities for precision, additional correction of the strategy, i.e. change of criteria, adapting criteria to specific conditions.

3rd stage. The method of environment sectioning allows one to determine the specifics of the macro environment and the market in potentially attractive countries.

4th stage. Use of a marketing mix model – the 7Ps – allows the company to match the needs of target consumers in each selected country with the marketing possibilities of the company.

Survival of small and medium-size businesses in the turbulent variable conditions of the Latvian market entirely depends on their focused research of new export opportunities. An example of a small Latvian company, SIA ProBaltic, shows that in conditions of market internationalization, accessible internet technologies, and use of screening analysis databases and matrix methods, it is possible to search for an optimal marketing strategy for entering foreign markets via cabinet research (Bahmane, 2010).

Screening analysis, in turn, has a series of sequential stages – a specific algorithm for an optimal solution search in selected countries and markets where a company's products (services) can find a competitive niche. According to V. Cherenkov (Черенков, 2006), the required stages can be described as follows:

- 1) The basis for analysis is determined: characteristics of company activities that make products (services) unique and improve their competitiveness.
- 2) The conditions for searching for new markets is determined – the strategy of the company is formed – standardization or adaptation of further searches: either searching for markets which are ready to accept the company's products or searching for products that are in demand in markets known to the company. This solution is determined by competitive (unique) company products' (services') features.

Screening analysis allows one to create a list of top priority countries by a focused search of over 236 countries using MS Excel software, including conditional formatting tools.

***1st filter. Macro environment.***

*Takes into account:* social-cultural norms, political-legal norms, the economic condition of the country, a geographical location.

*Suggested search criteria:* customs tax, the average income level per capita, a great distance between importer and exporter countries, a small population of the importer country, political disagreements between both countries (economic sanctions, ban on imports).

*Preliminary possibilities:* Austria, Belgium, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany Greece, Hungary, Ireland, Italy, Lithuania, the Netherlands, Norway, Poland, Portugal, Russia, Saudi Arabia, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Arab Emirates, the United Kingdom, Israel.

***2nd filter. Specific product acceptance specifics in each region.***

*Takes into account:* religious factors, informational support, historical premises, ethical norms and traditions, market development stages.

*Suggested search criteria:* Muslim countries excluded, no information about the market in a specific country, relatively few imports, presence of consumers related to the exporting country in any way.

More precise possibilities: Belgium, Estonia, France, Germany, Ireland, Italy, Lithuania, the Netherlands, Russia, Spain, the United Kingdom.

***3rd filter. Specific factors influencing exports.***

*Takes into account:* competition in the local market, similar substitutes for a specific product, forecasted and real data for sales of similar products in a given market, the rate of products' acceptance by consumers, market entry expenses.

*Suggested search criteria:* too much competition in the local market, substantial number of similar, mutually exclusive products, the worst forecast for the market, high expenses for entering a specific market.

*The most probable possibilities:* Germany, France, Italy, the Netherlands, Spain.

**4th filter. Target markets.**

As a result, a list of top priority countries is prepared to search in a specific niche. Presence of consumers with an ethnicity like Latvian people

*The most probable possibilities:* Germany, the Netherlands.

As a result, an estimation of macro environment factors is made in the conditions of a turbulent business environment. This allows business structures to define a competition position at a given moment, to find “anchors”, which will allow them to develop and improve strategies.

An example of a potential export market screening analysis method is shown below for the products of JSC Latvijas maiznieks. A conditional scheme of the screening analysis was made: JSC Latvijas maiznieks already exports its products to Latvia's closest neighbours, i.e. Lithuania and Estonia. Also, exports of confectionary products to Great Britain and Ireland were established in 2014, i.e. to the countries where many ethnic Latvians, Lithuanians, Estonians, and Poles live, who have tried products from Latvijas maiznieks multiple times before. These countries will not be considered as potential partners in the screening analysis.

What should be considered during a screening analysis? When choosing countries that are most appropriate for exporting Latvijas maiznieks products, the researcher chooses country features that have the greatest influence (or can possibly have such influence). Thus, a screening analysis was started with the exclusion of 4 countries already among the importers of AS Latvijas maiznieks, which are: Estonia, Lithuania, Great Britain and Ireland. It was possible to skip this step and check whether the intuitively made choice matches the logical search of variants per selected criteria.

So, there were 236 countries of the world initially. The main (first) criteria used to select variants was gross national income per capita in the country per year. This can be calculated by dividing national income by the population of the country. Income per capita as a rating is totally different from gross domestic product and gross national product per capita. For international comparisons, income per capita is recalculated into a single currency, usually the US dollar. Since no purchasing power differences in various countries are considered this way, purchasing power parity recalculation is preferred.

Countries can be divided into:

- countries with a high level of income per capita (over \$12,616);

- countries with a medium level of income per capita (from \$1,036 to \$12,615);
- countries with a low level of income per capita (below \$1,035).

**This way, the first filter is passed only by countries with an elevated level of income per capita, i.e. over \$12,000.**

Political-legal form. The screening analysis filter is passed by countries of the EU, i.e. exports to these countries are not subject to customs dues. Also, the greatest importing country of Latvia is excluded – Russia. Due to the latest political and economic events in the world, this country imposed an embargo on significant groups of food products imported to their country. These groups include products of AS Latvijas maiznieks.

#### ***Population***

The screening analysis filter prevents countries with a population below 2 million people from passing.

#### ***Ethical norms and traditions***

The filter excludes countries where it is historically uncommon to use flour products in the way AS Latvijas maiznieks provides.

#### ***Geographical location***

Since AS Latvijas maiznieks doesn't use E additives during production, the product can't be stored for a long time. Thus, delivery to the importing country should be performed in the shortest terms without spending a lot of time on transportation. This way, the screening analysis filter excludes countries with a distance of over 1,000 km from Latvia. Great distances between countries increase the costs of shipping products as well, which makes the price less competitive in the target market.

#### ***Taxes and dues (VAT payers)***

The filter excludes countries that are not members of the EU Economic Area and have customs taxes on imports. (Choice of criteria could be different.)

#### ***Ease of entering the market***

The markets of Germany, the Netherlands, Spain and Italy have considerable competition between both local and foreign manufacturers. Entering the market is also difficult because of the conservative views of the local population on food products. It is proposed that the focus of the company should be made on visitors from these countries, who are more open to changes in their usual routine and who are mostly familiar with the quality and taste of these confectionary products. So, Italy and Spain do not pass this filter.

## Conclusions

Based on the results of the screening analysis, 2 countries are selected for exports – the countries that most precisely match the needs of the environment at the present stage of the organization Latvijas maiznieks. These countries are Germany and the Netherlands. For these countries, environment segmentation and a strategy for entry are developed and a marketing mix 7Ps package is justified.

Results of the research

- 1) Use of controlled creativity of solutions is a real option in finding ways to achieve the goals of any business structure in the conditions of a turbulent external environment.
- 2) Use of algorithms for developing standard marketing solutions allows for fast and adequate research of specific business environment features and offers an adaptive marketing solution adequate for an organization.
- 3) If the situation is unclear, the use of complex approaches (matrices, clusters, discriminant analysis, the Jefremov-Zade method (a variation of PEST) allows for a nonstandard approach to solving problems (Bahmane, 2007) regarding national market conditions. This makes it possible to enter the 3rd and 4th levels of creative thinking development in training marketing specialists.
- 4) Use of the matrix “solution’s novelty – consumer’s demand for novelty” (Bahmane, 2005) in the process of marketing solution development allows specialists to find new aspects of adaptive marketing solution development.
- 5) In conditions of turbulence – unpredictably and quickly varying factors in the business environment – adaptation comes in the form of marketing strategy, especially for small and medium-size businesses of Latvia.

### ***Additional conclusions:***

- 1) The model of student training (including marketing managers) in development and use of creative solutions shows its practicality in the example of various business types, times and even different skills of students.
- 2) Knowledge of modern inter-marketing techniques and working experience removes young specialists’ fears of making expected management decisions, including creative ones.
- 3) Young specialists, even as students, understand and comprehend the possibilities of using modern methods and algorithms to find adaptive marketing solutions in the conditions of turbulent business environments.

***Conclusions on algorithm mastering and applications:***

- 1) The proposed algorithm can be successfully mastered during 100 academic hours and 3 study courses by students-managers.
- 2) The proposed algorithm can be easily adopted to new requirements in conditions of turbulent business environment, considering new methods and technologies of marketing management.
- 3) Students (managers) can determine the complexity of algorithm application required by Latvian market specifics.

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## CULTURAL HERITAGE AS A BASIS FOR DEVELOPMENT OF TOURISM (AS EXEMPLIFIED BY A SMALL TOWN IN CENTRAL EUROPE)

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**Abstract.** *The purpose of the study has been to identify the elements of cultural heritage of Hasids in Lelów. A landscape heritage inventory method has been used and a variety of attractions and objects have been identified attributed to traces of everyday life of David Biderman's dynasty Hasids. Attractions from among seven groups of physical classification were identified, namely: environmental objects; archaeological objects; monuments of architecture and urban planning; historical places of remembrance; museums, archives and collections; folk culture facilities and centres; and modern facilities (established after 1945), including events. In addition to the landscape heritage inventory an interview was also used to obtain information. It was found that the core of local and regional tourist product is the annual pilgrimage of Hasids to the tzadik David Biderman's grave, which is the largest and most glaring proof of Lelów's multiculturalism, similarly to the festival of Polish and Jewish culture (Festival of Ciulim and Cholent) organized since 2003. Cultivating traditions of this lineage in the annual celebrations involving thousands of foreign guests is unique on the scale of Central Europe, or at least Poland, a cultural and social event, stimulating the development of tourism.*

**Keywords:** *Ciulim, Cholent, Festival, Hasids, Lelów.*

### Introduction

Cultural heritage is a resource of tangible things (artefacts, places, natural and cultural areas) and intangible values (historical, religious, scientific, artistic, custom, folklore), protected and transmitted to subsequent generations and important for the preservation of a society's identity, its development and shaping the sense of civilisational community. Elements of cultural heritage constitute the basis for political, social and cultural development of a society, thus defining its identity (Oigenblick & Kirschenbaum, 2002; Poria et al., 2006;

Maoz, 2007; Wight & Lennon, 2007; Biran et al., 2011; Podoshen & Hunt, 2011).

The area of Central Europe was inhabited by the Jewish community from the late Middle Ages. The largest diaspora was located in the areas of today's Belarus, Lithuania, Poland and Ukraine, where the Jewish community represented over 10 % of the total population. The co-existence resulted in spontaneous mixing of cultures. The modern cultural heritage of Jews in Poland and neighbouring countries plays an important role in building a multicultural society in which different groups, customs and religions exist side by side.

Cultural heritage is successfully used in the strategies of tourism development. The elements of cultural heritage are often cited as tourist attractions that form the basis of leisure- and recreation-related tourism or education (Poria et al., 2003; Kowarik et al., 2016; Fajer et al., 2016), including as part of the so-called dark tourism (Miles, 2002; Stone & Sharpley, 2008; Causevic & Lynch, 2011; Kang et al., 2012; Wight, 2016; Płomiński & Bakota, 2017). Adaptation of the elements of cultural heritage in tourism usually refers to large objects or groups of objects, and is rarely the domain of small towns.

The purpose of the study is identify the elements of cultural heritage of Hasids in Lelów (in a small town in the south of Poland), its modern interpretation and investigation of its possible use in the development of tourism.

## **Research methods**

The study area is a small town in the south of Poland (Fig. 1). It is a village in the rural district of Częstochowa, located in the north-eastern part of Silesian province, about 35 kilometres east of Częstochowa.

Lelów has long been characterized by its multiculturalism because of the town's Polish and Jewish residents. The oldest mention of the presence of Jews in Lelów, which can be found in the inspection report, dates from the late 16th century. It is a document in which the church authorities expressed their outrage when the Lelów starost took a part of hospital land with the intention of using it for a Jewish cemetery (Poniewierska et al., 2005).

The privileges awarded to Jews meant that their number on the territory of Lelów increased. In the 17th and 18th centuries the Jewish community in Lelów received privileges from the following rulers: Władysław IV (1633), Jan Kazimierz (1649), Michał Korybut Wiśniowiecki (1669), Jan III Sobieski (1695) and Stanisław August Poniatowski (1766). It is worth mentioning that the seats of the rabbi and the kahal were located in Lelów too (Poniewierska et al., 2005).

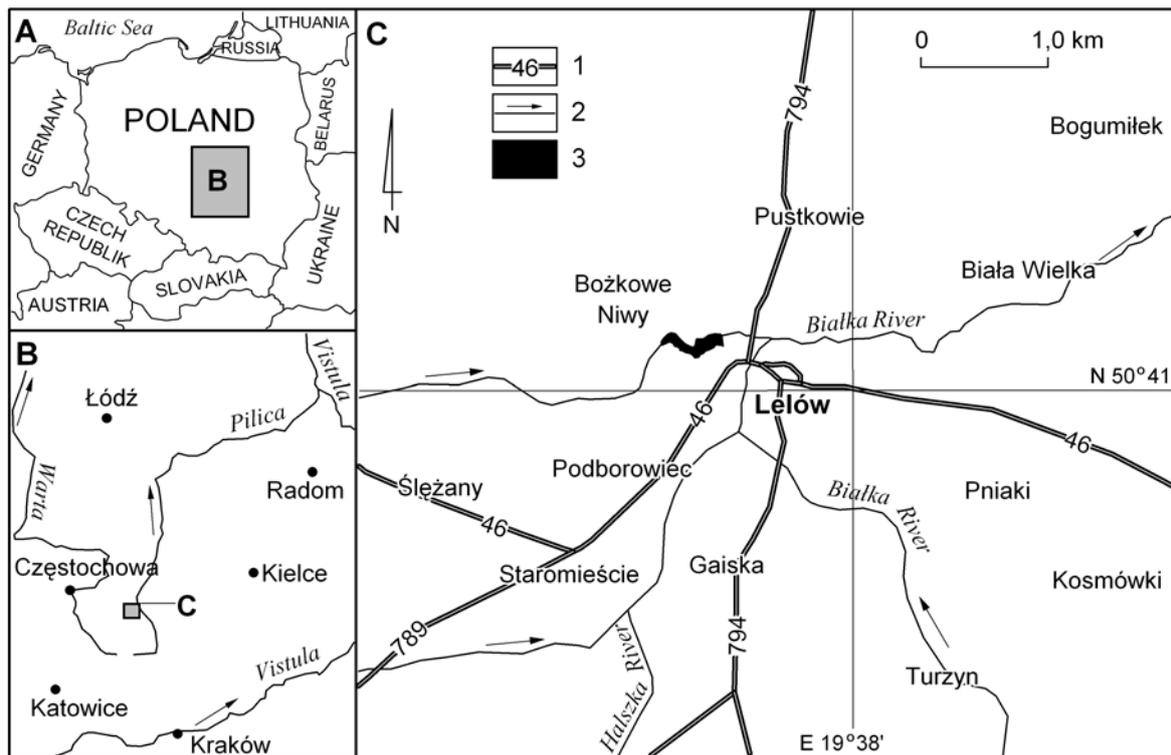


Fig. 1. Location of research area:

1 – major roads, 2 – surface watercourses, 3 – water bodies (source: own work)

The method used in identifying the elements of cultural heritage of Biderman's dynasty Hasids on the territory of Lelów is the landscape heritage inventory.

The landscape heritage inventory is a method of research based on stocktaking of sightseeing objects and attractions from nature. The spatial scope of the landscape heritage inventory has been limited to Lelów – a small village in southern Poland. The temporal scope of the landscape heritage inventory covers the chronology of Biderman's dynasty history in this town. The landscape heritage inventory was taken with regard to the sightseeing objects and attractions in eight groups of physical classification:

- natural environment,
- archaeological objects,
- monuments of architecture and urban planning,
- historical places of remembrance,
- technological monuments,
- museums, archives, collections,
- folk culture facilities and centres,
- modern facilities (established after 1945) and events.

## Research results

As part of the landscape heritage inventory, selected attractions from among seven groups of physical classification were identified, namely: environmental objects; archaeological objects; monuments of architecture and urban planning; historical places of remembrance; museums, archives and collections; folk culture facilities and centres; and modern facilities (established after 1945), including events (Fig. 2). The only inventory group without attractions and objects identified on the territory of Lelów was technological monuments.

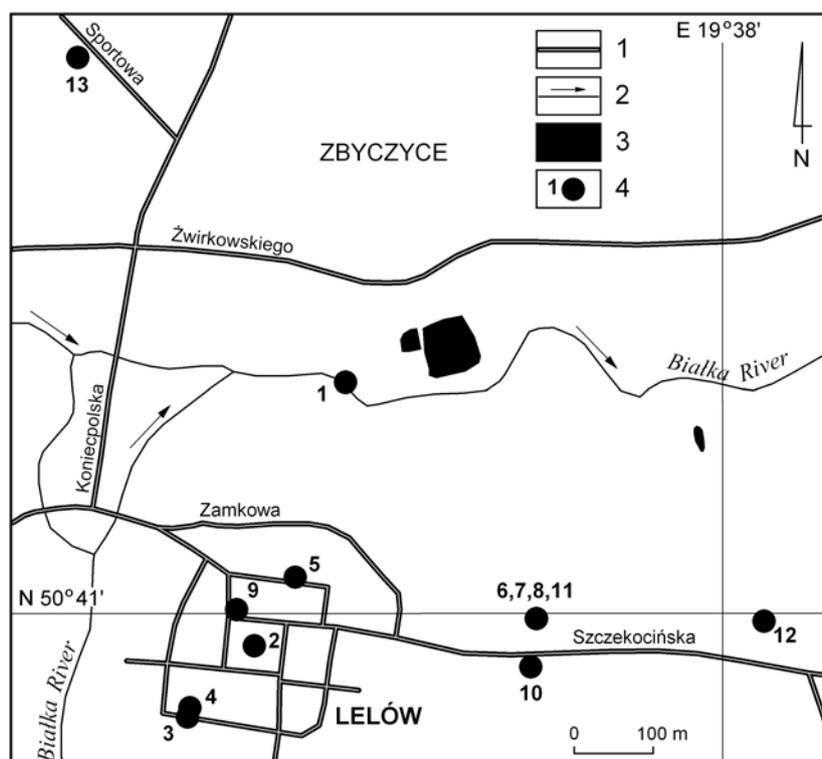


Fig. 2. **Elements of the cultural heritage of Biderman's dynasty Hasids in the area of Lelów:** 1 – major roads, 2 – surface watercourses, 3 – water bodies 4 – inventoried objects and attractions related to the cultural heritage of Biderman's dynasty Hasids (1 – Białka river used for recreation by tzadik David Biderman; 2 – pieces of foundations of Jewish shambles on the market in Lelów in Partyzantów Street; 3 – House of prayer in Ogrodowa Street; 4 – ohel of tzadik David Biderman opposite the house of prayer; 5 – St Martin's Church in Lelów at 8 Klasztorna Street with a plaque commemorating victims of Hitlerian barbarity; 6 – Local Cultural Centre in Lelów at 31 Szczekocińska Street; 7 – Chamber of Lelów Region Tradition at 31 Szczekocińska Street with Jewish diorama; 8 – Walenty Zwierkowski Historical and Cultural Society of Lelów at 31 Szczekocińska Street; 9 – Lelowianka Restaurant at 28 Partyzantów Street with Jewish cuisine dishes; 10 – Ciulim Inn at 22 Szczekocińska Street with Jewish cuisine dishes; 11 – location of Festival of Ciulim and Cholent in the years 2003-2005 at 31 Szczekocińska Street; 12 – location of Festival of Ciulim and Cholent in the years 2006-2013 at 41 Szczekocińska Street; 13 – location of Festival of Ciulim and Cholent in the years 2014-2016 at 1 Sportowa Street) (source: own work)

In the group of objects related to the natural environment, the Białka river has been distinguished with its recreational attraction emphasized in the context of baths taken by tzadik David Biderman (Source: Sefer Migdal Dawid (Wieża Dawida), Piotrków 1930).

In 2011 archaeologists from Wrocław found pieces of foundations of Jewish shambles on the market in Lelów (50 40'59.748"N, 19 37'29.409"E), which were commercial premises of the Jewish population. During excavations Hanukkah dreidels were also found, which were used in the traditional Jewish gambling game during the holiday of Hanukkah.

Monuments of urban planning and architecture are represented by the mikveh and kosher house. In the 1990s the building of a cooperative of the disabled (3 Ogrodowa Street) was adapted to suit the needs of the house of prayer (50 40'56.408"N, 19 37'25.836"E), in which in 2002 a mikveh was built. In the back rooms of the house of prayer another mikveh is located together with a kosher house, but they have lost their original character.

Historical places of remembrance located in Lelów are monuments, graves, commemorative plaques and epitaphs. They are represented above all by the ohel of tzadik David Biderman (50 40'56.946"N, 19 37'25.856"E), next to which are also matzevahs. Of lesser importance is a plaque on the house of prayer commemorating tzadik David Biderman and the Jews of Lelów. In addition, in 2010, on the pillar of the fence gates of St Martin's Church in Lelów (50 41'2.796"N, 19 37'31.81"E), a plaque with the added names of Jews of Lelów commemorating "victims of Hitlerian barbarism, who were the first to sacrifice their lives on the altar of their homeland in Lelów on 3rd and 4th September, 1939" (8 Klasztorna Street) was placed.

Lelów is also regarded as a folk culture facility and centre with its workshops in Jewish songs, dance, papercuts (Fig. 3) and cuisine, held in the Local Cultural Centre (50 41'0.826"N, 19 37'48.282"E). A similar role is played by the activity of the Walenty Zwierkowski Historical and Cultural Society of Lelów (50 41'0.826"N, 19 37'48.282"E). An important manifestation of the contemporary interpretation of the cultural heritage of Hasids in the area discussed is the presence of two restaurants serving Jewish dishes, i.e. Ciulim Inn, with such dishes as cholent and kreplach, and Lelowianka Restaurant, with such dishes as cholent and traditional Jewish goose meat dishes – goose gizzard stew ("*gęsi pipek*" in Polish) and stuffed goose neck ("*gęsie pipki*" in Polish).

The category of museums, archives and specialist collections includes the Chamber of Lelów Region Tradition (50 41'0.826"N, 19 37'48.282"E) with a room in memory of the Jews of Lelów, which also houses a diorama on the subject of Jews.



Fig. 3. Papercuts – example of Jewish art (photograph by D. Bakota, A. Płomiński)  
(source: own work)

The town is renowned for its modern cultural and religious events: Jorcajt and the Festival of Ciulim and Cholent, which are enjoying increasing popularity of residents, visitors and tourists. The Festival of Ciulim and Cholent has been held in different locations: in the years 2003-2005 at 31 Szczekocińska Street (50 41'0.826"N, 19 37'48.282"E); in the years 2006-2013 at 41 Szczekocińska Street (50 41'0.648"N, 19 38'2.445"E); and in the years 2014-2016 at 1 Sportowa Street (50 41'24.8"N, 19 37'17.177"E).

### Discussion of research results

Lelów became popular among Jews in the 18th century thanks to David Biderman. He founded a Hasid dynasty, which was based on Judaism and Kabbalah. Thus he made Lelów one of the centres of Hasidism (Poniewierska et al., 2005). He died in 1814 and was buried in the Jewish cemetery in Lelów. Since that moment his grave has become a place of visit for thousands of Jews, especially on the anniversary of his death (Skrzypczyk, 2008).

Before World War II, Jews accounted for more than 50 % of the population of Lelów. Therefore, in this village located near Częstochowa there were two Jewish cemeteries. The first, built in the 16th century, was located in front of the synagogue (where tzadik David Biderman was buried). Then, the second Jewish cemetery was established near Białka river at the beginning of the 19th century.

When in the spring of 1943 the last Jews of Lelów were sent to the concentration camp in Treblinka (with only seven Holocaust survivors), both cemeteries were closed down on the order of the German authorities (October 1943) (M. Skrzypczyk, personal communication, November 10, 2016).

Hasidic Jews have been coming to Lelów to the tzadik David Biderman's grave for many years. The date of the celebration is moveable, because it is calculated according to the lunar calendar. In 2016, the year 5777 began according to the Jewish calendar (counted from the creation of the world, which according to Jewish orthodoxy dates back to 3761 BC) (“Dziennik Zachodni”, daily, 2016).

Until the outbreak of World War II, Hasidic Jews made pilgrimages on a regular basis. Regular visits to the grave resumed in 1990, when in 1988 – thanks to the initiative of the Nissenbaums Family Foundation – David Biderman's grave was found. It is also noteworthy that the Hebrew University of Jerusalem confirmed the authenticity of the buried tzadik's remains (Bryła, 2006). His grave is located in a separate part of a commercial pavilion in Ogrodowa Street and is a destination of pilgrimages of Jews from all over the world.

In 2009, the Hasids who came to Lelów had double reason to celebrate. In December 2008, the State Treasury, by way of a notarial deed, took over the land where the tzadik's grave is located from the Local Cooperative and granted it to the Jewish Religious Community in Katowice. The participants in the negotiations on the recovery of a Jewish cemetery by the Jews included the Silesian province governor (who represented the State Treasury) and Rabbi Simcha Krakowski (a descendant of tzadik David Biderman). It is worth mentioning that the State Treasury paid PLN 603 000 to the Local Cooperative, and the remaining PLN 200 000 – in the form of a donation – was provided by the Foundation of Hasidic Jews which attended to the Jewish cemetery (after its previous assignment by the Jewish Religious Community). Thus Hasidic Jews regained the whole area which before the war was the property of the Jewish community of Lelów, including the building which housed the synagogue. Currently a ritual bath is located there (“Dziennik Zachodni”, daily, 2009).

The visits of Hasids to Lelów can already be treated as tourism industry, with the inhabitants of Lelów providing the visitors accommodation which is booked by the Foundation of Hasidic Jews of Lizhensk. A host entertaining Hasids, during Shabbat, must agree to perform simple activities for the guests, for example turning lights on and off or turning the tap on.

The celebration starts on Friday (after sunset). At this time the Hasids say Shabbat prayers. After these rites, which take several hours, they go to sleep. Saturday is also a day of the celebration, when the Hasids focus on deep prayer. On the tzadik's grave they put small pieces of paper with their requests

(kwitlech). At dusk they have havdalah (the ceremony of separating the Shabbat time from the weekday). The last day of celebration is Sunday. In addition each Hasidic Jew visits the tzadik's grave, because they believe it will give them strength for the next year.

The Hasids coming to the tzadik's grave have inspired the residents of Lelów to organize an event which would restore the memory of the pre-existing Polish-Jewish friendship. Thus the initiative of a festival that would allow the meeting of these two different yet close cultures was born. Therefore – according to the well-known Polish saying "the way to one's heart is through one's stomach" – the decision was taken to organize the festival, in which the leading role was played by two dishes – cholent and ciulim (M. Skrzypczyk, personal communication, November 10, 2016).

Getting to know the history of these dishes, which the name of the Polish-Jewish festival is derived from, is as important as the organisation of this event. The tradition of making Jewish cholent was linked to Shabbat, when Jews did not perform daily work. For the period of celebration they had other people, of no Jewish descent, do it, who took the responsibilities of the household members. The ingredients of cholent, which was prepared before the Shabbat (on Friday), included, among others, beef, potatoes, beans, barley, garlic, onion, goose fat, salt and pepper. It was roasted in bread ovens. The residents of Lelów, however, created their own dish, which was made in a similar way to the one of Hasids. It was ciulim, which was primarily based on potatoes, pork ribs, onion, lard and specific spices (mainly salt and pepper). The dish was consumed by the residents of Lelów at Christmas and Easter. It was taken out of the oven directly before consumption, just after returning from church. This custom was to prove great piety (Bakota & Płomiński, 2016).

The Festival of Ciulim and Cholent has been organized since 2003 (at the last or penultimate weekend of August). It was first initiated by Jerzy Szydłowski (the then head of the commune of Lelów). The place where the celebration was launched was the Local Cultural Centre in Lelów. It was a closed meeting attended by the Self-government of the Commune of Lelów and the Jewish community which was in the majority. The ceremony started with joint lighting of a menorah (which was customary in the following years too), i.e. a seven-branched candelabrum used in the liturgy of Judaism (Cała et al., 2000). The celebration of the 1st Festival of Ciulim and Cholent, which was attended by 120 people, was accompanied by the performance of a klezmer band from Cracow and school bands from Lelów and Częstochowa. After the artistic part it was time for tasting many dishes, including Lelów ciulim and Jewish cholent (Roden, 1996; Bryła, 2006).

From year to year the Festival of Ciulim and Cholent has been attracting more and more tourists. At the beginning it was a small event, whereas at present it has a nationwide, or even worldwide, scope. At the end of the 2nd half of the 1st decade of the 21st century during the Festival Lelów was visited by 5-6 thousand people. Next, in the years 2012-2016 each year even 10 thousand people came to Lelów (E. Molenda, personal communication, December 20, 2016).

In the years 2003-2005 it was a one-day event celebrated on Sunday. In 2006, due to the increasing number of visitors coming to Lelów wanting to learn about Jewish culture, the format of the event changed to two days (Saturday and Sunday). The first day of the festival was a day of Polish culture and the second one a day of Jewish culture. Since 2013, it has been a three-day festival (Friday to Sunday). The organizers of the event are the Commune of Lelów, the Local Cultural Centre in Lelów and the Walenty Zwierkowski Historical and Cultural Society of Lelów (E. Molenda, personal communication, December 20, 2016). From the information listed on the posters of each edition of the Festival of Ciulim and Cholent in the years 2007-2016, it appears that the media sponsors involved in the event in order to publicize it were the following: Polish Television channel TVP3, NTL, TVS, Orion Television in Częstochowa, Polish Radio Katowice, *Dziennik Zachodni* daily, *Gazeta Myszkowska* weekly, *Gazeta Wyborcza* daily, *Życie Częstochowskie* daily, *Kurier Jurajski*, *Kurier Zawierciański*, *City Poster*, *Tygodnik Regionalny 7 Dni* weekly, *Nowa Trybuna Częstochowska* weekly, Laboratorium Reportażu (Laboratory of Documentaries) and Jurajski Serwis Turystyczny (Jurassic Tourist Service). It is also noteworthy that in the years 2003-2016 the venue of the event also kept changing. At first it was celebrated in the seat of the Local Cultural Centre, from 2006 in the school square in Szczekocińska Street, and since 2015 at the sports stadium in Sportowa Street (Bakota & Płomiński, 2016).

With time, the range of "specialities" offered to participants during the festival also increased. Apart from ciulim and cholent these included crayfish, *gęsie pipki* (stuffed goose necks), *gęsi pipek* (goose gizzard), tzimmes, home-baked bread, goose lard, kugel, carrot cake, challah, matzah, Jewish style carp and trout, plum vodka of Lelów, and kosher dishes (Bakota & Płomiński, 2016).

In the years 2007-2016 (this period is covered by the sources of the Local Cultural Centre – LCC), during the day of Jewish culture performances were given, among others, by the bands playing at the LLC in Lelów, groups from Chmielnik (a Jewish dance show), the winners of the 1st, 2nd and 3rd edition of the Children's and Young Adults' Jewish Song Competition, Leopold Kozłowski (referred to as "the last klezmer of Europe") and klezmer bands, such as Chmielnikers, Sholem, Eliezer Mizrachi, Max Klezmer Band, Klezmates, NeoKlez and Tempero.

The programme of the event, in the period covering the years 2007-2016, included not only artistic performances, but also a photo exhibition on Jewish subjects by Leszek Pilichowski and Karol Fatyga; exhibitions by students of the Secondary School of Fine Arts in Częstochowa (entitled: "Inspired by the Jewish culture" and "Wherever I go, I always make my way towards Jerusalem"); an exhibition of children's and young adults' competition works "Lelów – a meeting place of cultures"; an exhibition entitled "Jewish papercuts" (by Marta Gołąb, Ilona Kotaszevska and Grzegorz Dudała); a photo exhibition "Dancing with God", which showed pilgrimages of Jews to Lelów; a photo exhibition by Daniel Pacha entitled "Neighbours who are no longer here...", a photo exhibition by Krzysztof Krzemiński entitled "On the road" and Jewish dance workshops. Of great interest was also the exhibition "Anne Frank – History for today", dedicated to Anne Frank (a young Jewess), whose diary, a testimony to the terrible days of the Holocaust, has become a global bestseller (E. Molenda, personal communication, December 20, 2016).

In addition, it is worth mentioning that since 2013 on Fridays films on Jewish subjects have been screened. In 2013, the film by Rama Burshtein "Fill the void" was shown (the film tells the story of eighteen-year old Shira, who after the death of her elder sister has to find her place in the Hasidic community again); in 2014 it was a film entitled "The Jewish Cardinal" (directed by Ilan Duran-Cohen, a biography of the cardinal Jean-Marie Lustiger coming from a family of Polish Jews); in 2015 "Zero Motivation" (directed by Talya Lavie; the film is a portrait of an Israeli military unit, where women do military service), and in 2016 "Self Made" (directed by Shira Geffen; the film tells the story of two women – one Israeli, the other Palestinian – whose lives intersect at the border checkpoint) (E. Molenda, personal communication, December 20, 2016).

## **Conclusions**

1. Lelów is an example of a town characterized by a multicultural nature resulting from centuries-old tradition of the coexistence of Poles and Jews, which was typical of many villages and small towns in central Europe.
2. On the territory of Lelów a number of attractions and objects related to the former presence of Biderman's dynasty Hasids have been inventoried, which prove the permanence of cultural heritage cultivated in the conditions of multiculturalism, dialogue and tolerance.
3. Elements of cultural heritage can serve as a basis for developing a strategy of tourism in small towns, and Lelów with its objects and attractions related to Biderman's dynasty Hasids is a case study confirming this thesis.
4. Evidence of the tourist attractiveness of Lelów is the thousands of visitors interested in thematic events related mainly to the short-term, annual stay

of Hasidic Jews in the town, and an occasional interest in tourist attractions in the remaining period of the year.

5. The growing interest of tourists in Lelów could be enhanced through the implementation of the concept of a Central European Hasidic tourist trail with numerous villages, e.g. in South-Eastern Poland and in Ukraine.

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# INTEGRATED MARKETING COMMUNICATIONS IN SUSTAINABLE BUSINESS

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**Abstract.** *Business sustainability hinges on authorities' action, cooperation and willingness to protect nature and natural resources, but they also have to meet the economic needs and cultivate the economic opportunities, whilst also satisfying the social needs and building a fair relationship among the different social groups. One of the ways to develop a sustainable business is integrated marketing communications. When using integrated marketing communications, businesses – notably food producers and retailers – need to focus on the education of consumers, the ecological performance and impact of products on the environment and human health, thus contributing to a sustainable development of Latvia's economy overall. The aim of the research is to evaluate the prospects of development of Latvian food retail chains through the use of integrated marketing communication tools for sustainable business. The following scientific research methods are used in the research study: analytical, comparative, graphical, statistical, observatory and interrogative. The research focuses on the Latvian food retail sector, the subject being Latvian food retail chains, with leading specialists from all Latvian food retail chains surveyed. The research confirmed the hypothesis of the positive influence of the use of IMC tools for sustainability upon demand at Latvian food retail chains, its contribution to the formation of public opinion on the importance of preservation of the environment, the enhancement of consumer awareness, the promotion of corporate social responsibility for consumer health, ecological products overall, and the role and contribution of a green economy to a sustainable development of the national economy as a whole. The author has defined IMC for sustainability, developed and classified IMC tools for sustainability, and drawn up an IMC model for sustainability. The results of the research are of both theoretical and practical value.*

**Keywords:** *integrated marketing communication model, integrated marketing communication tools for sustainability, sustainability, sustainable development; sustainable marketing.*

## Introduction

Business sustainability hinges on authorities' action, cooperation and willingness to protect nature and natural resources, but they also have to meet the economic needs and cultivate the economic opportunities, whilst also satisfying the social needs and building a fair relationship among the different social groups. One of the ways to develop a sustainable business is integrated marketing communications. When using integrated marketing communications, businesses – notably food producers and retailers – need to focus on the education

of consumers, the ecological performance and impact of products on the environment and human health, thus contributing to a sustainable development of Latvia's economy overall.

The aim of the research is to evaluate the prospects of development of Latvian food retail chains through the use of integrated marketing communications for sustainable business. In order to achieve the goal, the following research tasks were put forward: 1) to define IMC for sustainability, 2) to develop IMC tools for sustainability, 3) to classify IMC tools into groups, 4) to draw up a questionnaire for experts, 5) to survey the leading specialists at Latvian food retail chains in order to assess the impact of IMC tools for sustainability upon demand, economic development, social responsibility and environment preservation, and whether Latvian food retail chains intend to apply particular IMC tools for sustainability in their marketing strategy within the next 3 years, 6) to collect and assess the results of the expert survey, 7) to draw conclusions based on the expert survey, and 8) to draw up an IMC model for sustainability. The object of the research is Latvian food retail chains, and the subject of the research is IMC tools for sustainability.

The following scientific research methods are used in the research study: analytical, comparative, graphical, statistical, observatory and interrogative. The research focuses on the Latvian food retail sector, the object being Latvian food retail chains, with leading specialists from all Latvian food retail chains surveyed.

### **Integrated marketing communication in a concept of sustainable marketing**

With the rapid growth of population, development of technologies and change in economic relationships, and owing to such issues as poverty, preservation of ecosystem, shortage of food and water, climate change etc., sustainability is becoming an increasingly topical matter (Martin & Schouten, 2012).

As the current society is interested in the preservation of the environment, the promotion of a healthy lifestyle and other matters of public welfare, businesses, using a sustainable marketing strategy, need to offer products with consideration of preservation and future sufficiency of natural resources. Through taking social responsibility and using marketing communications, they need to focus on the education of consumers on the ecologic performance and impact of products on the human health, their composition and options of purchase, storage, use and utilisation, prioritising national production and thus supporting the domestic market and contributing to sustainable development of Latvia's economy overall (Bormane et al., 2017).

The author's previous research has confirmed that businesses need to adapt their assortment of goods and services to the changeable needs of consumers, the general public attitude, and the legislation. They are frequently able to negotiate with various stakeholders to achieve changes in the overall consumption of goods/services instead of merely changing their corporate activity." (Bormane & Praude, 2013).

It follows from the above that sustainability depends not only on the process where a product is created, but also on contributions to the future through improving the present situation. This is a profoundly integrated concept, not limited to environmental and ecological aspects, but relevant to social, economic and cultural development issues as well. A company should implement sustainability as satisfaction of the current needs of consumers and the society on the basis of market opportunities, corporate resources, communication with consumers, with the preservation and development of environmental resources kept in mind to meet the needs of future generations (Bormane & Praude, 2013).

When it comes to different dimensions of sustainable business development, Boons (2013), Lüdeke-Freund (2013) and Ciemleja (2010) mention business management tools both directly and indirectly related to marketing, such as offer value and interaction with customers (Boons & Lüdeke-Freund, 2013), production process, customer relations management and the selling process. (Ciemleja, 2010). Consequently, marketing is a key component of the business management system in the context of sustainable development. Furthermore, since the promotion of sustainable development sees merging and combination of various activities and elements of marketing communication, one can conclude that it is the IMC elements that matter in a successful sustainable business management system, because "integrated marketing communications unite all marketing communication activities" (Pickton & Broderick, 2005) and, as argued by Pickton (2005) and Broderick (2005), "are a customer relation management process that raises the brand value." (Pickton & Broderick, 2005)

According to Laura Illia (2012) and John M. T. Balmer (2012), the main function and form of marketing and the essence of the entire traditional marketing mix (4P) is business communication. For instance, in respect of product promotion it is crucial to understand how to integrate all messages in a single strategy with support to all IMC activities. This context also requires a thorough understanding of consumers' values and proximity to the company's brand, as the communication and identity of consumers and suppliers relates to the company's general communication and identity. The authors have noted the importance of considering the integration of both horizontal and vertical communication methods and distinguished the following links: 1) primary communication (products, services, management, personnel and corporate behaviour); 2) secondary communication (depending on the form of communication); 3)

tertiary communication (depending on third parties, such as comments by competitors and the media). 4) All communications interact among the organisation, the organisation's identity and reputation, so the entire communication process, including IMC, affects the stakeholder relationship, including political, economic, ethnical, social and technological aspects (Illia & Balmer, 2012).

Reid (2012) argues that the essence of IMC is: 1) to conduct an analysis of customers and stakeholders to identify the perception of value and the best way of interaction; 2) ensure the consistency of all messages sent by brand sponsors (e.g., the company) and work on strengthening the brand value; 3) to create and manage a multi-functional approach to the planning of marketing communications; 4) to use new technologies (e.g., databases) to understand the customer-brand relationship; 5) learn from the analysis, planning and implementation of communications to allocate resources more efficiently and profitably (Reid, 2012).

A peculiar view on IMC is proposed by Finne (2012) and Strandvik (2012) who introduced a new concept of IMC theory – invisible communication which includes non-existence of communication: planned and unplanned. Planned and controlled communication is visible, but communication may also be unplanned and is then identified as invisible. There are values and forms created, but no dialogues take place (Finne & Standvik, 2012).

Given the above and based on the scientific literature on the marketing communication process and IMC, the author finds that there are four main elements of the communication process – sender, message, channel and recipient. The IMC process is very similar to that of marketing communication, yet IMC include an approach that envisages conveying one consistent message to the recipient through organisational promotional activities which may simultaneously encompass a broad range of media.

Duralia (2014), too, in reference to Danciu (2006), has stressed that the competitive marketing strategy of businesses will be sustainable if: 1) based on at least one environmentally sustainable advantage; 2) aimed towards ecological customers and attractive to them; 3) capable of counteracting environment-friendly pressures by competitors; 4) improves the company's market position as an environmental factor (Duralia, 2014).

The use of IMC is constantly developing and the opportunities given by this process become increasingly topical for small and large businesses alike. The existing models of IMC enable to understand the IMC process, yet there is a lack of guidelines, a single model, a classification of tools, which businesses could follow to implement IMC systematically in the context of sustainable development and to optimise its processes. The author believes that the well-known IMC models are not enough for reaching the marketing targets, as the tools

applied in the IMC processes, existing in the scientific literature for now, have not been sufficiently classified and described and do not include the basic conditions of sustainable development – public wellbeing, environment preservation, and economic development.

### **A study of the conceptual approach of integrated marketing communications for sustainable development**

Concurring in essence with the conclusions that the development of the sustainable marketing concept makes businesses think of sustainability and its inclusion in their tactical marketing targets, the author put forward a hypothesis that the use of IMC tools for sustainability has a positive impact on demand at food retail chains, contributes to the formation of public opinion on the importance of preservation of the environment, the enhancement of consumer awareness, the promotion of corporate social responsibility for consumer health, ecological products overall, and the role and contribution of a green economy to a sustainable development of the national economy as a whole. In order to confirm or reject the hypothesis, the author conducted research on IMC for sustainability at Latvian food retail chains.

Given that the present market and consumers require a new way of communication that covers sustainability goals – environment preservation, social responsibility and economic development –, this research is not limited to the classic IMC aimed towards marketing activities and buyer behaviour in the market. The author has developed and classified IMC tools for sustainability, first defining IMC for sustainability, surveyed the leading specialists at Latvian food retail chains with a view to assess the impact of IMC for sustainability on demand, economic development, social responsibility and environment preservation and whether Latvian food retail chains intend to apply particular IMC tools for sustainability in their marketing strategy within the next 3 years, as well as drawn up an IMC model for sustainability based on the results of the expert survey.

The expert survey was distributed to leading specialists of all Latvian food retail chains. The expert survey was held in 2017, and the MS Excel software was used for data processing and analysis. The IMC tools for sustainability developed, collected and classified by the author are shown in Table 1; a summary of the results of the expert survey with the most popular IMC tools for sustainability with a positive impact on demand and sustainable development is presented in Figure 1, and the IMC model for sustainability drawn up by the author on the basis of the results of the research is rendered in Figure 2.

As mentioned, before presenting IMC tools for sustainability in detail one needs to define IMC for sustainability. The author proposes the following definition: **Integrated marketing communication for sustainability (IMC S) is**

**the implementation of marketing activities by integrating opportunities of public welfare, environment preservation and balanced economic development with a view to increase the consumption value of a product or service through the company's communication with market participants using distribution channels.**

The author further explains that, under the definition, the product consumption value is not only the product's economic value measured in money, but also the consumption value given by the availability of information to consumers when choosing the product, an informed choice of the product, a purchase out of necessity, as well as the consumer's knowledge on its functions, use, utilisation and other consumption-related matters. In the author's view, such a product consumption value would encourage a sustainable management – public thinking and action.

A marketing that fits in sustainable economic development may be deemed sustainable marketing. Hence, the IMC included in the traditional marketing communication of businesses with their consumers may as well serve as a tool for sustainability. Businesses may work with various stakeholders to achieve changes in the overall consumption of goods or services instead of merely changing their corporate activity. For instance, when working on product packaging, they may choose among a variety of materials and contemporary advancements. Likewise, when working on product promotion, they may promote sustainable consumption etc. IMC tools for sustainability may serve as market tools in the sustainable development of the country overall.

Latvia's Sustainable Development Strategy "Latvija 2030" sets out priority long-term directions, such as 1) creation of market instruments that would enable a market in ecosystem services and products and improve the ecological efficiency of the country's economy, help attract private funding for the preservation and regeneration of the natural capital; 2) promotion of healthy lifestyle – the reduction of biodiversity and the climate changes are largely driven by households as final consumers. The economic activity and excessive consumption by people result in an increasing release of greenhouse gases into the atmosphere and depletion of natural resources. By promoting involvement in the preservation of ecosystems it is possible to evolve into a society that respects the natural capital etc. (Latvija 2030). For instance, one of the solutions put forward for the promotion of a sustainable lifestyle is certification of sustainable products (Latvija 2030).

Based on the above, the author believes that demand is nowadays affected by various factors, but sustainable business development in the traditional IMC with consumers requires tools that facilitate the accomplishment of sustainability goals. In Table 1, the author has developed, aggregated and classified IMC tools for sustainability (80 pcs) and divided them into 8 main groups. They have been

categorised based on the following principle: **1) management IMC tools for sustainability** (8 pcs) – includes a marketing communication management system, focusing on the promotion of sustainable, ecological, Latvian-made products; **2) product-related IMC tools for sustainability** (14 pcs) – includes tools that facilitate the availability of ecological Latvian-made products by supporting domestic production and agriculture and educating consumers on healthiness, ecology, packaging, product usage, utilisation options etc., **3) price-related IMC tools for sustainability** (5 pcs) – primarily includes the pricing policy having regard to the sustainability goals, aimed towards boosting the consumption of domestic-made, ecological and sustainable products or introducing new products into the market; **4) promotion-related IMC tools for sustainability** (28 pcs) – deal with the physical availability of goods in stores and the availability of information on sustainable, healthy, ecological, domestic-made products; **5) digital promotion-related IMC tools for sustainability** (12 pcs) – enable extensive communication options among consumers, with businesses able to convey information to the public in a brief form, save resources and time, build a positive image, while for consumers there is an opportunity to belong to a social group, share opinions, get actively involved, save time, do comparative shopping etc.; **6) staff professionalism- and selling-related IMC tools for sustainability** (2 pcs) – generates feedback between consumers and the company and promotes sustainable consumption, substantially affects the buyer behaviour at such stages as information searching and consideration of alternatives, buying decision, and buying; **7) corporate identity-related IMC tools for sustainability** (6 pcs) – key to covering large social groups, enhancing the public's awareness, and changing its routine thinking and action. Investments in scientific research or conferences, education, instructional literature as IMC tools for sustainability pave the way for new approaches and methods, contribute to the scientific development, form the theoretical basis of further practical business; **8) geographic placement- and technology-related IMK tools for sustainability** (5 pcs) – for the mitigation of risk, the testing of product quality, the introduction of new products into the market etc.

A full list of the IMC tools for sustainability developed, aggregated and classified by the author is presented in Table 1.

IMC tools for sustainability enable businesses to generate feedback because through marketing communications consumers receive information from the company on the products or services being offered, also in the context of sustainability – the preservation of the environment and the stimulation of economic growth and public wellbeing in Latvia.

**Table 1 IMC tools for sustainability**

(source: IMC tools for sustainability developed, aggregated and classified by the author)

<b>No.</b>	<b>Marketing communication tools for sustainability</b>
<b>1.</b>	<b>Management tools for sustainability</b>
1.1.	Sustainability targets in the company's informational resources
1.2.	Strategic planning of marketing communications for sustainability
1.3.	Inclusion of ecological product in tactical sales-inducing activities
1.4.	Company's participation in social responsibility for consumer health
1.5.	Company's participation in building public opinion on environment preservation
1.6.	Raising public awareness of ecological products in general
1.7.	Marketing staff training on sustainability, sustainable products
1.8.	Customer loyalty programmes driven towards boosting sales of sustainable ecological Latvian-made products and consumers who buy ecological products regularly
<b>2.</b>	<b>Product-related tools for sustainability</b>
2.1.	Proportion of ecological products on offer
2.2.	Proportion of Latvian-made products on offer
2.3.	Proportion of genetically modified products or products containing genetically modified food ingredients on offer
2.4.	Proportion of import products on offer
2.5.	Proportion of products with environment-friendly packaging (with quick natural decomposition) on offer
2.6.	Proportion of products with recycled packaging on offer
2.7.	Product packaging design promoting consumer awareness of sustainability
2.8.	Information on product labels promoting consumer awareness of sustainability
2.9.	Information provided by product marking on product healthiness and nutritional value
2.10.	Information provided by product marking on packaging recycling and utilisation options
2.11.	Best before dates of import products
2.12.	Best before dates of Latvian-made products
2.13.	Proportion of products with long best before period in assortment
2.14.	Proportion of products with relatively short best before period in assortment
<b>3.</b>	<b>Price-related tools for sustainability</b>
3.1.	Pricing policy making for sustainability
3.2.	Price discounts on ecological products
3.3.	Price discounts on Latvia-made products
3.4.	Price discounts on products with environment-friendly packaging
3.5.	Sales promotion activities for ecological products
<b>4.</b>	<b>Promotion-related tools for sustainability</b>
4.1.	Product quantity and availability to buyers in store during evening hours
4.2.	Position of Latvian-made products in stores
4.3.	Position of own-brand products in stores
4.4.	Position of import products in stores
4.5.	Position of genetically modified products (or products containing genetically modified food ingredients) in stores

4.6.	Informational messages at eye height on presence of genetically modified organisms in food
4.7.	Informational messages at eye height on presence of ecological products in store
4.8.	Informational messages at eye height on availability of lactose-free and gluten-free products
4.9.	Informational messages on vegan products (without ingredients of animal origin)
4.10.	Company's information online, incl. the website, on product composition and impact on human health
4.11.	Company's information online, incl. the website, on recycling of product packaging
4.12.	Company's information online, incl. the website, on impact of product packaging and waste volume on public health and environment preservation
4.13.	Outdoor advertisements on product quality, composition and impact on human health
4.14.	Outdoor advertisements on impact of product packaging and waste on human health, environmental harm
4.15.	Outdoor advertisements on product storage, packaging recycling and utilisation etc.
4.16.	Advertisements in mass media (TV, radio, press etc.) on product quality, composition and impact on human health
4.17.	Advertisements in mass media (TV, radio, press etc.) on product storage, packaging recycling and utilisation
4.18.	Advertisement stands (at shops, exhibitions) on product quality, composition and impact on human health
4.19.	Advertisement stands on product storage, packaging recycling and utilisation
4.20.	Advertisement stands on harm of product packaging to environment and human health
4.21.	Company's special newspapers, catalogues on product quality, composition and impact on human health
4.22.	Company's special newspapers, catalogues on product storage, packaging recycling and utilisation
4.23.	Company's special newspapers, catalogues on environmental harm of products and packaging
4.24.	Competitions, lotteries, coupons, souvenirs to promote sales of environment-friendly products
4.25.	Competitions, lotteries, coupons, souvenirs to promote sales of ecological products
4.26.	Gifts for purchase (ecological products)
4.27.	Salesman's advice on ecological performance of products, harmlessness of packaging and its utilisation options etc.
4.28.	In-store degustations of ecological products
<b>5.</b>	<b>Digital promotion-specific tools for sustainability</b>
5.1.	Structure of information available on the company's website with ecological and Latvian-made products singled out
5.2.	Information on the company's website on ecological products available in stores
5.3.	Information on the company's website on Latvian-made products available in stores
5.4.	Mobile app with information on ecological products available in stores
5.5.	Mobile app with information on Latvian-made products available in stores
5.6.	Information within product barcode on disposal and recycling of product packaging, impact of composition and quality on health, pictures on general application

5.7.	Formation of social groups on social media for consumers who regularly buy ecological products
5.8.	Involvement of consumers in popularisation, evaluation, promotion of the company's products on the website, social media etc. (reward for consumer activities – game system)
5.9.	Mass involvement in new product creation
5.10.	System of game elements linked to brand loyalty programme to promote sales of ecological products (points, discounts, gifts, status)
5.11.	Linkage of the loyalty card to payment options, account replenishment options
5.12.	Linkage of the loyalty card to budget planning options
<b>6.</b>	<b>Staff professionalism- and selling-related tools for sustainability</b>
6.1.	Staff training, workshops etc. on composition and health impact of ecological products, on recycling and utilisation of food packaging
6.2.	Integration of game elements in employee motivation system (rewards for sales increase, customer appreciation etc.)
<b>7.</b>	<b>Corporate identity-related tools for sustainability</b>
7.1.	Charity initiatives in the context of sustainable development (environment preservation, public health, promotion of sales of Latvian-made products)
7.2.	Investment in scientific research
7.3.	Support and contribution to conferences, education, instructional literature
7.4.	Charity initiatives in culture, cinema, art etc.
7.5.	Investment in new product creation
7.6.	Aid to social groups – large families, disabled people, orphans etc. (e.g., further discounts, food baskets)
<b>8.</b>	<b>Geographic placement- and technology-related tools for sustainability</b>
8.1.	Product quality testing at a certified licensed laboratory (service for consumers)
8.2.	Certified licensed laboratory (for assessment of hazardous, poisonous, radioactive substances and/or food quality, incl. for mitigation of the company's risks)
8.3.	Availability of environment-friendly shopping bag materials
8.4.	Waste sorting facilities
8.5.	Greenery within shop premises

In order to assess the impact of the IMC tools for sustainability developed by the author upon demand at food retail chains, economic development, social responsibility and environment preservation and to find out whether Latvian food retail chains intend to apply the said IMC tools for sustainability in their marketing strategy within the next 3 years, the author prepared a questionnaire and in 2017 surveyed the leading specialists of Latvian food retail chains. The MS Excel software was used for data processing and analysis.

The experts were asked to reveal whether in the next 3 years the Latvian food retail chains intend to use IMC tools for sustainability in their marketing strategy and rate how the use of IMC tools for sustainability would affect demand, economic development, social responsibility and environment preservation by the following scale: *N* – the sustainable marketing communication in question does

not exist; *-1* – the sustainable marketing communication in question reduces demand, its use will harm the economic and social development of the country and the preservation of the environment; *0* – the sustainable marketing communication in question does not affect demand, its use will not affect the economic and social development of the country and the preservation of the environment; *1* – the sustainable marketing communication in question slightly increases demand, its use will have a positive effect on the economic and social development of the country and the preservation of the environment; *2* – the sustainable marketing communication in question substantially increases demand, its use will have a substantial positive effect on the economic and social development of the country and the preservation of the environment.

Based on the results of the expert survey (see Figure 1), the author has visually represented the most popular IMC tools for sustainability from among all the 8 groups of IMC tools for sustainability that 1) increase demand at Latvian food retail chains; 2) would have a positive effect on economic development, social responsibility and environment preservation if used in a marketing strategy; 3) are planned for introduction by Latvian food retail chains in their marketing strategy within the next 3 years (summary of ratings – arithmetic mean, medians).

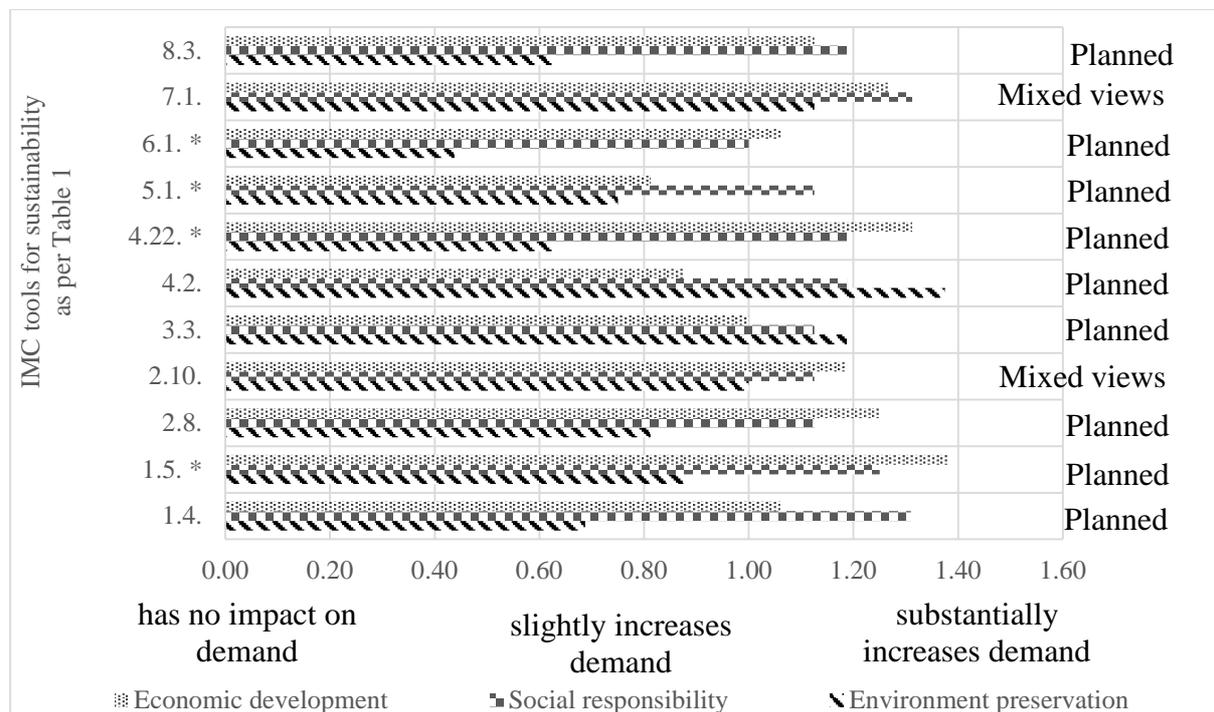


Figure 1. **Main IMC tools for sustainability with positive impact on demand at food retail chains, conducive to sustainable development** (source: figure created by the author in MS Excel based on the summary (arithmetic mean) of the results of the expert survey)

The summary of the expert survey leads to a conclusion that businesses rate the use of IMC tools for sustainability as conducive to economic development, environment preservation and social responsibility, and suggests that understanding of sustainability incites to take responsibility, to innovate, to generate new ideas to meet the interests of stakeholders as much as possible. Furthermore, Latvian food retail chains have deemed all the tools listed in Figure 1 as demand-increasing and intend to use those in their marketing strategy within the next 3 years, with the exception of *charity initiatives in the context of sustainable development* and *information provided by product marking on product healthiness and nutritional value* where the opinions are mixed.

The author presumes that part of Latvian food retail chains implement their marketing activities in campaigns rather than continuously. Sustainability goals, incl. charity initiatives in the context of sustainability, do not come to fruition and just some of the retail chains intend to include them in the marketing strategy. This stems from part of the companies being of foreign capital with a different market positioning: 1) some are leaders in low prices whose assortment primarily consists of affordable products (quality, composition and packaging much depends on their cost price), 2) others present themselves as sellers of premium products offering elite delicacies imported from different countries. Their marketing strategy may feature sustainability goals based on international practice.

As concerns information provided by product marking, the expert opinions are split because the implementation of this tool requires state support, regulatory framework etc.

The author points out that IMC tools for sustainability in Figure 1 (marked with \*) – 6.1; 5.1; 4.22; 1.5 (as per Table 1) are new and not yet present in the marketing strategies of food retail chains, still the experts have recognised them as having a positive impact on economic development, social responsibility and environment preservation and intend to introduce those in their marketing strategies within the next 3 years.

The results of the expert survey served as the basis for the development of an IMC model for sustainability and the drafting of proposals (see Figure 2).

Sustainability issues increase the need for changes in demand, which, in turn, require changes in supply. Businesses need to change the approach in their marketing strategy from the classic communication to one that embodies not just sustainability goals, but an integrated systemic approach with a view to promote sustainable management, thinking and action; in other words – a sustainable lifestyle.

In Figure 2 the author presents an IMC conceptual model for sustainability schematically showing six levels or stages of communication. The 1<sup>st</sup> level accommodates a company interested in communication with its consumers and a

marketing strategy based on the marketing definitions in the scientific literature. The 2<sup>nd</sup> level features the generally accepted marketing mix or 4P (product, price, promotion, place), which, under a successful marketing strategy and having regard to the organisational goals, enable to build a closer and more valuable relationship with customers. Both the scientific literature and practical business have proven that IMC may be used for effective communication with consumers, so in the 3<sup>rd</sup> level there are the types of elements of marketing communication: advertising, sales promotion, public relations, personal selling and direct marketing, which help realise the company's integrated marketing communication for sustainability.

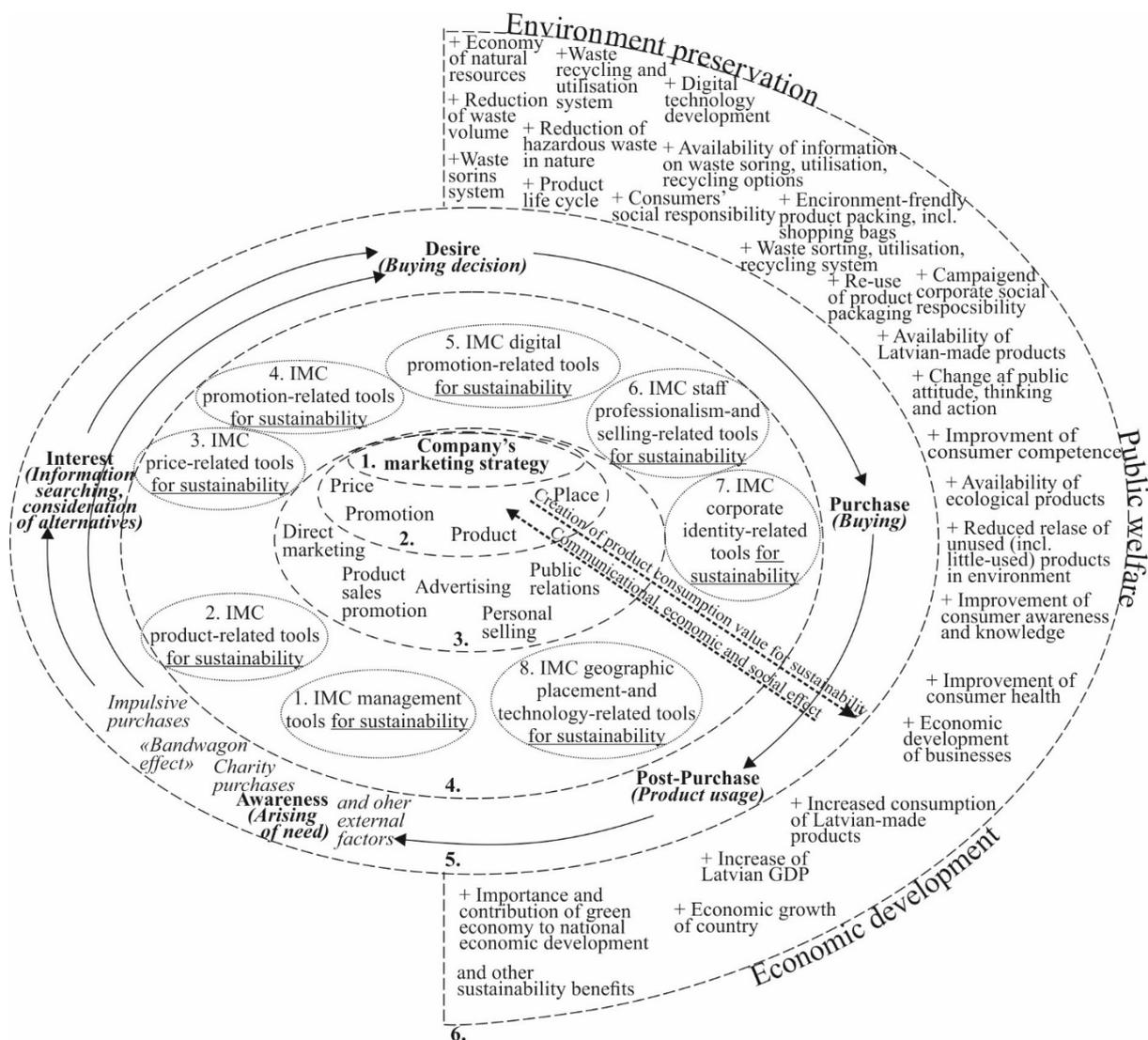


Figure 2. IMC model for sustainability  
 (source: IMC model for sustainability developed by the author)

In order to reach the company's goals in communication with consumers, the IMC must be implemented through concrete, detailed, customer-oriented IMC tools for sustainability as developed by the author with a view to increase the consumption value of a product or service for sustainability – economic development, public wellbeing, and environment preservation. IMC for sustainability should be implemented through distribution channels (TV, radio, newspapers, the Internet and other communication channels). Hence, 4) level four of the model provides the groups of IMC tools for sustainability development by the author; 5) in level five the author has shown that through the said IMC tools for sustainability it is possible to reach the target audience and influence the buyers' behaviour. The creation of a product consumption value for sustainability is focused on such stages of buyer behaviour as buying and product usage because it is at these stages of buyer behaviour that the essence of sustainability comes into effect. The author stresses that buyers may also make impulsive purchases based on a variety of surrounding incentives or external factors, rather than out of necessity. In such a case it might never come to product usage as a stage of buyer behaviour, the product may end up in the trash bin and not contribute to environment preservation, social responsibility and economic development. Lastly, 6) level six of the model shows the benefits gained from the use of IMC tools for sustainability in a marketing strategy. For the company, the communicational, social and economic effect comes as feedback, but in the context of sustainable development there is the effect on environment preservation – saving of natural resources, reduction of waste, environment-friendly product packaging etc.; social responsibility, which also raises the level of public wellbeing – improvement of consumer competence, availability of Latvian-made ecological products, improvement of consumer health, change of public opinion, thinking and action, incl. increased consumption of domestic-made products etc.

In communication with consumers (current and potential customers) through IMC, businesses can work continuously, rather than in campaigns, to accomplish sustainability goals – economic development, social responsibility, and environment preservation. Each sector certainly has peculiarities in product selling, service provision etc., yet there are also common market trends that apply to all industries. Hence, the author urges further market research, also covering product manufacturers that provide the product assortment.

## **Conclusions**

1. In a successful business management system, it is IMC as a business management tool that matters in building the offer value, interaction with customers, the production process, customer relations management, and the selling process in the context of sustainable development.
2. The improvement of business in terms of adherence to a sustainable marketing concept relates not only to the product assortment, quality, packaging and design, but also to distribution and promotion, thus contributing to the formation of public opinion on the importance of environment conservation, the raising of consumer awareness, the enhancement of corporate social responsibility for consumer health, ecological products overall, and the role and contribution of a green economy to the country's economy as a whole.
3. Businesses see the use of IMC tools for sustainability as conducive to economic development, environment preservation and social responsibility, which means that understanding of sustainability incites to take responsibility, to innovate, to generate new ideas to meet the interests of stakeholders as much as possible.
4. In order to achieve changes in the overall consumption of products whilst promoting a healthy lifestyle, businesses need to apply IMC tools for sustainability classified in 8 groups: management tools for sustainability, product-related tools for sustainability, price-related tools for sustainability, promotion-related tools for sustainability, digital promotion-related tools for sustainability, staff professionalism- and selling-related tools for sustainability, corporate identity-related tools for sustainability, and geographic placement- and technology-related tools for sustainability.
5. Market demand at Latvian food retail chains is increased by the IMC tools for sustainability which businesses intend to use in their marketing strategy within the next 3 years. This is suggested by businesses rating IMC tools for sustainability as having a positive impact on economic development, environment preservation, and social responsibility.
6. The application of IMC tools for sustainability enables businesses to generate a product consumption value focused on such stages of buyer behaviour as buying and product usage, since it is at these stages of buyer behaviour that the essence of sustainability comes into effect.
7. Making impulsive purchases based on surrounding incentives or external factors rather than out of necessity does not contribute to environment preservation, social responsibility and economic development, as there is a risk of not reaching the stage of product usage and the product ending up in the trash bin.

8. Under the concept of sustainable marketing, by applying the model of IMC for sustainability, maintaining a systemic approach and using IMC tool for sustainability, businesses will promote sustainable consumption, raise the level of consumer awareness of the impact of a product and its production on the natural capital, expand the options of public participation, and foster a healthy lifestyle in general.
9. The research tasks put forward for the research study have been performed and the aim has been achieved. The theoretical and practical research confirm the initial hypothesis that the use of IMC tools for sustainability has a positive impact on market demand at Latvian food retail chains, contributes to the formation of public opinion on the importance of environment preservation, the enhancement of consumer awareness, corporate social responsibility for consumer health, ecological products in general and the role of a green economy in the sustainable development of the country's economy overall.

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## CHALLENGES FOR IMPROVING MARKETING ON LATVIAN FARMS

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**Abstract.** *Marketing plays an important role in realizing goods and services, yet consumers' opinions and suggestions for improving cooperation are not usually searched on agricultural farms. The problem is also observed on the farm Birzes, located in Kurzeme region and dealing with the production of agricultural products and the provision of services. Despite the fact it is one of the leading farms by the area of cultivated land and turnover in the district, until now Birzes has not had a detailed study of marketing opportunities for production and sales promoting for recognizing the farm. Taking into account the afore-mentioned, the aim of the research is to investigate the specifics of marketing activities of farms and evaluate the current situation on the farm Birzes. Analysis of literature, statistical data and internal documents are combined with the primary data gathering method – interviews with suppliers of clients of Birzes and content analysis. The research results show that personal contacts play a very important role in rural farms' marketing, at the same time customers propose to start using different information transfer channels, especially the communication possibilities offered by the Internet.*

**Keywords:** *agricultural farm, marketing communication, rural areas.*

### Introduction

Agriculture is one of the most ancient sectors of the national economy. It is the major user of land, provider of food and one of the major employers in rural areas as well as the main element in maintaining the quality and conservation of the environment. In Latvia's agriculture, the role of two major sectors is becoming stronger with every year – cereal production and milk production. (Ministry of Agriculture, 2018.) Although slightly decreasing in numbers, agricultural holdings still play a considerable role in the economy and for promoting the production, marketing measures have to be realised on farms.

Consumers are accustomed to learn information about a product or service of interest in a quick and easy manner, and businesses have to be where their client is. This trend applies both in the world in general, and here - in Latvia.

This is evidenced by the latest TNS data – 45 % of Latvia's residents agree with the statement “When I look for information I use the Internet” (Kantar TNS, 2016).

Farms' most characteristic marketing communications in Latvia are not extensively studied, therefore, taking into account the above-mentioned, the aim

of the work is to investigate the specifics of marketing activities of farms and evaluate the current situation on the farm “Birzes”. The authors of the work have raised the following research question: What are the specifics of marketing activities by farms? The research study uses a mixed research strategy, including the primary data acquisition method (11 structured interviews with suppliers, partners and customers of the farm Birzes) as well secondary data analysis methods such as the theoretical study method, as well as the external and internal environment IFE, EFE, VRIO model. The research period is from 2013 to 2017.

### Marketing Activities on Farms – Theoretical Concepts

A farm is a specific individual company producing agricultural products, the main means of production using land. Each farm differs in terms of available land area, activities and goals. (Dobele et al., 1999) One of the basic prerequisites for increasing the competitiveness of domestic agriculture is organizing production and marketing on family farms. (Nedanov & Žutinić, 2015) Based on the literature review performed, the authors of the work have summarised the most characteristic functions of farms.

Table 1 **Functions of Agricultural Farms** (summarised based on Dobele et al., 1999)

Feature	Characteristics
Food Production	Agricultural farm produces and supplies necessary raw materials for the industrial sector
Employer	Large part of Latvian employees are employed in agriculture and agricultural processing
Large and stable customer of industrial products and consumer	All machines, vehicles, equipment, building materials are manufactured by industry The costs of agricultural production are formed by fuel, fertilizer, spare parts, plant remedies - it means that agriculture stimulates the development of many other sectors
Cultural and rural landscape	The rural cultural environment and the landscape are built up with agricultural enterprise management and culture The common countryside is in close proximity interactions among the cultivated areas, forests, uncultivated areas, farmstead improvement, greenery and roads Clogged fences create a clean environment
Latvian people – lives, consciousness and moral upbringing	Historically, we cannot deny the importance of farming in establishing and strengthening the people's cultural life Guarding people's virtues and traditions are survived thanks to agriculture Farm is a peculiar demographic social cell of society - especially today, when the question of self-preservation of people is topical

The performance of enterprises is influenced by their marketing activities.

Theorists define marketing differently. One of the founders of marketing theory Philip Kotler (2006) notes that the marketing definitions can be divided into management and social ones. Based on social definitions, Kotler points out marketing is a social process in which groups and individuals acquire what they need and what they want. Based on the management's definition - marketing is a selling art. A contradictory marketing management definition is provided by the theorist of the management Peter Drucker (1973), who believes that the purpose of marketing is to create a situation in which there is no sale required.

To find out the particularities of farms' marketing, the authors have developed a table (see table 2).

Table 2 **Marketing on Farms** (based on Jončiks et al., 2013, Adanacioglu, 2017, Tudisca et al., 2015, Barnard et al., 2016)

<b>Output Type</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Questions</b>
Farmers' Market	Opportunity to emerge in society Direct contact with the customer No products to be delivered on a regular basis and to a certain extent	Transportation costs A vendor is required Pay for a trade place	Which market is the most suitable? How do I attract customers for your trading venue all year long?
Shop on the farm the opportunity to harvest themselves	No transport or another extra expenditure Fresh products Ability to harvest gives yourself the opportunity of contact directly with buyer	Do the necessary trading point and employee (or rely on the customer honesty The landlord is responsible for insurance etc.	Where and how to set up a farm store and how much it will cost? Are there enough surroundings? Are there customers?
Local community supplies (for example, an order baskets)	Previously known what should be produced and what will be possible income Direct contact with the buyer	Need for order processing and packaging There is no guarantee that every buyer's favourite products will be available	How to prepack and deliver your product? What is the minimum amount delivered?
Online shop	A wide range of potential range of customers Not required store rooms Opportunities to expand business	Organize your product supply Need to order and to have the trading system on the Internet No direct contact with the buyer	Who will create and maintain the home page and how much will you pay?

Direct sales of such retailers as: restaurants, supermarkets, special food stores authorities, e.g. schools, hospitals	The farmer receives a wholesale price; Can be avoided order sorting / packaging; Easy to find out the final consumer reaction	An important thing may turn out to be good product appearance A pretty long time relationships with a sufficient number of retailers Sales volumes can be small It must be permanent supply A frequently set minimum delivery volume	How to secure the supply to restaurants whose requirements may vary and previously unpredictable?
Direct sales of such wholesalers as: farmer cooperatives wholesalers / distributors supermarket suppliers processing plants	Most likely sales volumes will be larger Marketing predominantly engaged themselves wholesalers	Transportation costs The farmer may not have many opportunities to influence the price; An important thing may turn out to be good product appearance A frequently set minimum	

The research performed in Turkey shows that owners of medium-sized farms are more interested in direct marketing. (Adanacioglu, 2017) Also a study in Romania proves that many farmers today adopt direct sales as an entrepreneurial strategy in order to achieve a competitive advantage. (Tudisca et al., 2015) Direct sales on farms is one of the most popular and characteristic sales promotion activities. Direct sales on farms mean that a farmer supplies products or services to customers without intermediaries. Selling this kind of product or service provides a closer contact with customers, allowing them to understand their desires and needs, as well as responding quickly to changing customer priorities. (Czubala, 2001) Direct sales play an important role in farm marketing communication, since the seller is in direct contact with the client and is able to apply communication according to the wishes of the client so that they are satisfied. For many farms, setting up and holding long-term customer relationship is one of the main goals of marketing. (Barnard et al., 2016), however, business executives can no longer afford to ignore modern consumer habits.

The number of shoppers who use websites and search programs to compare the product is growing. Competition on the Internet is beginning to grow, but

those companies that still need to survive must create the presence of their company on the Internet. (Gaile-Sarkane & Sceulov, 2010)

To provide more focused analysis, the next chapter will summarise the marketing opportunities and challenges for the farms in Latvia.

### Marketing Opportunities and Challenges for Farms in Latvia

Marketing opportunities and challenges for farms in Latvia are analysed, based on the sample of Birzes, registered in 1992, with a total land area of 1698 ha (large part of it is the property of the owners), of which 1537 ha is land used in agriculture. There are 34 employees on Birzes and the farm has been ranked as the 79<sup>th</sup> largest farm in Latvia in 2016. Taking into account the afore-mentioned, the aspects related to the farm are important for other farms in Latvia as well.

The possibilities of improving the marketing activities of Birzes, 11 structured interviews with farm suppliers, customers and co-operation partners were conducted in order to clarify the information channels used for learning about Birzes, as well as the preferred communication channels to make it easier for consumers to find the information on the offered products and services.

The interviews did not offer specific answers, but the interviewees provided a comparative analysis of similar replies that could be categorized. The main results of the interviews are presented in Table 3.

Table 3 **The most significant results of interviews with suppliers and customers/ cooperation partners of Birzes** (source: Interview results, 2017)

No.	Question	Suppliers' opinion (answers)	Client / co-partner opinion (answers)
1	How did you get started with Birzes?	Databases (3x) Birzes found us (4x)	Article in the newspaper (1x) Personal contact (2x) Birzes found us (1x)
2	How would you describe the current co-operation with Birzes?	Very good (3x) Outstanding (1x) Great (1x) Stable (2x)	Satisfactory (1x) Positive (1x) Complex (2x)
3	What are the facilitating factors of co-operation?	Humanity (3x) Communication (3x) Honesty (1x) Loyalty (1x) Mutual trust (2x) Economic growth (1x)	Meeting (1x) Communication (3x) Need (1x) Competitive commodity prices (1x)

4	What are the fostering factors of co-operation?	There are no fostering factors (3x) Neighbouring Bank (1x) Economic growth (1x) Competitor (1x) Restricted service options (1x)	Need (1x) Low-quality work force (1x) Grain prices (1x) Communication (1x)
5	What would be possible improvements in cooperation?	Buy another technique (2x) Open accounts in more banks (1x) Frequently communication (1x) No improvements are required (3x)	Grain yield rise (2x) Purchase wall (1x) No need for improvement (1x)
6	What are the main differences of Birzes from other farms?	Positive attitude (1x) Management model (2x) Technical park (2x) Wide action profile (1x) No freelance accounting (1x)	Wide action profile (2x) Management model (1x) No difference (1) Communication with control (2x) Attitude to work (1x)
7	Would you prefer to receive information in a different way format in comparison with the current one?	No (5x) Yes (2x)	No (4x)
8	How do you learn about Birzes products and offered services?	Phone (2x) Email (2x) In a conversation with management (5x) The information is not actual (1x) Homepage (1x)	In a conversation with Birzes management (3x) Calling (1x)
9	What would be desirable information transfer channels for the Birzes offered products?	Word-to-mouth information (1x) Email (2x) SMS (1x) Social Networks (1x) Website (5x) Business card (1x) Swedbank Business Network (1x) Seminars (1x)	Website (3x) Satisfied info so far with the type of receipt (1x) Sponsorship (1x)

The interview results prove that personal contacts still play a very important role for farms. For example, the owner of the farm organizes regular meetings to tell the news about the farm, the future development plans and the plans to be implemented. Birzes management representatives often visit different seminars, conferences, courses where suppliers and co-operation partners also take part. It is also an opportunity to distribute information about the current events on the farm.

The partners are satisfied with the cooperation, however, they also stress the necessity to introduce more interactive tools of communication, the web-site being one of the main ones.

Taking into account the busy schedules of agricultural farms' management, the authors have summarised the main advantages and challenges of farms in owning a website.

Following the overall global trends, it will be of utmost importance for agricultural farms to start using websites. At the same time the personal contacts will still remain to be an essential part of Latvian farms' production promotion.

### **Conclusions**

1. A classical marketing mix remains to be taken into account when forming marketing activities, and one of the main tools provided by farmers on rural farms for selling their production is direct sale.
2. The reputation of farms is mostly made up of people's feedback about the services it provides or products it sells - most often the success is the result of "word-to-mouth" information. Mutual communication, understanding and trust have been success factors for the past.
3. Meeting one of the representatives of the farm management is one of the most common ways to find information on the products and services. At the same time, suppliers, customers and co-operation partners consider the necessity to receive more information by the communication possibilities offered by the Internet.
4. There are both advantages and challenges for agricultural farms for promoting their production via the Internet, yet advantages do exceed the challenges and resources have to be allocated for promoting goods and services online.

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# FOREST ACCOUNTING AT FAIR VALUE: AN EVALUATION OF STRENGTHS AND POSSIBILITIES TO MINIMISE SHORTCOMINGS

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**Abstract.** *The accounting standards provide options for different accounting methods to be deployed in accounting of certain assets. However, in other cases, only one of the specified methods should be applied. The forest (stands), the main resource of forestry enterprises, is also attributed to this category of assets, which, according to the standard IAS 41 Agriculture, should be accounted for only at fair value. The aim of the paper is to identify the strengths and shortcomings of applying the concept of fair value to forest financial accounting and to evaluate the possibilities to minimise the disadvantages. The study examines the scholarly literature and deploys the theoretical methods of comparative analysis, critical evaluation, systematisation, generalisation. The empirical research involves the document content analysis, expert assessment methods.*

*The paper examines the issues of applying the fair value concept to forestry accounting: forest valuation at fair value in financial statements reflects the forest biological transformation and the impact of market price changes on the value of the forest. However, the main disadvantage of this method is the fact that the forest often does not have an active market with quoted prices. Thus, its fair value is determined using different valuation methods, often based on subjective assumptions resulting in financial information which can be unreliable and difficult to verify. Furthermore, the profit and loss accounts including the recognition of the change in the fair value of the forest to be sold in the forthcoming decades are not only doubtful, but may also lead to false interpretations of the financial indicators and contradict to the prudence principle. Based on the conclusions of expert evaluation of certain aspects of forest accounting at fair value, the research study offers a modified method of forest accounting at fair value which facilitates minimisation of the shortcomings.*

**Keywords:** *accounting methods, fair value, financial statements, forest (stands), IAS 41.*

## Introduction

Today's business success of enterprises, exposed to modern business management, changing competitive markets and abundant flows of information, can only be enhanced by the availability of the relevant and reliable financial information, on the basis of which rational and effective economic decisions in business management, investment and other fields can be made. The meaning of

information on the entity's assets and financial performance results, presented in the financial statements, largely depends on the use of accounting methods based on two concepts: accounting at historical cost and accounting at fair value. None of the concepts is ideal: the fair value is misleading in terms of the profit and loss account, historical cost – in terms of the balance sheet (Alexander & Fasiello (2014). Accounting standards frequently provide options for different accounting methods to be deployed in accounting of certain assets. However, in other cases, only one of the specified methods should be applied. The forest (stands), which is not only of particular importance to the society, but also the main resource of forestry enterprises, is also attributed to this category of assets, which, according to the IAS 41 Agriculture, should be accounted for only at fair value.

The scientific literature has been broadly examining the concept of fair value – both, in terms of its theoretical and conceptual aspects and its practical application. Other authors, such as C. Elad (2004), K. Herbohn and H. Herbohn (2006), H. A. Jöbstl (2009), K. Herbohn (2009), W. Tzschupke (2009), K. Wallner (2009), B. J. Epstein and E. K. Jermakowicz (2010), C. Elad and K. Herbohn (2011), Y. H. Aryanto (2011), D. Dvořáková (2011), I. V. Zamula and O. V. Shavurska (2015), M. Stárová et al. (2016) studied the advantages and limitations of the use of the fair value method or the application of some of its aspects for the financial accounting of forests. Although all of the authors demonstrate a larger or smaller degree of criticism of the fair value approach, all of them express the need for its improvement in order to adapt it to the financial accounting of forests. However, the problems encountered in applying the fair value method for the forest financial accounting remain unresolved.

The aim of the paper is to identify the strengths and shortcomings of applying the concept of fair value to forest financial accounting and to evaluate the possibilities to minimise the disadvantages. The research study examines the scholarly literature and deploys the theoretical methods of comparative analysis, critical evaluation, systematisation, generalisation. The empirical research involves the document content analysis, expert assessment methods.

### **Strengths and shortcomings of forest accounting at fair value**

Accounting at fair value is a concept of financial accounting that requires assets and liabilities to be presented at fair value in the financial statements. The benefits of fair value accounting are obvious - the information available in the financial statements becomes more relevant and favourable in terms of economic decision making and cash flow projections, reflects changes in the market and their impact on the company's activities. Moreover, accounting at fair value is more consistent with the time the accounting information was presented, creates a clear picture for investors, for users of financial statements – better understanding

of valuation at fair value rather than at cost (Miller & Bahnson, 2009; Ristea & Jianu, 2010; Argiles et al., 2011; Hodder et al., 2014; Palea, 2014).

The use of the fair value method in accounting for forests managed by forestry enterprises requires that the forests in the balance sheet should be presented at fair value. This procedure is not only significantly more relevant to the adoption of economic decisions, especially those related to the long-term prospects of the company, but also allows the financial statements to include the forecast of future cash flows, the reflection of the forest bio-transformation and the impact of changes in the market situation. Miller & Bahnson (2009), Stárová et al. (2016) claim that another alternative in accounting, a historic cost-based approach, when only forest planting and maintenance costs are included in the value of stands or even worse – written off as expenses, does not adequately reflect this resource in the financial statements of the forestry companies. Therefore, such accounting *de facto* does not perform its main function to provide useful information to the users. Dvořáková (2011) argues that the main factor determining the change in the value of forests is its biological transformation over a very long period of growth that can only be reflected by the fair value method, while the cost method does not disclose the real financial situation of forestry enterprises, because the costs of forest growth and maintenance largely do not impact the increase of the forest value. Despite the benefits of fair value, many authors criticise the application of this approach to the accounting of biological assets, and, in particular, forests.

Fischer & Marsh (2013) claim that, before IAS 41 *Agriculture* entered into force, biological property accounting practices were based on historic cost: this practice was concrete, verifiable and understandable, while the use of fair value contradicts the main accounting principles, the financial statements are based on estimates and opinions rather than evidence. It weakens the accounting information, increases chances for management malpractice, encourages litigation and makes it difficult for auditors to express their opinion on financial statements (Fischer & Marsh, 2013; Muhammad, 2014).

It has to be recognised that forests, as a specific asset of forestry enterprises, often do not have the quoted prices on the active market, so the fair value of forests is determined on the basis of certain valuation methodologies and rather subjective assumptions. This is confirmed by the conclusions of the research carried out by Herbon (2009), who states that the determination of the fair value of a forest is a very subjective process that creates favourable conditions for managerial manipulation, and the possibility of using different valuation methods makes it difficult to compare the estimates, especially in the context of superficial disclosures observed in explanatory notes.

Elad & Herbohn (2011), Goncalves & Lopes (2014) also highlight the failure or lack of disclosure of fair value determination in explanatory notes. Stárová et al.

(2016) points out that the application of different methods in determining the fair value of a forest may increase the incomparability of the financial statements of enterprises, while the objective of the fair value concept is to reduce it. Herbohn & Herbohn (2006) emphasise that the problems occur in distinguishing the fair value from the value of the land, as well as in determining the fair value of young stands without an active market. According to Jöbstl (2009), it is difficult to choose the appropriate forest valuation method, and when determining the fair value, there is a problem of forecasting the prices for future production and the scope of activities. A similar conclusion was made by Tzschupke (2009) who also stressed that there is no consensus on the best method for assessing forests, which leads to incomparable results of enterprises. Indeed, if an asset does not have an active market with quoted prices, an enterprise may determine the fair value of the asset using a variety of valuation methods, ranging from future discounted cash flows to cost. The results of applying different methods can vary widely, which has a direct impact on the balance sheet value of an asset and on the outcomes of the entity's performance. Although the opinion of a human or an institution on the fair value of an asset cannot be completely accurate or correct due to different assessment circumstances, the perception of the market situation (the determination of an asset value is not just an ordinary mathematical step, but it involves evaluating important assumptions), it must be recognised that the variety of forest fair value methods can lead to a lower level of comparability of information provided in financial statements. Thus, it is necessary to create a unified approach in determining the fair value of forests. Also, in their explanatory notes, enterprises have to provide a clear and detailed description of forest fair value measurement methods and assumptions used for valuation purposes.

In addition to the doubtful credibility level of evaluation, Elad (2004), Herbohn (2009) identified another no less important aspect of applying the fair value method - recognition of fair value changes in the profit and loss account that distorts the real results of the performance of a company. Herbohn (2009) found out that after starting to evaluate forests at their fair value, the enterprises that were investigated for the changes in the fair value of biological assets over the four-year period, increased their net profit margin from 8.5 % to 15 %, the *fluctuations* of net profit values strongly increased due to the constant change in the value of the forest, influenced by the changing world prices of timber, state policy decisions, natural phenomena. Fischer and Marsh (2013), Stárová et al. (2016) point out that the application of the fair value method may lead to the issue of dividends that are not based on the required cash flows. According to Wallner (2009), the presentation of changes in the fair value of forests in revenues may lead to erroneous financial decisions and an increase in the company's liquidity risk, and, at the same time, the need for complex risk management instruments. Moreover, Epstein and Jermakowicz (2010) note that, like some other plants, the

forest has a very long cycle of growth (production), which determines the need to record changes in the fair value and to show these changes in the profit and loss account for each reporting period. Otherwise, the information would be distorted, since, in the case of a cost method, income from such assets would be shown only at a certain interval of time, which would not adequately reflect the economic performance of the enterprise (Epstein & Jermakowicz, 2010). However, it should be noted that the presentation of a fair value change in the profit and loss account may mislead users of accounting information and even contradict the general principle of prudence: in the profit and loss account, entities present revenues recognised on an accrual basis, but only when they are certain that the economic benefits *will be gained*. Meanwhile, using the fair value method, the profit and loss account shows *only potential* revenues.

Although, according to Ramanna (2008), the fair value allows enterprises to present information in their financial statements reflecting current market conditions and is changed in line with market changes, while profit and losses are not recognised when the transaction is completed, but when that profit or loss on holding an asset or liability arise, however, such an approach and income presentation method are more appropriate for fairly high liquidity assets when their fair value change profit can be quickly realised. In the meantime, the forest under development, especially immature, is an asset of a relatively low liquidity, with its fair value increase revenues to be realised (perhaps) only in a relatively long time in the future. Therefore, the preliminary presentation of the change on fair value of the forest in the profit and loss account may lead to erroneous profit distribution decisions and false interpretation of financial indicators as well as encourage the management of the company to manipulate the estimates seeking to achieve the results set by the owners of the company. The problem of the presentation of the unrealised revenues of the fair value change in the profit and loss account can be solved by modifying the report or the method, and the modification itself could be based on another type of presentation of the changes in the forest fair value in the financial statements.

### **Methodology of research into minimising weaknesses in forest accounting at fair value**

At the first stage of the research, in order to examine the drawbacks in financial accounting at the fair value that affect the financial accounting practices of forests, the method of the document content analysis was applied. The major focus of the document content analysis is the official legal documents of a high level of information reliability, in this case, the International Financial Reporting Standards (IFRS), approved by the EU Commission, which regulate forestry accounting. The document content analysis was performed by applying a

traditional mechanism for understanding the document text. Due to the specificity of the phenomenon under analysis, aiming to assess the advantages and the potential to minimise the deficiencies of forest financial accounting at fair value, in the second stage of the research, the authors deployed an expert evaluation method. This approach is widely used when the complex problem cannot be solved by quantitative methods, but the benefits can be derived from subjective collective assessments. It is suitable for the research of the causes of hidden, complex, interrelated or multidimensional social processes where quantitative data may be biased, inaccurate or difficult to access, and is often useful in developing new theories, exploring the specific context, unique or exceptional processes (Bhattacharjee, 2012).

The financial accounting of business enterprises is usually governed by the relevant legal acts, therefore, professionals responsible for developing and improving the country's corporate accounting system should have deep knowledge of the accounting theory as well as the problems of specific accounting areas. These criteria determined the exclusion of the first target segment of experts – professionals of the institutions responsible for the regulation of financial accounting. To avoid the experts being involved solely in the field of financial accounting regulation, the second segment involved experts with working experience in forestry enterprises - auditors who have audited forestry enterprises over the past 5 years, thus, with understanding of the accounting problems and specificities of forestry enterprises.

The optimal group of experts should consist of 5-10 people, because a large number of experts hinders the formation of a common opinion, and based on the classical theory of tests, the reliability of aggregated solutions and the number of decision-makers (experts) are associated with a rapidly decelerating nonlinear connection (Augustinaitis et al., 2009). The list of experts was compiled using a non-probability sampling method. The questionnaire was submitted to ten experts, among them: 5 experts were from the Audit, Accounting and Insolvency Department of the Ministry of Finance of the Republic of Lithuania and from the Business Accounting Standards Committee under the Ministry of Finance, with experience of 2 to 18 years in the field of regulation of financial accounting; 5 experts were certified auditors with over 15 years of experience in auditing, who performed audits of forestry companies over the last five years. An expert assessment questionnaire was submitted to the selected experts, the main part of which was the group of claims for: 1) the modification of the fair value method of accounting for stands; 2) the principles for determining the fair value of the forest; 3) improvement of forest financial accounting process. The responses were assessed on the 5-level Likert item scale.

When making decisions on the basis of expert evaluation, it is necessary to assess the degree of compatibility of the opinions of the experts themselves, as

their attitudes to the problem can not only vary, but can also be contradictory. The consistency of expert opinions is most commonly assessed using non-parametric statistics - Kendall's coefficient of concordance ( $W$ ). When no coinciding ranks are observed in the expert evaluation, the coefficient is calculated according to the formula (Podvezko, 2005):

$$W = \frac{12 S}{r^2 m(m^2 - 1)} = \frac{12 S}{r^2(m^3 - m)} \quad (1)$$

If the expert rating has coinciding ranks, the coefficient ( $W_r$ ) is calculated according to the formula (Podvezko, 2005):

$$W_r = \frac{12 S}{r^2(m^3 - m) - r \sum_{j=1}^r T_j} \quad (2)$$

Values of formula variables:

$W$  – Kendall concordance coefficient;

$S$  – the sum of the S-indicators rank deviations from the mean squares;

$r$  – number of experts;

$m$  – number of objects (indicators);

$T$  – number of coinciding ranks in a row.

An expert evaluation was carried out in February of 2017. The questionnaires to the experts were sent individually, by email. Thus, they did not influence each other's views.

### **Results of the research and modification of the method of forest accounting at fair value**

The analysis of the IFRS content revealed that the accounting standards present only the general principles for the presentation of forest and forest land in financial statements: forest stands should be accounted for in accordance with IAS 41, while IAS 16 *Property, Plant and Equipment* or IAS 40 *Investment Property* apply to forest land accounting. Forests (stands) at the date of initial recognition and at each balance sheet date must be measured at their fair value less estimated costs to sell. Their fair value must be determined on the basis of the active market, but if it does not exist, using other methods of determining fair value. An exception to the fair value measurement indicated in the IAS 41 is important in forest accounting: the fair value of biological assets may be close to their costs, especially in cases when costs were spent on biological assets for the first time resulting in its insignificant biological change, or biological changes are not expected to have a significant effect on price, for example, during the growing

season of pine plantations of up to thirty years. The gain on changes in the fair value of a forest must be included in the profit or loss for the reporting period in which they are generated (Commission Regulation ..., 2008).

However, IAS 41 does not regulate accounting for forest development and maintenance costs, i.e. it is not effectively specified whether these costs need to be capitalised or recognised as expenses of the reporting period. IAS 41 refers to the concept of “growth”, i.e. profit should be recognised at the time of the growth of biological assets, and the concept itself is based on the following arguments: 1) biological assets can be sold at any stage of its growth; 2) when assets (stands) grow, their value only increases. Therefore, the income of biological assets is recognised, although not yet realised, provided that realisation is inevitable and is just a matter of time (Aryanto, 2011). Nevertheless, because of the long forest development cycle, its changes in the fair value would be more accurately included into profit or loss when the profit-making process *ends* (the forest is sold standing or after felling) rather than when these changes take place during the development of the forest. Furthermore, the results of forest biotransformation may not be realised due to the effects of fires, storms, pests and similar phenomena.

Therefore, it would be worthy to look for another way of presenting a change in the fair value of forests in the financial statements, which, on the one hand, reflects the impact of the change in the forest biological transformation and the changes in market conditions on the balance sheet value, but, on the other hand, would not affect the results of activities of the business entity before the realisation moment. Some authors suggest minimising this shortcoming by providing alternative profit and loss statements or recognising only the gain from forest biotransformation in the profit and loss account, while the effect of price changes on the forest shall be accumulated in the revaluation reserve (Stárová et al., 2016). According to Aryanto (2011), it is possible to consider the accumulation of a fair value gain of biological asset grown for a very long time, in other comprehensive income. We believe that the change in the fair value of the forest, which will be realised in the long-term future, should not be reflected in the profit or loss of the reporting period, but could be accumulated in equity, in the revaluation reserve until the realisation of the forest (stands).

In applying this method for presentation of fair value changes, forests in accounting could be recorded at cost which could be considered as a substitute for fair value until a slight biological transformation of the stands is going on or bio-change is not expected to have a significant effect on the price, for example, in the period of development of young stands, when cutting down of the small trees and shrubs takes place, and the resulting forestry production is insignificant and worthless. Although some authors (Dvořáková, 2011; Zamula & Shavurska, 2015) suggest that only mature stands should be valued at fair value, we believe

that such an assessment should be made earlier when the biological transformation of the stands begins to affect their fair value. From then on, the forest stands in financial statements should be revalued to fair value through the reporting of their changes in the revaluation reserve, in which the accumulated amount would be transferred to the profit and loss account when the standing or felled forest is sold. After implementing this modification of the fair value method, the costs of forest planting and subsequent forest development and care should be capitalised, since the recognition of these costs as expenses in the profit and loss account would distort the meaning of the principle of comparing. The revaluation reserve would accumulate the gain from the unrealised change in fair value after deduction of the amount of capitalised development and maintenance costs incurred during the period.

An expert evaluation was carried out to assess the modifications introduced to the forest accounting at fair value - the experts were asked to express the level of approval for the statements regarding the reasonableness of the modification of the fair value model, as shown in Figure 1.

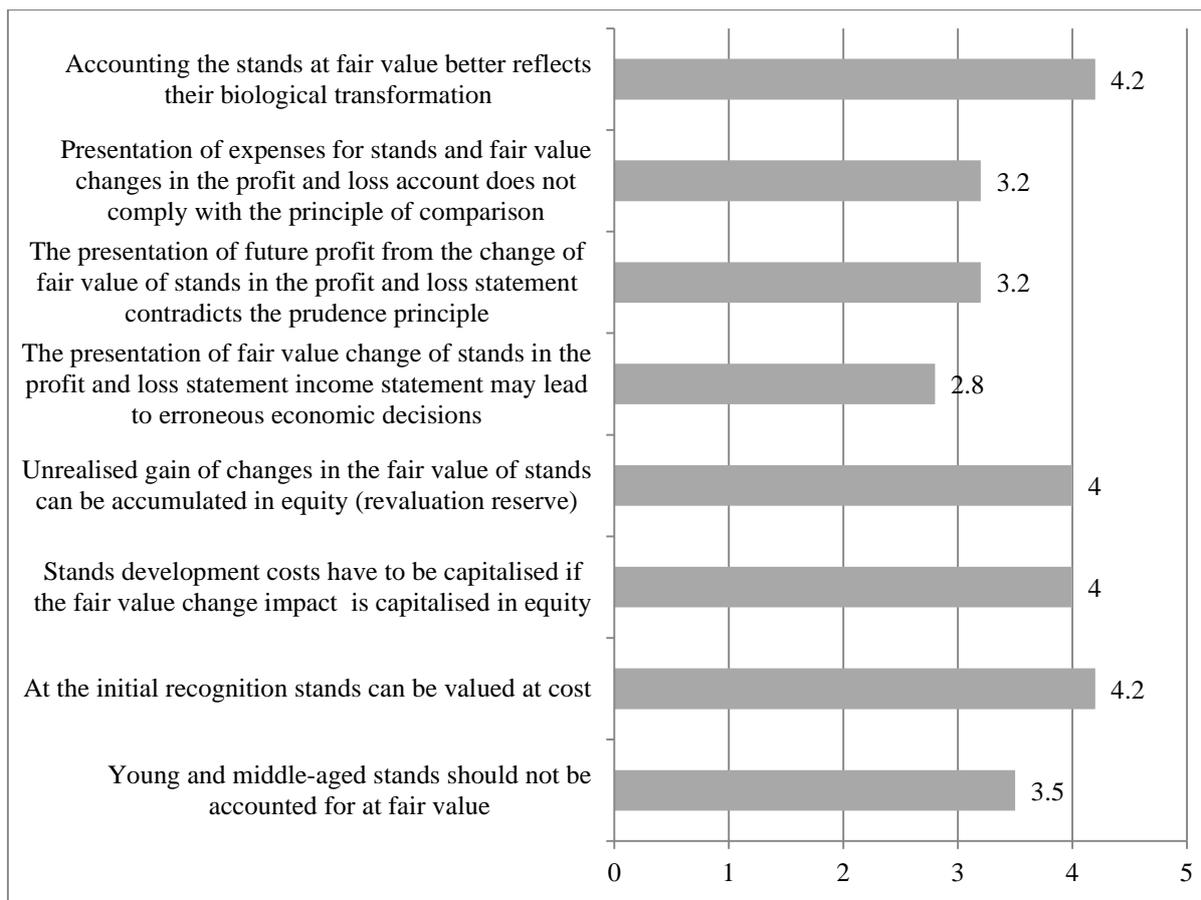


Figure 1. **The reasonableness of the modified fair value method**  
(source: compiled by authors, based on research findings)

The experts expressed a high level of acceptance of the statement that the fair value in the financial statements better reflects the forest biological transformation (mode: *Agree*), however, when evaluating the arguments regarding presentation of fair value changes in the profit and loss account, the respondents were less unanimous: they more strongly supported the argument that such presentation does not meet the principle of the comparison of income and expenses and determines the asymmetry of data submission (mode and median: *Agree*), however, the statement that presentation of changes in fair value in the profit and loss account may lead to erroneous economic decisions was given a critical evaluation (mode: *Disagree*; median: *Neither agree nor disagree*). Despite the lower level of expert agreement with the reasons for the need to modify the fair value method, the experts expressed a high level of approval for the modification of the method itself: the unrealised gain of the change in the fair value of the stands may be accumulated in the revaluation reserve (mode and median: *Agree*), in this case the costs of planting must be capitalised (mode and median: *Agree*), and at the time of initial recognition, stands can be evaluated at cost (mode and median: *Agree*). The experts demonstrated diverse attitudes to the *reasons* for the modification of the fair value method, thus, a low coefficient of concordance ( $W_r= 0.35$ ) was obtained.

The research also aimed at examining the expert opinion on the principles of determining the fair value of forests. Only 4 out of 10 experts accepted the statement that the fair value of the stands could only be determined by applying valuation based on discounted cash flows (DCF). Most pointed out that the fair value could be determined using other public information on the prices of standing forest or roundwood, but agreed with the argument that the only suitable method for determining fair value for stands before reaching maturity is the methodology based on DCF. When assessing the level of expert approval for the proposed categories of inflows included in the DCF calculations, the highest expert approval was demonstrated for the statement that the future inflow from the stands could be determined by quoted prices of raw wood or standing forest (average score 4.3, mode and median: *Agree*). A rather unanimous opinion of the experts was found in the aspect of the expected cash payments to be included in the calculation of the DCF: the high level of acceptance was observed in the statements regarding all direct forest maintenance before the logging costs (average score 4.2, mode and median *Agree*), as well as forest recovery costs (average score 4.1, mode and median *Agree*). The most critically evaluated statement was regarding the inclusion of future administration and general expenses (average score 2.2, mode and median *Disagree*). After ranking the expert opinions the meaning of  $W_r= 0.59$ , therefore, it can be stated that the expert opinions on this issue were sufficiently coordinated.

The expert opinions differed in evaluating the process improvement trends observed in the forest financial accounting at fair value. The experts supported the statement that forest financial accounting should be regulated (average score 4.6; mode *Strongly agree*). However, the experts' opinions differed in terms of the scope of regulation: half of the experts supported the statement that the accounting standards should be provided with a detailed methodology for determining the fair value of the forest (average score 3.4, mode and median *Agree*). However, the others have expressed a higher level of approval for claims that accounting standards should only include general guidelines for forest accounting, and that detailed methodologies should be established by the enterprises themselves in their accounting policies (average 3.6; mode *Strongly agree*, median *Agree*). These diverse opinions presented by the experts are reflected by the Kendall' coefficient of concordance ( $W_r=0.3$ ), which shows the low compatibility of opinions and poses an old issue with regard to whether accounting standards based on principles or rules are more beneficial to the stakeholders.

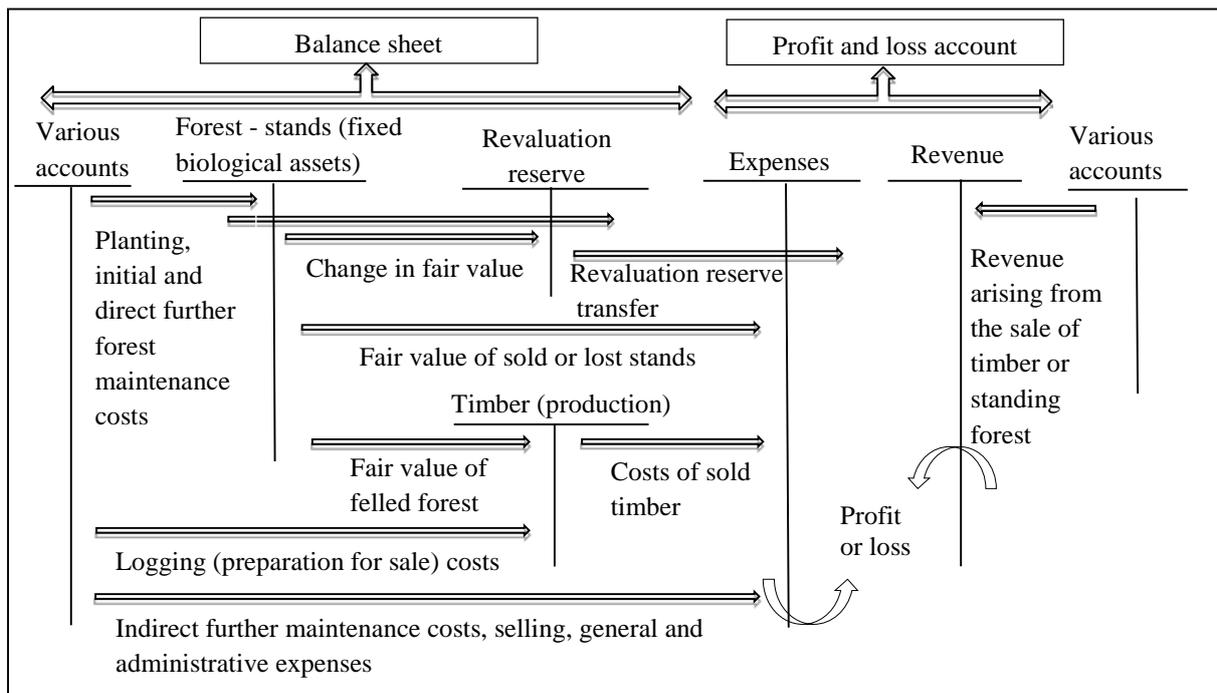


Figure 2. A modified method of forest financial accounting at fair value

(source: compiled by the authors)

In order to minimize the shortcomings of the classical fair value method, the authors suggest the modification of it, as shown in Figure 3. According to the modified fair value method, the forest is presented in the balance sheet at fair value less estimated costs to sell (a valuable indicator for users of financial information), the fair value change is presented in the revaluation reserve and shall

be transferred to the profit and loss account when it is realised (no misleading information is provided to users of the financial statements, while the profit and loss account presents the actual results of the entity's activities and escapes the manipulation of profitability indicators). The method ensures that only the realised revenue is presented in the profit and loss account, whereas the fair value of the sold forest (timber), reduced by the amount of the accumulated revaluation reserve, would be the actual cost of the forest and recognised as expenses.

It should be recognised that the application of our modified method, as well as other methods based on fair values, may be complicated due to the annual determination of the fair value of the forest, and should therefore be proposed to *medium and large* local and, in particular, international and listed forestry enterprises that are relevant to the public and/or community, have many users of their financial information, who often better understand measurements at fair value rather than cost.

### **Conclusions and discussions**

1. When the fair value method is used for forest accounting, the financial statements reflect the forest biological transformation and its impact on the value, continuous information about changes in the value of the forest is presented, while these changes are directly related to the forecasts of the future cash flows. However, the fair value method applied in forest accounting has two basic shortcomings: 1) the presentation of the fair value change in the profit and loss account does not meet the revenue recognition criteria, can lead to false expectations for dividends and wrong assumptions for economic decision-making processes, 2) due to the lack of an active market, the determination of fair value of the standing forest is a subjective process, which can be reduced only by applying uniform assessment methods, revealing the fair value determination methods and assumptions in the explanatory notes.
2. The expert evaluation has shown that the experts were unanimous in expressing the approval of the appropriateness of the fair value method to be applied for accounting of forests managed by forestry enterprises and, despite a lower level of support to causes that triggered the need to modify the fair value method, expressed a high level of acceptance of the way of modification. The experts supported the DCF method for determining the fair value of the forest, however, they also emphasised that the fair value of the mature forest may be determined by other publicly available information.
3. The suggested modified method of forest accounting at fair value allows to minimise the shortcomings: the stands should be recorded and presented in the financial statements at cost up to the moment when the biotransformation

of stands starts to affect their fair value; thereafter, the stands should be annually revalued to fair value, the unrealised fair value gains or losses should be presented in equity (revaluation reserve), while the forest afforestation (reafforestation) and further development and maintenance costs should be capitalised.

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## ASSESSMENT OF THE LINK BETWEEN MACROECONOMIC DEVELOPMENT INDICATORS AND TAX REVENUES OF THE COUNTRY

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**Abstract.** *In any country, the tax system acts as the basis of the economic system. In Poland, the process of improving the tax system is constantly underway. It is aimed at unification with world norms and standards and depends on the strategic directions of the national economic development. Since the opportunities for implementation of the country's strategic development programmes depend on the level of the state income and the main indicators of national development are macroeconomic indicators, the purpose of the paper is to study the relationship between the dynamics of macroeconomic indicators and tax revenues of the country. In the research study there were used some general scientific and special methods, such as: systematic method (in the research study of taxes in the structure of budget revenues); comparison, grouping, analysis and synthesis, statistical method (in analysing the dynamics of macroeconomic indicators and the volume of tax revenues in the budget of Poland); method of logical generalisation (for the formation of conclusions). The research used data exclusively from the official statistical sources of the Main Statistics Office of Poland, the National Bank of Poland, the Ministry of Finance of Poland. The paper identifies the importance of tax revenues in the revenue part of the budget, analyzes the growth rates of taxes and macroeconomic indicators, establishes a correlation and a regression relationship between gross domestic product, public debt, balance of trade, volume of gold reserves and total tax revenues, and also outlines the level of efficiency of the Polish tax system on the basis of the coefficient of tax elasticity. The results of the research study showed that tax revenues are sensitive to changes in the growth of gross domestic product, as well as changes in public debt, exports and imports, gold and foreign exchange reserves. All the above should take into account the country while being in the budget planning and forecasting process.*

**Keywords:** *domestic product, exports, foreign exchange reserves, import, public debt.*

### Introduction

Taxes are the financial basis for the country's functioning. They provide the most part of budget revenues, mobilise cash resources to finance public expenditures and serve as a guiding financial indicator in the budget planning and forecasting process. In today's conditions of a market economy, taxes play an important role in ensuring the financial stability of the country and in achieving social welfare of citizens. Since they are an objective social phenomenon, the

compliance of the tax system is extremely important in the formation of a favourable environment for the development of the country. Under dynamic changes and instability in economic situation in Poland, a special significance acquires such a system of tax administration, which would meet the needs of socio-economic development of the country, ensured the reduction of tax burden, initiated the revival of business activity, stimulated investment and innovation activities and encouraged taxpayers to fully pay their taxes in a timely manner. Besides, special attention should be paid to the process of ensuring a proper level of tax revenues, taking into account macroeconomic indicators. Scientific approaches to forecasting budget revenues, tax bases and peculiarities of tax administration are highlighted in the works of scholars of the Polish economic thought: L. Bylicki, S. Dolata, S. Owsiak, R. Goryszewski, E. Kotowska, M. Sosnowski, W. Ziółkowska. Despite the fact that in scientific works there were researched the theoretical and applied aspects of the taxation system (Bylicki, 2016; Dolata, 2009; Owsiak, 2005; Sosnowski, 2016), the process of budget forecasting and planning (Goryszewski & Kotowska, 2015), the issue of assessing the dynamics of macroeconomic indicators and the volume of tax revenues to the state budget remains inadequately investigated. Accordingly, the purpose of the paper is to study the relationship between the dynamics of macroeconomic indicators and tax revenues of the country. In the research study there were used some general scientific and special methods, such as: systematic method (in the research study of taxes in the structure of budget revenues); comparison, grouping, analysis and synthesis, statistical method (in analysing the dynamics of macroeconomic indicators and the volume of tax revenues in the budget of Poland); method of logical generalisation (for the formation of conclusions). Database of research study consisted of data from the Main Directorate of Statistics of Poland, the National Bank of Poland, the Ministry of Finance of Poland, monographs and scientific papers in periodicals.

### **Tax revenues in the state budget of Poland**

Tax revenues are mandatory payments that come to the budget as a result of the compliance with the tax law by the payers (Owsiak, 2005: 173). They occupy an important place in the budget revenues, occupy the largest share in the structure of budget revenues, which, in turn, affects the socio-economic development of the state, and is also one of the tools of state regulation of the economy. The formation of tax revenues is the process of initiating, administering and accumulating taxes with the use of fiscal pressure.

Tax revenues of the budget, their formation, distribution and use are an important element of fiscal and tax regulation of the economy, the value of which increases in the conditions of the market economy system. The state's influence

on the development of economic processes becomes indirect and is realized through the implementation of economic, including budget and tax policies, the consistency and weight of which determine the rates of economic growth (Ziółkowska, 2005: 86). The state can expand its existing obligations only if sources of tax revenues are used from the country's budget.

Income tax revenues are an important form of redistribution of GDP (gross domestic product). They provide a significant portion of state budget revenues.

The volume of tax revenues is determined by the state of the country's economy, the number of economic agents and their activity, which, accordingly, are obliged to deduct in favour of the state in accordance with the provisions of the national tax legislation and the state's requirements regarding financial support for the implementation of state programmes. The formation of tax revenues by the state is carried out by removing part of the income or other assets of taxpayers.

Let us determine the place of tax revenues in the revenues of the budget of the Polish state through an analysis, which is presented in Table 1.

**Table 1 Structure of state budget revenues of the Polish state for 2000 - 2016 years**  
(Author's calculations based on data from the Statistical Yearbooks of the Republic of Poland in Years 2012 - 2017)

Years	Indicators					
	Tax revenues		Non-tax revenues		Other revenues	
	mln. PLN	%	mln. PLN	%	mln. PLN	%
2000	119 644	88.2	16 020	11.8	-	-
2001	119 101	84.8	21 426	15.2	-	-
2002	128 751	89.7	14 769	10.3	-	-
2003	135 228	88.9	16 883	11.1	-	-
2004	135 571	86.7	18 122	11.6	2 588	1.7
2005	155 860	86.7	21 465	11.9	2 477	1.4
2006	174 876	88.5	20 779	10.5	1 985	1.0
2007	206 385	87.3	22 448	9.5	7 534	3.2
2008	219 499	86.6	19 309	7.6	14 739	5.8
2009	214 879	78.4	27 433	10.0	31 871	11.6
2010	222 533	88.9	24 502	9.8	3 248	1.3
2011	243 211	87.6	32 274	11.6	2 072	0.8
2012	248 275	86.3	37 143	12.9	2 177	0.8
2013	241 651	86.6	35 976	12.9	1 524	0.8
2014	254 781	89.9	27 232	9.6	15 301	0.5
2015	259 674	89.8	27 710	9.6	1 753	0.6
2016	273 138	86.8	40 131	12.8	1 414	0.4

From the data in Table 1, it can be seen that tax revenues accounted for about 90 % of Poland's state budget revenues in recent years. Thus, in 2014, tax revenues

accounted for 89.9 % of budget revenues, which amounted to PLN 254 781 million, in 2015 this figure was 89.8 %, that is, PLN 259 674 million, and in 2016 – 86.8 %, that is, PLN 273 138 million. These figures indicate that the role of tax payments is significant, since the effectiveness of the state's performance and the welfare of the society depends on the amount of taxes paid. It is clear from the calculations that during the period from 2000 to 2016 there was an increase in the volume of tax revenues to the budget of the country. Thus, the amount of tax payments in 2016 compared with 2000 increased by PLN 153 494 million.

The factors that influence the volume of tax revenues to the budget include macroeconomic factors that change with each passing year (Dolata, 2009: 28): GDP, balance of payments structure, legislative base. In addition, the volume of tax revenues in the budget is also influenced by microeconomic factors: the choice of enterprises for the form of their taxation, the presence of enterprises tax breaks, the level of profitability of economic entities, their gross income, labour costs in the structure of the cost of production of the enterprise, the average number of people working.

The volume of tax revenues of the budget is determined by the tax policy of the state, since taxes are a factor affecting the economic activity of enterprises, the state, they can change the structure of the activity of individual enterprises, the structure of economic sectors, structure of the national economy. In particular, taxes can be used to equalize incomes and ensuring a certain level of social equality, to promote job creation through the preferences of small business and individual entrepreneurship, to be a tool to curb inflation, and be an instrument of export-import relations.

The system of tax revenues to the central budget of the Polish state includes (Owsiak, 2005: 176):

- indirect taxes: a tax on goods and services, excise tax, gaming,
- direct taxes: income tax of legal persons, income tax on individuals,
- other income taxes.

The next part of the article will analyse the connection of direct and indirect taxes and macroeconomic indicators, namely: gross domestic product, foreign exchange reserves, balance of exports and imports, public debt.

### **Macroeconomic indicators and tax revenues to the budget of the Polish state in 2010 – 2016**

One of the main macroeconomic indicators that characterize the results of the country's economic development is gross domestic product (GDP). In order to understand the features of the relationship of GDP with tax revenues, it is

necessary to analyse their volume changes, which will enable us to estimate the relationship between the indicators (Table 2).

**Table 2 Dynamics of GDP by categories of tax revenues of the Polish state budget for 2010-2015** (Author's calculations based on data from the Statistical Yearbooks of the Republic of Poland in Years 2012 - 2017)

Indicators	Years, in mln. PLN					
	2010	2011	2012	2013	2014	2015
<i>Gross domestic product</i>	1445297	1553582	1615894	1656341	1719704	1798302
Costs related to employment	547 676	573 441	598 549	618 838	646 459	664 449
Taxes reduced by subsidies on production and import	178 639	192 108	188 974	186 617	195 836	208 398
Gross operating surplus	718 982	788 033	828 371	850 886	877 409	925 455
<i>Tax revenues</i>	222 553	243 211	248 275	241 651	254 781	259 674
Indirect taxes, including:	165 190	180 273	181 892	175 369	187 067	187 267
tax on goods and services	107 880	120 832	120 001	113 412	124 262	123 121
excise tax	55 684	57 964	60 450	60 653	61 570	62 809
tax on games of chance and betting	1 625	1 477	1 442	1 304	1 235	1 337
Income tax, including:	57 363	62 937	64 955	64 366	66 288	70 853
corporate tax	21 770	24 862	25 146	23 075	23 266	25 813
income tax from individuals	35 593	38 075	39 809	41 291	43 022	45 040
Growth rate compared with the previous year, %						
<i>Gross domestic product</i>		7.49	4.01	2.50	3.83	4.57
Costs related to employment		4.70	4.38	3.39	4.46	2.78
Taxes reduced by subsidies on production and import		7.54	-1.63	-1.25	4.94	6.41
Gross operating surplus		9.60	5.12	2.72	3.12	5.48
<i>Tax revenues</i>		9.28	2.08	-2.67	5.43	1.92
Indirect taxes, including:		9.13	0.89	-3.58	6.67	0.11
tax on goods and services		12.01	-0.68	-5.49	9.57	-0.92
excise tax		4.09	4.29	0.34	1.51	2.01

tax on games of chance and betting		-9.11	-2.37	-9.57	-5.29	8.26
Income tax, including:		9.72	3.21	-0.91	2.99	6.89
corporate tax	-	14.20	1.14	-8.24	0.83	10.95
income tax from individuals	-	6.97	4.55	3.72	4.19	4.69

From Table 2, it can be seen that, with an increase in GDP, the tax revenue of the state budget increases as well. This is explained by the fact that with the growth of the corresponding component of the macroeconomic indicator the volume of the corresponding tax increases. Analysing data for the period 2010 - 2015, one can see that GDP increased from PLN 1 445 297 million in 2010 to PLN 1 798 202 million in 2015, i.e. by PLN 353 005 million, or by 24.42 %, respectively the tax revenues of the state budget increased from PLN 222 533 million in 2010 to PLN 259 674 million in 2015, i.e. by PLN 37 141 million, or by 16.69 %. It is necessary to draw attention to the fact that in 2011 and 2014 the growth rate of tax revenues to the budget was higher than the growth rate of GDP. In particular, in 2011 GDP growth by 7.49 % affected the growth of tax revenues to the country's budget by 9.28 %, while in 2014 GDP growth by 3.83 % led to an increase in taxes to the budget by 5.43 %. However, in 2012 and 2015, the GDP growth rate in Poland was higher than the growth rate of tax revenues to the budget. Thus, in 2012, the GDP growth rate amounted to 4.1 %, which led to an increase in tax revenues to the state budget by 2.08 %, and in 2015, GDP growth caused an increase in taxes to the budget by only 1.92 %. However, in 2013 GDP growth at 2.50 % led to a reduction in taxes of 2.67 %. The latter was caused by a decrease in value added tax of PLN 6 589 million (5.49 %), a gambling tax of PLN 132 million (9.57 %), a corporate income tax of PLN 2 071 million (8.24 %). The scientific financial literature points to various factors that cause similar situations, for example, the political situation in the country, changes in the tax legislation of the country, etc.

Another major macroeconomic indicator that characterizes the results of economic development in the country is the volume of Poland's gold and foreign exchange reserves (Table 3).

**Table 3 Volumes of gold and foreign exchange reserves of Poland for 2010 -2015, mln USD** (Author's calculations based on data from the Statistical Yearbooks of the Republic of Poland in Years 2012 - 2017)

Indicators	Years, in mln USD					
	2010	2011	2012	2013	2014	2015
Official Reserve Assets	93514,4	97866,0	108914,6	106219,5	100438,2	94921,1
1. Monetary gold	4 666,4	5 209,9	5 506,0	3 975,7	9 968,6	3 515,3
2. SDR	2 018,7	1 796,8	1 731,6	1 635,5	1 429,0	1 312,6
3. IMF reserve position	500,9	1 160,3	1 349,2	1 260,5	966,2	662,2
4. Receivables in convertible currencies	86328,4	89699,0	100327,8	99 347,8	94 074,4	89431,0
Growth rate compared with the previous year, %						
Official Reserve Assets		4.65	11.29	-2.47	-5.44	-5.49
1. Monetary gold		11.65	5.68	-27.79	-0.18	-11.42
2. SDR		-10.99	-3.62	-5.55	-12.63	-8.15
3. IMF reserve position		131.64	16.28	-6.57	-23.35	-31.46
4. Receivables in convertible currencies		3.90	11.85	-0.98	-5.31	-4.94

If we analyse the growth rates of Poland's gold and foreign exchange reserves and compare them with the growth rates of tax revenues, one can see that in 2011-2012 the increase of the country's gold and foreign exchange reserves by 4.65 % (2011) and 11.29 % (2012) led to the growth of taxes to the budget, respectively, at 9.28 % and 2.08 %. However, in 2013 the reduction of the volume of gold and foreign exchange reserves by 2.47 % led to a reduction of tax revenues to the state budget by 2.67 %; and in 2014 and 2015, the decrease of gold and foreign exchange reserves by 5.44 % (2014) and 5.49 % (2015) caused the growth of tax revenues of the budget, respectively, by 5.43 % and 1.93 %.

Also, macroeconomic indicators that characterize the economic development in the country are the volume of export and import of goods, as well as the level of public debt (Table 4).

**Table 4 Volume of export and import of goods, the level of public debt of Poland for 2010 - 2015, million PLN (Author's calculations based on data from the Statistical Yearbooks of the Republic of Poland in Years 2012 - 2017)**

Indicators	Years, in mln PLN					
	2010	2011	2012	2013	2014	2015
Exports	481 058	558 739	603 419	647 879	693 472	750 836
Imports	536 221	623 373	648 128	656 098	704 568	740 973
Balance	-55 163	-64 634	-44 709	- 8 219	-11 096	9 863
Public debt	747 899	815 343	840 477	882 293	826 775	877 282
Growth rate compared with the previous year, %						
Exports		16.15	7.99	7.37	7.04	8.27
Imports		16.25	3.97	1.23	7.39	5.17
Balance		-17.17	-30.83	-81.62	35.00	-188.89
Public debt		9.02	3.08	4.98	-6.29	6.11

The data of the analysed period show that the volume of export and import of goods in Poland has increased. In particular, for the period from 2010 to 2015, exports of goods increased by PLN 269.178 million, or by 56.08 %, and imports - by PLN 204 752 million, or by 5.17 %. In 2015, the balance of exports and imports of goods was positive and amounted to PLN 9 863 million. This shows positive trends in Poland's foreign trade policy. However, the growth rate of exports and imports of goods decreased from 2010 to 2015.

The statistical data on the total amount of public debt show variable dynamics: during the period under review, the total debt increased from PLN 747,899 million in 2010 to PLN 877,282 million in 2015, i.e. by PLN 129 383 million, or by 17.29 %. However, the growth rate of government debt for the analysed 2010-2015 years declined annually.

For a better understanding of what level of influence have the above-mentioned macroeconomic indicators on the amount of tax revenues to the state budget, we will use the coefficient of elasticity of taxes, which shows how the volume of tax revenues changes to the budget depending on the change in the volume of a certain macroeconomic indicator.

For example, derived from the effect of GDP change, the formula for the coefficient of tax elasticity is as follows:

$$Ce = \frac{\Delta Tr}{\Delta GDP} \quad (1)$$

where  $\Delta Tr$  – percentage change in tax revenues over the analysed period of time;  $\Delta GDP$  – percentage change in GDP for the same period.

Table 5 shows the level of influence of macroeconomic indicators of the country's development on the volume of tax revenues of the state budget, which explains the above analysed changes in revenues to the state budget.

**Table 5 The level of influence of macroeconomic indicators of the country's development on tax revenues (Author's calculations)**

Indicators	Years				
	2011	2012	2013	2014	2015
The coefficient of GDP elasticity and tax revenues	1.239	0.519	-1.068	1.418	0.420
The coefficient of elasticity of gold reserves and tax revenues	1.996	0.184	1.081	-0.998	0.349
Elasticity ratio of export and import surplus and tax revenues	-0.540	-0.067	-0.032	0.155	-0.010
Elasticity ratio of public debt and tax revenues	1.029	0.675	-0.536	-0.863	0.314

It is evident from Table 5 that changes in 2011 point to an elastic system of tax payments to the budget. This indicates an increase in tax revenues faster than changes in the volume of gross domestic product, that is, the taxation had little significant potential of the automatic regulator.

GDP and tax revenues are in the polynomial dependence of the 4<sup>th</sup> level:  $y = -0.5207x^4 + 6.0304x^3 - 23.598x^2 + 35.673x - 16.345$ , at which the accuracy of the approximation ( $R^2$ ) is equal to 1,0. The dependence of foreign exchange reserves and tax revenues is polynomial of 4<sup>th</sup> level:  $y = 0.5036x^4 - 5.9838x^3 + 24.666x^2 - 41.479x + 24.289$ , and the accuracy of approximation ( $R^2$ ) is 1.0. The dependence of the balance of export and import of goods and tax revenues is polynomial of 4<sup>th</sup> level:  $y = -0.0456x^4 + 0.5542x^3 - 2.4044x^2 + 4.4908x - 3.195$  (accuracy of approximation ( $R^2$ ) - 1,0). The level of public debt and revenue is in the polynomial dependence of the 4<sup>th</sup> level:  $y = -0.0467x^4 + 0.7573x^3 - 3.8043x^2 + 6.4588x - 2.336$ ,  $R^2 - 1.0$ .

Let us display the influence of the growth rate of GDP (x1) public debt (x2), the balance of exports and imports (x3) and the volume of reserves (x4) in tax revenues (y) by using multiple regression statistical method. As a result of the calculations, an equation is obtained:

$$y = -7.137 + 2.638x_1 - 0.356x_2 + 0.005x_3 - 0.01x_4.$$

From the equation, it can be seen that the plane inclination towards the rate of GDP growth (+2.638) represents the positive sensitivity of tax revenues to changes in GDP growth, and the plane inclination in the direction of changes in public debt (-0.356) represents a negative sensitivity of tax revenues. This

indicates that with an increase in the GDP growth rate and the balance of export and import of goods, tax revenues should increase, with a decrease in the level of government debt and the volume of gold and foreign exchange reserves, tax revenues should decrease.

## **Conclusions**

According to the results of the research study, it can be concluded that tax revenues to the state budget in market conditions are a prerequisite for the state to fulfil its functions and the main structure-generating component of the revenue side of the budgets. Tax revenues to the state budget are a coherent interaction of all elements of the system, the functioning of which characterizes the state, the development of the tax system in general, the change in dynamics under the influence of external factors.

There was a strong correlation between gross domestic product, public debt, balance of export and import of goods, volume of gold and foreign exchange reserves and total volume of tax revenues. This share of GDP, which formed the tax revenues of the state budget and was the result of the distribution of the value of GDP between economic entities (or subjects of the economy), was mobilized almost unchanged in the budget - in the considered time interval its polynomial extrapolation took place. In 2010 – 2015, there were changes in the elasticity of tax revenues relative to the macroeconomic indicators of the development of Poland.

Budget revenues are modelled depending on: 1) the dynamics of macroeconomic indicators; 2) changes in tax rates; 3) changes in privileges for payment of a certain tax due to changes in tax legislation; 4) the quality of tax administration. The degree of disaggregation of tax revenues depends on the availability of relevant data, the separation of relevant tax bases and their structure for the allocation of the main categories of taxes. Proceeding from the fact that the main tax categories often relate to the bases covering most of the economic activity, trends can be used to address certain issues related to budget revenue planning and to find alternative or settlement bases among the variables of national accounts and balance of payments. It is also possible to apply a consistent procedure when considering the implications for tax revenues due to the different choice of tax bases to ensure appropriate scenario interaction between macroeconomic variables.

Prospects for further research. In the process of budget forecasting and modelling it is necessary to take into account the levels of inflation, the rate of national currency and labour migration. Therefore, in the future it is expedient to study the relationship between the above indicators and tax revenues of the country.

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# EXPLORING THE INPUT OF COMPETENCE ASSESSMENT TO GOAL-SETTING IN VARIOUS TYPES OF ORGANIZATIONS

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**Abstract.** *The aim of the present research is to investigate the existing practices of linking competence assessment to organizational goal-setting in various organisations in Latvia. The importance of linking employee competences to goal-setting within organizations has been established in scientific literature. Nevertheless, there is evidence gathered in this interdisciplinary research that existing methods of competence assessment used by various organizations in Latvia do not translate well into organizational goal-setting. The research is based on information gathered from semi-structured interviews with representatives of managerial positions in private and public, including educational service organizations (26 in total). Additionally, publicly available development plans are analysed. Empirical data are analysed according to a conceptual framework of criteria impacting the goal-setting process. Three subsets of criteria are used that guided interview question formulation and interview data analysis: formulation of a goal; employee's ability to reach the assigned goal; employee's self-assessment on his/her ability to reach the assigned goal. Analysis of the results indicate that when setting goals and assessing employee competences in relation to those goals, management decisions are greatly guided by subjective approaches. Such identified approaches in observed private and public service organizations indicate common risks that are discussed in this research.*

**Keywords:** *competence assessment; management; organizational goal-setting.*

## Introduction

Goal-setting has been established as a vital part of organisation performance management (Armstrong, 2000). The way goals are set within an organisation leaves an impact on the behaviour of employees and management of the employees by their managers (Locke & Latham, 2002). Setting appropriate goals

may improve the performance results of employees (Seijts, Latham, Tasa, & Latham, 2004). Goal-setting itself may be linked to a motivation system of employees (Berrel & Huan, 2004). It may act as part of the motivation system by enabling a behaviour that results in increased performance (Lunenburg, 2011; DuBrin, 2012). Setting appropriate and challenging goals may help with retaining existing employees within the organisation and with decreasing the need to compete in the employment market (Echols, 2007; Rodriguez, 2008). But at the same time goal-setting raises a question of whether it is done properly.

There are best practices for goal-setting (Locke & Latham, 2002; Lunenburg 2011), but they are usually expressed in terms of what is a good goal. This works well with goals that organisations are sure to be able to reach because they have had experience with reaching similar goals in the past. The challenge arises when new goals are not similar to the previous ones or if the resources used for reaching them are not the same as before. To be more specific, the evaluation of possibility of reaching the goal at the end of the period at the time of setting the goal needs a reliable criterion that can indicate the possibility of reaching the goal.

A competence has been used as a measure for employees for some time now (McClelland, 1973; Boyatzis, 1982) and has been used as an important resource of an organisation (Prahalad & Hammel, 1990). Best practices of competence management have been identified for the organisations to gain more benefit out of the process (Campion et al., 2011). But the evidence gathered in this research indicates that organisations in Latvia tend to treat goal-setting and competence management of employees as separate disciplines. Moreover, such observations apply to both private and public service organizations. The existing employee competences are not used as an input for the goal-setting diminishing the organisations' ability to forecast possible challenges in reaching the goals.

Another group of problems that arise because of a missing link between goal-setting and assessment of competences needed to reach the goals relates to how organisations in Latvia tend to conduct employee development. Empiric evidence gathered shows that development is positioned as an additional motivator for the employees to remain with the organisation especially when options of monetary motivation are limited, and the managers generally recognize that employee development is beneficial to the organisation. At the same time managers struggle to find the most effective ways of employee development and seldom recognize a direct link between employee development and improvement in reaching the goals of employees and organisations.

**Research aim:** The aim of the present research is to investigate the existing practices of linking competence assessment to organizational goal-setting in various organisations in Latvia.

**Research questions:**

1. How does an organization formulate its goal in relation to how it can be assessed?
2. How does management assess employees' ability to reach the formulated goal?
3. How do employees assess their ability to reach the formulated goal (as perceived by management)?
4. What similarities and differences of aligning employee competence assessment to goal-setting can be observed in different types of organizations?

Methodology used, results gathered, and discussion and conclusions will be described further in the research.

### **Materials and Methodology**

In order to gather empirical data, 26 organizations were selected. The guiding principle for selection was to include organizations that represent different areas (private and public service), sizes and forms of work performed. All the selected organizations stated that the question of employee competence assessment and goal-setting management was relevant to them.

Private sector (business) organizations were selected according to the European Commission's defined criteria for organization size: number of employees, turnover, balance of income and expenditure, relation to other organizations (European Commission, 2008). Four groups are represented: small and micro (N=3), medium (N=4), large (N=7) size organizations.

Selected public service organizations are divided in two groups: public schools providing compulsory education programmes (hereafter: schools) (N=8) and other public service organizations (N=4) that are directly governed by the state or a municipality. To represent the diverse kinds of public schools found in Latvia, selection was based on three criteria. First, school size is expressed in management workload rate and in number of students. All schools are ranked in six groups (very small to very large) according to these size measurements and four of these groups are represented in this research. The second criterion is the different administratively territorial division where five different groups are identified, all of them represented in this research. The third criterion is the type of education programme provided by a school. Seven groups are identified and five of them are represented in this research.

The main approach for gathering empirical data from all of these organizations was by conducting semi-structured interviews with representatives of higher, middle or lower level managerial positions (hereafter: managers). In schools, principals were interviewed. Interviews were done in the period of

March - May, 2017. Publicly available internal documents of schools (development plans) were additionally gathered to complement data obtained in interviews.

Each respondent was presented a set of 3 main questions and was asked to express their opinion in a free form. The interviewers were instructed to ask additional questions from a supplied list if the answers were not deemed sufficiently explanatory. The interview questions were:

1. *What kind of goals does your organization set?*
  - a. *Please provide an example of a typical goal!*
  - b. *What numerical values do you use for the goals?*
2. *How does the management know that the employee is capable of reaching the goal?*
  - a. *Are any specific parameters measured in employees before assigning a goal to them? Which ones?*
3. *How does the employee know that he/she is capable of reaching the goal?*
  - a. *Based on what parameters does the employee expresses his ability to reach the goal?*

The answers were then analysed for key concepts and the context of key concepts was compared between the organisations for similarities of use.

Interview and document data were later analysed according to a previously developed conceptual framework of criteria impacting employee competence assessment in relation to goal-setting.

In an early stage of this research, a conceptual framework of criteria was developed from an analysis of scientific literature of criteria influencing the whole goal-setting process that any public or private service organization can experience. Based on the analysis, a set of criteria (five in total) was established and a subset of criteria (28 in total) was further identified that can influence the result of goal-setting process. For this research, three subsets of criteria are used that guided interview question formulation and interview data analysis:

1. Formulation of a goal (Tompkins, 2005);
2. Assessment of an employee's ability to reach the assigned goal done by the management (Klein, Cooper, & Monahan, 2013);
3. Employee's self-assessment on his/her ability to reach the assigned goal (as understood by the management) (Bandura, 2013);

## **Results**

### **Formulation of a goal**

Goals are very often formulated in ways that do not contribute to an objective and structured understanding of how to determine if the goal is reached or not.

More importantly, such an approach to goal formulation indicates that an organization can't objectively determine the necessary resources (employee competences) to reach the goal and whether the organization have them. Contrary to interviewed principals' statements that a goal should be measurable and attainable, official school goals found in the school development plans show that goals are formulated in a free form, using qualitative indicators and are not expressed in measurable units. Only one of the selected schools had a goal formulated with elements that can be measured (specific time, quality rank to be reached). Private sector organizations more frequently have goals that are all measurable and testable. Indicators describing how goals are formulated in different organizations are grouped according to theoretical assumptions (Tompkins, 2005) and topical themes derived from the interview data (see Table 1).

Table 1 **Results for criteria: Formulation of a goal** (prepared by authors)

No.	Indicators (describing the criteria)	Types of organizations		
		Schools (N=8)*	Other public service (N=4)	Private (N=14)
1	Freely formulated and unmeasurable	3	2	3
		7		
2	Some goals are quantitatively formulated	7	2	4
		1		
3	All goals are measurable and testable	0 (document content only)	0	7

\* For schools 1<sup>st</sup> row related to interview data, 2<sup>nd</sup> to document content

### Assessment of employees' ability to reach a goal

An assessment of employee ability to reach a goal is done through a management assessment based on previous experience, referencing to formal job descriptions, qualifications, consensus reached during meetings and gut feeling and other subjective and unstructured ways of assessment. A regular progress assessment is done, but there are minimal indications that it is objective and directly aimed at assessing competences. In all cases, this assessment happens after a goal is set and not before. Many interviewed managers admit that an evaluation of reaching a goal at the point when it is defined is an intuitive estimate and most principals rely on a positive mutual feeling that a goal is "the right goal". Half of private and public service organisations interviewed indicated that regular progress assessment of employee goals is part to goal-setting process and represents the assesment of employee experience. In addition some of these organisation rely on assessment of employee qualifications and competences.

Almost no linking of assessment practices of teacher ability with goals can be found in school development plans. In three cases there are mentions of teacher professional development, competence development, further education to be organized and adjusted to the “priorities” of the school. Assessment, specifically, is not mentioned. Indicators on which management assesses employee ability to reach a goal in different organizations are summarized in Table 2.

**Table 2 Results for criteria: Assessment of an employee’s ability to reach the assigned goal done by the management** (prepared by authors)

No.	Indicators (describing the criteria)	Types of organizations		
		Schools (N=8)*	Other public service (N=4)	Private (N=14)
1	Previous experience	2	3	9
		0		
2	Training new employees	3	0	1
		0		
3	Regular progress assessment	4	2	7
		0		
4	Subjective assessment done by management	7	2	4
		0		
5	Employees’ qualification, job description	0	3	2
		0		
6	Employees’ skills, knowledge, competences	2	1	1
		3		

\* For schools 1<sup>st</sup> row related to interview data, 2<sup>nd</sup> to document content

### **Employee self-assessment to reach a goal**

Management of private and public organisations rarely controls or formalizes employee self-evaluation in relation to employees’ ability to reach a goal. If it is done, then it’s an independent activity or done subjectively by the management through meeting discussions and is not related to objective measures of employee competences. In almost none of the reviewed school development plans are mentioned procedures for how teachers do assessment on his/her ability to reach the assigned goal. Generally, in these documents there are no indications that in schools, teachers would do self-assessment to determine their ability to reach a goal. Indicators for how employees do assessment on their ability to reach a goal are summarized in Table 3.

Table 3 **Employee’s self-assessment on his/her ability to reach the assigned goal (as perceived by the management)** (prepared by authors)

No.	Indicators (describing the criteria)	Types of organizations		
		Schools (N=8)*	Other public service (N=4)	Private (N=14)
1	Employees’ subjective assessment	1	4	8
		0		
2	Regular progress assessment	5	0	6
		1		
3	Subjective assessment done by management	4	1	4
		0		

\* For schools 1<sup>st</sup> row related to interview data, 2<sup>nd</sup> to document content

### Similarities and differences in selected organizations

Private sector organizations are more likely than public sector organizations to formulate goals so that they are measurable and testable. Even if school principals state that goals should be partly quantifiable and measurable, it does not guarantee that they are such in reality. For all selected organizations goals are usually expressed in terms of what needs to be achieved without indicating what resources are needed in order to reach the goals.

Private sector and other public service organizations tend to rely more on previous experience when assessing employees’ ability to reach an assigned goal compared with schools. All organizations tend to do a regular progress assessment which means that employees’ ability to reach a goal is assessed after the goal is formulated and set. All organizations also tend to have a subjective assessment of employees’ ability done by the management. Another similarity is that employee skills, knowledge and competences are rarely measured in relation to determining employees’ ability to reach a goal. It should be also taken into account that even if managers use concepts such as “competence”, this research did not specifically try to investigate how do they understand and define employee competences.

In all organizations employees can address their inability to reach a goal but in nearly all cases management does not make changes to the goals. In cases where employees say the goal is not reachable, private sector organizations try to motivate their employees, schools tend to reach a common understanding of the goal. In all selected organizations some type of subjective assessment is being done either by the employee or by management. In schools, a prevalent approach is teacher self-assessment, but this research did not investigate what sorts of teacher job activities are assessed and how and if they relate to goal-setting.

## Discussion

Data gathered from the interviews in organisations in Latvia show several main characteristics. First, goals are usually expressed in terms of what needs to be achieved. The goals usually do not indicate what is needed in order to reach the goals which contradict the best practice indicated in scientific literature (Latham, 2003). Regarding goal formulation, managers use terms such as “*qualitative and quantitative goals*”. Quantitatively formulated goals are assessed according to predefined indicators. Qualitative goals are assessed according to a subjective evaluation done by management or an expert. In schools, principals aim to formulate goals as understandable for all teachers, measurable and attainable. Interviewed principals point out to the twofold nature of goals, that a goal can be assessed by both qualitative and quantitative measures: “*It can't be only numbers or results, sometimes it is attitude of students and teachers*”. Contrary to this, development plans show that goals are mostly formulated in a free and qualitative way that rises questions of proper accountability systems for schools in Latvia (Hallinger & Heck, 2002: p. 20).

Second, employee ability to reach goals is not expressed in terms that can easily be translated into the improvement of the ability in case it is not sufficient to reach the goals successfully. Because managers avoid expressing goals in terms of competences required to reach them, they also have no motivation to conduct a competence assessment for their employees. This creates a potential for dissatisfaction of employees with the organisation and may decrease the ability of an organisation to retain their employees (Kyndt, Dochy, Mishielsen, & Moyaert, 2009). Most of indicators imply that management's intuitive assessment is required. It is also difficult to make guesses about new employees whom management have not formed an opinion or lack previous experience in working with them. In schools, great deal of time is spent on meetings where management and teachers are working together to reach a consensus and shared understanding of the essence of the goal which is regarded as an effective approach to goal-setting in schools (Hallinger & Heck, 2002). Interviewed principals use these meetings to subjectively assess teachers' understanding of the goal and whether they are for or against it. Such an approach is used also in regular weekly meetings. The ability of a teacher is mostly interpreted as a principal's intuitive assessment of teachers' professional and emotional readiness to understand and agree collectively to reach the school goal: “*If I see that during meetings they [teachers] come, communicate and are satisfied, they have suggestions, they are open for collaboration then it is an indicator and I can say [...] it has worked, they are not against it, we fit as a team*”. Five interviewed principals mentioned lesson observation as an approach to determine the ability of a teacher to reach school goals. Others mention tools such as employee questionnaires or self-assessment.

But it should be pointed out that only one interviewed principal used the concept “competence” when talking about teachers’ ability to reach a goal and that through lesson observation teacher competence is determined. Other interviewed principals don’t use concepts such as “competencies, skills, knowledge” in regard to determining teacher ability to reach a goal. To conclude only in two cases assessment of teachers’ ability is linked to goal-setting.

Third, procedures for employees to do a self-assessment of the ability to reach the goals in organisations are limited and done mostly individually. The reasons for this indicated by organisations participating in the research relate to the first two characteristics. Usually managers let employees express their self-evaluation and doubts about their ability to reach a goal during meetings or individual meetings. Some organizations try to cultivate an organizational culture where employees turn to managers and express their opinion about the goals. However, interviewed managers say that the goal does not change after employees have expressed their doubts. In some cases, employees’ opinions are heard out by management not for changing the goal but for other reasons. Even if an employee reasons that he/she is not capable to reach a goal, management does not take into account his/her objections. Such a passive response to employees who speak up is a common practice in other organizations (Detert & Burris, 2007). Managers are looking for ways how to motivate their employees in such situations. Authority is also being used to force employees to agree with challenging goals. Some managers admit that they set goals purposely that are beyond their employees’ capacity to attain.

In schools, teachers evaluate their ability to reach a goal mainly by participating in meetings with other teachers and management and by doing a self-assessment. Other approaches are: informal conversations with the principal, conversations in methodical meetings, feedback from management: *“In everyday conversations I can find out a lot. I can see what has been understood”*. Regular progress assessment happens by doing a teacher self-assessment and lesson observations. However, as one principal says, a teacher self-assessment is done but the results of these activities are not reviewed. As another principal state: *“I would like that a teacher is so professional that he/she can say: this is my goal, have I achieved it”*.

## Conclusions

Based in the information gathered in this research it can be concluded that there is evidence that all the selected organisations have created a set of procedures for goal-setting. There are typical characteristics that are common in the majority of the organisations according to the opinion of the managers. The goals are set based on the experience of the managers working in similar situations

with the existing set of employees the managers have evaluated by using subjective methods. Some of the goals are formulated as qualitatively measurable goals which implies that the measurement of success will be made based on a feeling that is not necessarily expressed in unquestionable terms. The ability of the employees assigned to the goals to reach them has not been a major concern of the managers and the involvement of employees in the goal-setting process is limited in most organisations, except in schools where teachers are actively involved.

All organisations have established procedures to assess their employees. The assessment of employees is typically made at the end of the business cycle together with the assessment of goals reached, and part of the assessment is based on the proven work results e.g. goals reached without a prior assessment of the ability to reach the goals. This puts the organisations in a gambling mind-set. Some of the organisations also indicate that their employee assessment methods are subjective and lack rigorous criteria for the assessment.

Therefore, organisations in Latvia may be prone to several risks. First, the organisations are unable to forecast their ability to reach goals based on the assessment of their employees. That may impair the ability of the organisations to realise their potential and miss the available opportunities in the market. It also may decrease the ability of organisations to participate in the development activities of the organisation itself like participating in a reorganisation project regardless of whether those projects have stemmed from internal need or outside influence.

Second, the organisations have decreased ability to participate successfully in the employment market since their employees may not feel sufficiently appreciated. For the private sector organisations, that may result in a higher employee turnover and decreased ability to rely on the existing taskforce to be available for their endeavours. For the public service organisations, that may result in inability to fill their vacancies and decrease in prestige and image in the eyes of society, which is already a problem regarding school teachers' low professional prestige in Latvia (OECD, 2016).

Therefore, it should be concluded that using competence as a building block describing both employees themselves and the goals they are required to reach provides the organisations with several benefits. It makes the definition of the goals more precise and aligns better with existing employees. It allows for better forecast of reaching the goals at the start of the business cycle. It potentially provides the organisations with the input for the improvement of goal-oriented employee development.

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## ENOTOURISM AND SUSTAINABLE TOURISM IN POLAND

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**Abstract.** *This paper presents a research conducted in three Polish regions, Dolny Slask, Malopolska, and Pod Karpacie, within the EU funded project “Innovation and Capacity Building in Higher Education for Cultural Management, Hospitality and Sustainable Tourism in European Cultural Routes” that aims to provide profitable solutions for sustainable tourism problems and focuses on how developing enotourism in places that have to improve their tourism capacity building. Based on literature analysis and the study of key cases, this article presents the reasons why enotourism is an important tourism opportunity in Poland. Our research was grounded on a cost and profit analysis of the enotourism business and we considered a few of relevant cases of wine tourism experiences. Indeed, the principal aim of our research was to find innovative successfully ideas for this form of tourism.*

*From our research, emerged that the most important factors for enhancing enotourism are incentivising laws, an effective cooperation between vineyard owners and tourist operators (e.g. hotels, restaurants, travel agencies, etc.) as well as the integration of enotourism with other local attractions.*

**Keywords:** *business implementation, enotourism, Polish winemakers, wine tourism.*

### Introduction

Search for new possibilities of tourism at local level is a key issue for a sustainable development. One of the new possibilities observed in the last years is the implementation and management of enotourism, that even though, it is an old form of income in many European countries, in Poland is still a new branch to be implemented. Nowadays, there is a good grape quality in Poland that influence in the quality of wine produced in vineyards. Robinson (2017) argues that “Most of the vines planted in the harshly continental climate of Poland are hybrids such as Solaris, Rondo and especially Regent... There are already more than 150 officially registered commercial vineyards with about 200 hectares”.

In Poland, winery and viticulture are especially rooted in some areas, such as the territories of Zielona Góra, Wrocław, Kraków, Podkarpacie, and Kazimierz Dolny.

The oldest wineries officially registered are:

- Winnica Equus
- Adoria Vineyards
- Winnica Jaworek
- Winnica Maria Anna
- Winnica Płochockich
- Winnica Stara Winna Góra
- Winnica Miłosz
- Winnica Wzgórza Trzebnickie.

Polish winemaking has over a thousand years of tradition. Polish wines are currently winning many prestigious awards. Despite this, still thinking about an enotourism vacation, our native vineyards do not appear in our subconscious, but the French, Spanish and Italian ones. Our winemakers must be aware that this kind of tourism is also an opportunity for economic development.

The first vineyard was made available to tourists not to educate and broaden their knowledge, but because the owner was on the verge of bankruptcy. La Reine Pedauque enjoys the greatest success among several of its rivals in Beaune.

A vineyard, according to D'Souza P. (n.d.), is the place of viticulture for the production of grape wine. Often, within the vineyard, there is a wine bar where this process takes place. In the leading countries of wine production, i.e. the United States, France, Italy, Germany, Spain, Portugal, Australia, Chile, Argentina, and South Africa, vineyards are an important tourist attraction, where tourists can get to know the production process, taste wines from different strains, in different years. Some vineyards, in addition to their services, have restaurants and shops, in which tourists can taste local delicacies, as well as purchase wine and those specialties.

Enotourism can be considered in two ways. Firstly, as a new trend in tourism, which is an original and very fashionable form of spending free time. Secondly, as potential for rural areas and farmers. Currently, in Polish literature it is very difficult to find researches or studies regarding particularly this potential and possibilities of using enotourism, as an opportunity for the development of very fragmented Polish agriculture; and wine tourism, similarly to other forms of tourism, can play the role of a factor that stimulates the development of the agricultural region.

### **Research objectives and methodology**

The main objectives of our research are:

- Supporting effective solutions for measuring, understanding and enhancing enotourism;
- Defining policies and institutional frameworks that sustain enotourism.

Indeed, enotourism initiatives need an integrated approach since enotourism is related to the development of the three different components: the vineyard cultivation, the wine production, and the tourism promotion. Of course, the basic element is represented by the quality value of the product, namely the wine quality

Our research was based on a systematic analysis of the literature on “enotourism” and “wine tourism” conducted by the authors. Following the general guidelines of the systematic literature review method (Moher et al., 2009), we analysed the current literature available online, searching for combinations of keywords on ISI listed proceedings as well as on databases of leading world publishers.

### **Costs and profits of enotourism development**

The combination of two branches, characterized by different characteristics and located at various parts of the industry, that is, wine production and tourism in one [wine tourism], can give very different effects, both positive and negative. The conditions for economic tourism and viticulture (Mazurkiewicz-Pizlo, 2013), even taking into account phenomena such as demand, supply, price, costs, profits and branding, are fundamentally different.

However, although this is not a simple task, of course, these two areas of the economy can be combined. In economic terms, therefore, we will talk about the costs related to tourism, as well as wine-making.

Bosak (n.d.) to the question: how to earn a few pennies on wine production, answers that it is simple. First you have to spend a fortune and after wait patiently for many years. In these words, often spoken by winemakers, there is nothing exaggerated. There are many years of waiting for the return of costs from the establishment of a vineyard, and they are not small and are composed of the following items:

- Purchase of a plot for a vineyard.
- Setting up a vineyard.
- Purchase of wine growing equipment.
- Adaptation of wine making rooms.
- Purchase of the appropriate wine making equipment.
- Adaptation of the object for the sale of wine and enotourism.

The purchase of a suitable plot of land fluctuates between PLN 15000 and 30000 (Nowakowski, n.d.), depending of course on the location. About 5000

grape cuttings will fit on a hectare plot of land. Prices over PLN 40000 per hectare, from an economic point of view, are justified only when the plot location is very beneficial, whether it is due to the tourist attractiveness of a given place, or because of the location near a large agglomeration.

The cost of planting a vineyard may vary and depends mainly on the density of plantings, and also from the work that must be done to prepare the plot for planting. There is no necessity to fence or grub everywhere. The average cost is between PLN 70000 and 120000 per hectare. Below is an example of the cost estimate of establishing one hectare of a vineyard (see Table 1), planted at a spacing of 2.20 m x 1.00 m. (that is about 4500 bushes / 1 ha) on a plot previously used for agricultural crops, so without the need for grubbing or terracing (Bosak, n.d.).

Table 1 **Cost estimate for establishing 1 hectare of a vineyard** (own source)

<b>Expenses</b>	<b>Net price (PLN)</b>
Preparation of the plot before planting	3000
Purchase of fertilizers, lime and manure	3400
Buying seedlings (4500pcs. x PLN 8.00)	36000
Machine planting (4500 pcs. x PLN 1.10)	4950
Purchase of bamboo stakes (4500 pcs. x PLN 0.40)	1800
Purchase of materials for scaffolding (extreme posts, anchors and tensioners, 80 pieces each, posts through bars around 1085 pieces, wire approx. 1800 kg.)	39800
Installation of scaffolding (about 50 hours of tractor work with a trailer and verge)	9500
Total:	98450

Area of planting and other decisions, e.g. regarding the choice of location, grape varieties or the organization of winemaking, to a large extent depend on the final objective. Do we plant a vineyard for our own needs, or we anticipate any commercial activity, related to the production of grapes and wine. Wawro (2013) suggested that if you plan to make wine only for your own [domestic use], then you should plan a vineyard with an area not larger than 20-30 ares, because even such a relatively small acreage should provide us with production of about 1000 litres of wine per year. If we are planning fully commercial winemaking production, which is to be our primary source of income, we should plant vines at least 2-3 hectares, assuming that most of the produced wine is sold on the spot directly to consumers. If, on the other hand, we intend to distribute our wine mainly through wholesalers and stores or give up wine production and deliver grapes to other producers, we will need a vineyard with an area of at least 5-10 hectares. We will treat farms even differently, for which the vineyards are an

element of promotion or an element of supplementing crops. These are not typical vineyards, created solely and exclusively for the production and distribution of wine. In the case of tourist farms, the anticipated demand for wine should be taken into account, from this for sale and promotional events, to free samples and food.

The cost of fencing the vineyard and maintaining it until the first crop should be added. An important issue is the purchase of wine-growing equipment. Of course, if we cannot afford it, at the beginning you can think about commissioning this work to someone else - in the agricultural areas it should not pose major problems. However, already in the case of over a hectare vineyard, it seems viable to purchase a small garden tractor with basic equipment. As for the costs, its purchase in the used version ranges from PLN 40000 to 60000, and in the case of new equipment, you have to reckon with a two- or even three-times higher expense.

The next step is the construction or appropriate adaptation of premises for the production of wine. A farm with its own vineyard and processing cellar is undoubtedly a complex organization. The production of wine requires adequate premises and equipment as well as some knowledge and practical skills. Deciding on this variant, we put off the cash flow in time - when the grapes are cashing in right after harvest, the wine at the earliest after a few months, and often after some years. On the other hand, own processing gives us very important benefits: it generates additional profits, as well as making us independent of the recipients of raw material and periodic price of grapes.

**Table 2 Average costs of processing equipment** (Mazurkiewicz-Pizlo, 2013)

<b>Specification</b>	<b>Overall cost (in PLN)</b>
A grinder or a mill-stalker	1100 – 4400
Basket / hydraulic press	850 – 1780/ 2450 – 7700
Maceration tanks	700
Fermentation tanks	4000-7000
Metal containers	12000-17000
Glass bottles (glass balloon)	500-1000
A filler, a wine filler	1700-10000
Wine goblet	10-530
Welder	790
Total	2165-49120

Wydawnictwo Eurosystem (2012) writes that winemakers earn about twice as much when making middle-class wine, than selling grapes, and in the case of very good wines, increase profits even three to four times. The wine market is and will be much wider than the market for the raw material, because the sale of a finished product does not impose such time and spatial restrictions on us.

Actually, beverages stored in the basement can wait for recipients even several years, without losing any of its value, and a properly packed wine carton will be sent everywhere there, where someone will pay for it: to a nearby restaurant, to Gdańsk, Tokyo or to London (Bosak, n.d.). The average costs of processing equipment are based on a study presented by Mazurkiewicz-Pizlo (2013) where describe the Enotourism as an opportunity for socio-economic development.

An important issue is also the adaptation of the object for the sale of wine and enotourism. Good tasting equipment is unfortunately not cheap (among others glasses, carafes, coolers, corkscrews, etc.) - it will cost about PLN 1000. However, it is very difficult to predict other expenses related to ecotourism business. Both the adaptation of the right room, and its arrangement, will depend on the specific situation and location of the vineyard. The same is with toilets and parking. Such costs could amount to PLN 5000, but it might also be as much as PLN 50000. However, along with the adaptation of the facility to accept tourists, expenses do not end. There must be counted the current expenditure on maintaining the vineyard. These expenditures in normal conditions range from PLN 8000 to 15000, although of course they could be smaller or larger - everything depends on the size of the vineyard, its location, climate, atmospheric conditions, as well as many other factors. The costs in question include (Bosak, n.d.):

- Labour.
- Purchase of fertilizers and plant protection products.
- Damage repair.
- Completing pitches in planting.
- The cost of mechanical work (i.e., the cost of equipment work with its operation, depreciation, etc.).

It is estimated that the average cost of producing 1 litre of wine is PLN 2.50 in the case of table wines, from PLN 3 to 5 in the case of medium-quality wines, and in the case of wines of a much higher quality this amount might even reach PLN 10. The final price will also include the cost of packaging (about PLN 2.00-2.50), VAT and excise tax - 1.58 PLN / l. In addition, there are marketing costs, and of course the intermediary markup (in the case of wholesalers and stores, usually it is about 10-20 % of the retail price, while in restaurants, the markup even reaches 50 %) (Dul, 2008).

To sum up, the cost of producing a bottle of wine (0.75 litre capacity) is about PLN 9. Considering the fact that the store shelves in Poland are dominated by wines in the range of PLN 15-20 and wine meets the needs of most consumers, this puts into question the economic sense of wine production in Polish vineyards (PLN 9 is the cost of producing a bottle of wine, without the intermediary and store markup). The winemaker is able to get a price of up to PLN 15 per bottle, so make a maximum of PLN 6 - usually it is about PLN 4 per bottle. In the case

of Poland, this gives around PLN 21536 annually (at the price of 15 PLN / bottle). It gives us about 1794 PLN / month. Therefore, it is not an amount that would allow the family to be kept only from viniculture [The calculations were made on the basis of data published on the ARR website, which shows that 49 vineyards that are registered in the ARR, in total produce 1978.95 hectolitres. However, one vineyard produces an average of 4038.67 litres of wine, that is about 5384 bottles (which at the price of 4 PLN / bottle will give us PLN 21536, while at the maximum price, that is 6 PLN / bottle, PLN 32304 per year). These data, given the fact that few Polish vineyards are registered in the ARR, are averaged data and in fact, depending on the region area, strain, as well as many other factors, these sums could differ from the calculations presented in the publication] (Smogor, 2012).

Therefore, the local market is an interesting solution. When selling wines in returnable packaging to premises, e.g. in ten-litre cylinders or barrels, the costs of bottling are eliminated. Other components remain, such as VAT, excise duty (Kuleba, 2016). The cost of producing one bottle is, as already mentioned above, around PLN 9, subtracting the cost of bottling from this, the cost will be not PLN 9 but about PLN 6. If we assume that the wine will be sold for the same amount in stores, the PLN 4 average profit per bottle will increase to PLN 7 (maximum, instead of 6, it will be PLN 9). So from PLN 21536 (for the same production) we jump to PLN 37688, which gives approximately 3140 zlotys per month [In the case of a maximum profit, it will be PLN 48456 annually and PLN 4038 monthly].

Another solution is to sell wine on the farm, as part of enotourism, which currently seems to be the most suitable solution for Polish vineyards (Olszewski & Drozd, 2013). As part of the tourist attraction, the winemaker can offer to the guests the wine of their own production. This is the so-called open bottle trade, without the right of bottling and marketing the bottles. Then, even if we count guests at PLN 2 per glass, our income will be PLN 16 per litre (150 ml are served in a glass wine, so from 1 litre you can get 8 glasses of wine), while profit after deduction of production costs will amount to approximately PLN 11 per litre, which gives PLN 44425 per year and PLN 3702 per month. You can get even more profits from tasting.

The group of guests tries different wines produced by the farm, of course, with the owner's consent. Considering typical tasting samples - 30 to 50 ml is poured into a glass. So 200 to 400 ml are consumed by one guest. Of course, the total amount is set for such a tasting. If it oscillates at the level of, say, 15 zlotys, the price of one bottle will be 25 to 30 zlotys. It gives us PLN 19 and 24, respectively, per bottle, so if all the wine produced would be used for tasting, the annual profit would be PLN 102296, respectively, and PLN 129216 [per month, it will be PLN 8524 and 10768]. Thus, the sale of wine as part of wine tourism, from an economic point of view, seems to be the best solution. Do not forget that

if the wine taste action is welcomed by the tourist and is liked, the tourist will take with him at least one bottle, bought on the spot, and in the future he will look for this type of wine in different stores or return for more wine in the future. Whether buying it directly in the vineyard or via an online or stationary store, it's a good way of promotion, without cost for the seller.

Direct sale and tasting are obviously not the only offers for tourists in the field of enotourism, although actually tastings are the most characteristic offer of this field of tourism (Kruczek, 2014). A classic example of a region that benefits greatly from wine and tourism links are the New York area, where several hundred small wine farms function perfectly, which equally live on wine production and the service of weekend tourists visiting them. In this way, up to 80 % of wines produced in this state (and this is the second US wine producer after California), it is sold directly on wine farms, omitting any intermediaries. Today, also in many European countries, winemakers are trying to attract visitors to their farms, offering accommodation, meals, picnic areas, etc., and typically wine-related attractions: tasting, visiting the vineyard and basement, lectures on wine, etc. (Bosak, n.d.).

It also seems obvious that the vineyards located in typical tourist regions are in a much better position. The reason for this is even the fact that these regions already have a well-developed tourist base and a wine producer, starting his adventure with tourism, does not have to bear additional costs to adapt the facilities to tourist services. It can cooperate with local entrepreneurs, e.g., it does not have to own and offer accommodation to tourists in the vineyard (although it is undoubtedly an interesting and often sought after proposition). Instead, such accommodation can be offered by a nearby hostel, guest house or agritourist farm. This is a very interesting solution, and requires only certain arrangements between the winery owners, and for example an agritourist farm and placing such information on the website, or in folders. If, however, there is no such option, or if the winemaker prefers profits from this type of offer to his own pocket, and not someone else's pocket, he must also bear (besides those typically wine-growing), some additional costs. They will be very different, depending on what profile of the enotourism activity will be selected.

It would be a mistake to assume that all production will be used for tastings, or vice versa, that we will stop tasting and any wine produced will be sold. Such situations almost never happen. It is also very difficult to determine the exact cost of setting up and running such activities, especially in Polish conditions. However, from the simulations carried out (which there are still very few on the Polish market) it is clear, that wine sales through eco-tourism are much more profitable - directly in the vineyard. One of such simulations, conducted by Wojciech Bosak, who took into account two variants of sales (the first - sale of

the whole production through intermediaries, and the second - sale of 2/3 of the production directly in the vineyard, also in the form of paid tastings with a lecture), it clearly shows that when deciding to go to tourism, the costs are refunded twice as fast as in the situation when all of the production is sold by intermediaries. In addition, the annual sum of profits is also twice as large. In addition, after 25 years of doing tourist business, you can earn 5 times more than selling the whole production through intermediaries (Bosak, n.d.).

This simulation proves that enotourism, also from an economic point of view, is the best possible choice for Polish winemakers. However, the most convincing evidence that enotourism can bring not only winegrowers, or given regions, but also the whole country tangible economic benefits, are statistical data, which say that every year almost 8 million tourists visit, within the wine tourism, France. However, the largest income from this type of tourism - about 2.7 billion dollars - they have in the United States (Wierzynski, 2011).

## **Conclusions**

European cultural routes and heritage represent a resource for innovation, creativity, small business creation, and cultural tourism products and services development. The promotion of cultural tourism is a logical next step in developing Cultural Routes since this type of tourism builds on the uniqueness and authenticity of remote destinations, local knowledge, skills, traditions and heritage (Cultour+ project, 2016). CULTOUR+ is a Erasmus+ Strategic Partnership in the field of Higher Education with the mission of coaching and fostering innovative and creative business ideas in cultural management. The research present Enotourism as an additional form of tourism that can be implemented in that places were pilgrimage and religious cultural and thermal tourism enjoys great acceptance by tourists.

The research findings have implications for predicting and promoting future wine tourism. An understanding of the planning, organizing, leading, and controlling of human and other resources to achieve organizational goals effectively and efficiently, is important to understanding all marketing activity which aims to develop enotourism at local level. The practical approach on how to promote this type of tourism in places that have developed good tourism resources but did not add to this important sector is a key issue presented in this research and present some new issues for new research possibilities.

By understanding how to implement and develop enotourism we are able to gain a better understanding of when we need to stop or continuo to invest in something that is associated with certain costs. However, when creating the right programmes, the benefits and profits that can be achieved from running this type

of business can be very large, and the revenues generated by this branch of tourism can also contribute to the development of the local community.

An important factor in the development of enotourism will therefore be above all: next to the appropriate legal regulations, establishing cooperation of vineyard owners with other entities of the tourist industry, e.g. with hotels, restaurants, travel agencies and connection with other local attractions.

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# PERCEIVED QUALITY OF RURAL TOURISM ACCOMMODATION SERVICES BY PROSPECTIVE CUSTOMERS

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**Abstract.** *Rural tourism and corresponding activities generate new jobs, providing employment for people in rural areas, create a cooperation mechanism between different rural entrepreneurs, attract tourists, and thus contribute to both well-being of local population and the regional development in general. Rural tourism is attractive from an economic perspective, as it provides the opportunity to boost and diversify rural economies in remote areas. The paper is a part of the RTA scientific grant “Tourism Products Evaluation of the Rezekne Municipality (Quality Audit)”. The aim of the research is to study rural tourism accommodation services in Rezekne municipality and to carry out their evaluation based on experts’ (potential customers’) perception of quality. The methods applied in the research: logical and constructive, synthesis and analysis, an empirical survey. However, the rural tourism accommodation establishments in Rezekne municipality in general are characterized by the keywords “responsiveness” and “hospitality” as well as by the well-ordered environment around the houses. The rural housings have to evaluate the current and future demand and precisely define the potential market segments to create an offer in accordance with it.*

**Keywords:** *accommodation services, local economy, quality, rural tourism, satisfaction, tourism.*

## Introduction

Tourism is a rapidly growing sector of the Latvian economy. The successful development of the sector is determined by both the natural resources, geographically advantageous location, rich historical and cultural heritage, and the talents of the Latvian people, growth-oriented work, and hospitality (Latvian Investment and Development Agency).

In the global tourism economy, the rural tourism is defined as an economic activity where the profits are gained by use of agricultural land, natural resources, cultural heritage, agricultural holdings, local traditions and products, appropriately labelling them, reflecting regional identity, and serving the needs of tourists (overnight stays, entertainment, and other services) in order to promote

sustainable local development and to meet the demands of modern society for proper service in the context of new social solidarity between rural and urban areas (Naktsmītnes lauku un reģionālajā tūrismā).

Rural tourism and the related activities generate new jobs providing people in rural areas with employment, create a mechanism for cooperation between different rural entrepreneurs, attract tourists, and thus contribute to both increase of the well-being of local people, and the regional development in general. However, these impacts cannot occur when there is no more population in the area that can be employed in rural tourism or in other related sectors.

Moreover, tourism is considered an incentive for economic development in remote areas, in the regions experiencing stagnation or decline in the primary economic sector, but lacking the capacity to absorb large-scale industrialization or other alternatives. Sustainable tourism serves as a driving force to stimulate economic growth in developing areas and to reduce the subsequent decline. Rural tourism is attractive from the economic point of view, as it has the opportunity to replenish and diversify rural economies in remote areas. It is also claimed that it has access to social and cultural benefits as a platform for advocacy of interests. Tourism growth and the economic development of the tourism industry in Latvia are often evaluated mainly in relation with two economic indicators – changes in the number of foreign travellers, and the amount of money spent by travellers (Dembovska & Silicka, 2014).

Local governments also have a significant role in rural tourism – tourism development in their own territory provides a good opportunity to supplement the municipal budget, thus having additional funds to promote small business development, growth of cultural institutions, as well as opportunity to improve road infrastructure, raise the level of catering establishments, and develop trade, crafts. Particularly for the local municipalities, tourism potential (natural and historical sites) can turn into tourism resources by including them on tourist routes and excursions, offering to spend entertaining time in nature for tourists. Particularly with the support of the local authorities, hotels and catering establishments are being built and arranged, travel packages are being developed that can be realized in a particular area.

The aim of the research is to study rural tourism accommodation services in Rezekne municipality and to carry out their evaluation based on experts' (potential customers') perception of quality. Tasks to achieve the goal:

- theoretical sources on opinions of “perceived quality” are explored;
- the results of the expert-client (“hidden guest”) survey are summarized and analysed.

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

## **Research and discussion**

The term “rural tourism” is often used when rural culture is the main component of the product offered. The main feature that helps to distinguish the offer of the rural tourism product is a desire to provide the traveller with a personalized contact, opportunity to enjoy the rural physical environment and get to know people, and to allow participate in the daily activities of local people observing their traditions and lifestyle whenever possible (Naktsmītnes lauku un reģionālajā tūrismā).

Quality of rural tourism should be considered as a factor contributing to entrepreneurship and product and destination development. The quality of the tourist accommodation hence the quality of the customer's safety, convenience, catering, additional services, etc. is related to the implementation of the rules and regulations that are determined by the national and international standards. The potential risk factors in the premises of the building and its surroundings determine the customer's safety and guarantee the reliability of quality: a location of the premises, its space and convenience; technical condition and quality of buildings and premises; technical condition and quality of furniture and equipment; water supply and its quality; sanitary norms; technical equipment, etc. (Daugeliene, 2006).

The assessment of the “perceived quality” of rural tourism services depends on the selection of the correct factors (elements) affecting the customer’s satisfaction. The selection of these factors determines appropriate management decision making and rural business accommodation improvement processes in order to meet the needs of visitors as fully as possible. An important factor for successful development is support of the stakeholders/interested parties resulting in the quantitative demand for rural tourism accommodation. Both the definition of a rural tourism accommodation establishment, an understanding of quality of the modern rural tourism accommodation services, and tourism sustainability approaches emphasise the interests of stakeholders that are the basis of all activities in the tourism enterprise. Thus, the authors conclude that organization of quality management for rural tourism accommodation establishments has a great influence on its sustainable development (Figure 1).

Based on Figure 1, it is possible to conclude that, on the one hand, satisfaction with rural tourism accommodation services is influenced by supply, but on the other hand – by demand, that is based on the customer’s character, perception, experience, values, and reasons of choosing a particular service.

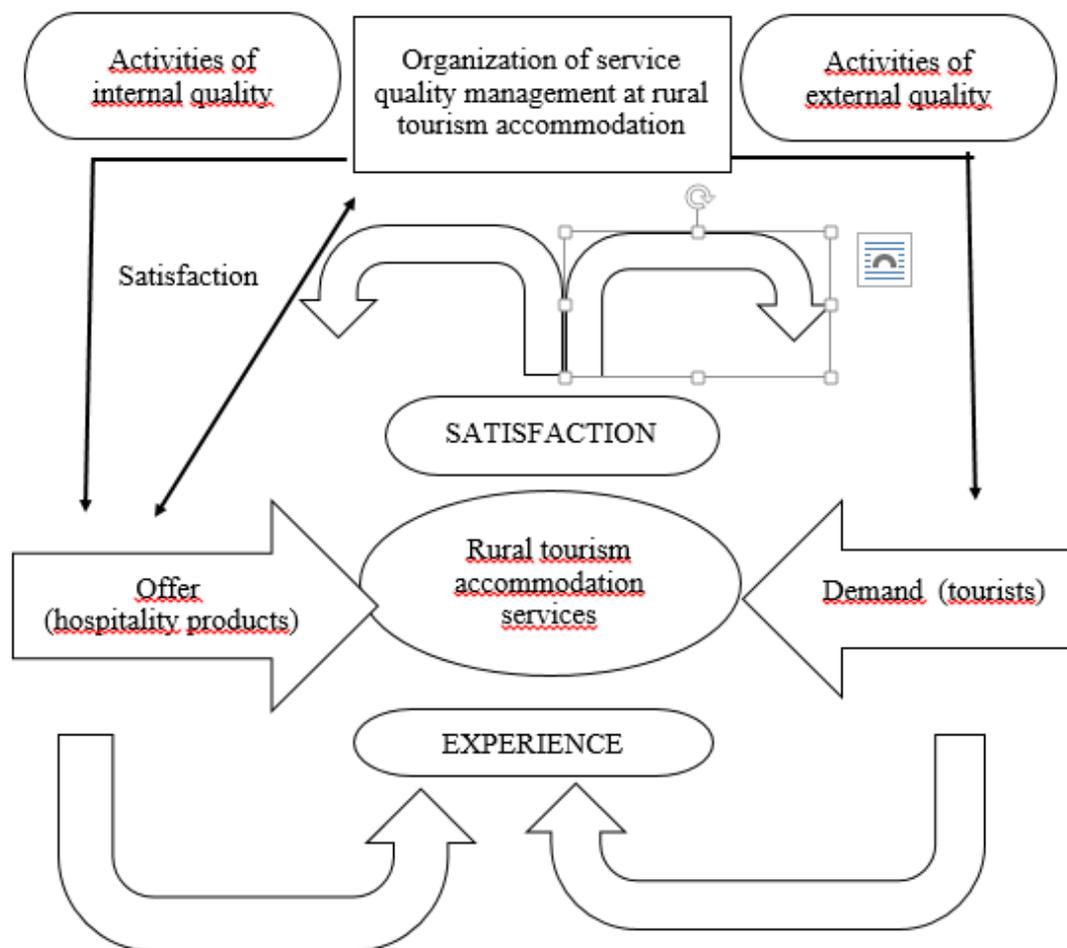


Figure 1. **Activities in the organization of quality management and their impact on the long-term development of tourism establishments** (Steina, 2012)

Noriaki Kano (Kano, 1996) is one of the scientists who has researched the “perceived quality” and distinguished 3 categories of factors that influence the way the customer perceives an offered service. He specifies that particular elements of a service may cause positive and negative reaction of the customer. The customer’s satisfaction (i.e. a conscious consumer’s value) increases with the improvement of a particular quantitative or qualitative factor.

*Must-be (critical) service factors* – are the main factors that influence the customer and the essence of the offered service directly. *Unexpected (attraction) factors* may cause positive reaction if the customer’s expectations of rural tourism accommodation services are exceeded. *Neutral or indifferent categories* (factors that influence the consumer’s satisfaction) factors, which do not influence the customer reaction. „*Reverse*” categories (factors influencing the consumer’s satisfaction) stand for the existence or non-existence of a particular service quality which may equally cause satisfaction to part of the customers, as well as

indifference or even dissatisfaction among other guests (Dembovska, Litavniece, & Silicka, 2017).

Using the factors named by N. Kano, it is possible to determine an action's influence on the service consumer's value in rural tourism accommodation services; to find out immediately which *must-be* qualities have to be included in the service; which qualities may serve as a "zing", how to attract the customer to innovation; which factors are precisely measured, analysing the expenses to achieve it and the increase in the quantity of buyers (quantitative values). The same way it is possible to define that some of the service qualities are insignificant, therefore, the resources for their creation are spent in vain.

In the process of the research of the factors influencing customer satisfaction, the authors rested upon the following sources: the Rural Tourism Accommodation Quality Evaluation System created by the association *Lauku ceļotājs*, the Ishikawa's cause-and-effect diagram, the N. Kano's model, which allows making the logical analysis of the influencing factors, though do not provide the numeric equivalent of the significance value of these factors (Dembovska, Litavniece, & Silicka, 2017; Kalēja, 2014).

Within the research, an expert-customer ("hidden guest") questionnaire was developed, and several rural tourism accommodation places were surveyed. The examination of the objects was carried out in the time from June 2017 to September; it was done by two experts, the lecturers of the Faculty of Economics and Management of Rezekne Academy of Technologies (RTA). In the assessment and questionnaire of the quality of services provided by the rural tourism accommodation establishments, 7 factors were included that were divided into 45 sub-factors, for example, an evaluation of the driveway and directional signs to the rural tourism accommodation establishment, buildings and rooms (including furniture), equipment and quality, guest rooms (living-rooms, bathrooms), water supply in the rural tourism accommodation, customer service, catering, and quality, customer information accessibility establishment, customer safety. The assessment data provided by the experts was processed using SPSS.

Overall, the experts examined 61 accommodation places in Rezekne municipality, resting upon the data provided by the TIC of Rezekne municipality. As the result of the research, it was concluded that the classification that is used in the specialised tourism web pages and the positioning of the accommodation places by the accommodation places owners do not correspond considering the services provided. The experts offer their own classification in Table 1.

**Table 1 The examined rural tourism accommodation establishments and their classification in the evaluation of the experts (made by the authors)**

<b>Type of accommodation</b>	<b>Characteristics of accommodation by type offered by the experts</b>	<b>Accommodation establishments satisfying the characteristics in the experts' comprehension</b>
Guest houses	Recreation rural place in the village or the suburbs, which is meant for a large number of visitors. There are no less than 3 rooms for overnight stay, sauna, halls for celebrations or workshops rooms; various entertainment opportunities are offered.	Water tourism development centre Bāka, Ezerkrasti, Vītoļi, Rāznas līcis (Pīlādzis), Rāznas stāvkrasti (big house), Zaļā sala (old building), Azarkrosti, Balda's watermills, Priedītes, Zīdu kolns, Žubītes, Latgale region Rehabilitation centre „Razna”, Birzes, Pērtņieki/ Zaļā sēta
Holiday cottages	Separate house for guests, often near bodies of water, a holiday cottage usually consists of bedrooms, living-rooms and facilities, although some exceptions may occur, when there is no living rooms or facilities are situated outdoors; prices are indicated for a day per person or the whole house rent per day; bedding, tableware and kitchen equipment is included in the price, guests are responsible for keeping the house in order while staying in.	Osmany (2 buildings), Zaļā sala (new building), Rūmes, Spārītes, Rāznas līcis, Meirānu krasts (3 buildings), Zvejnieki (4 buildings), Veselības Sala (2 buildings), Azarkrosti, Ezera sonāte, Jāņi, Salāji, Skaistā Rāzna, Vilnīši V, Zeizes, Kazupes, Selena, Burvīgā Rāzna, Silvija, Peldošā māja, Rāznas stāvkrasti (2 buildings), Adamova special boarding school (separate apartment)
Baths with fishing facilities	Separate building for baths, where guests are offered an additional overnight accommodation	Vēžusala, Austrumi, Dana, Dīķi (3 buildings), Kaktiņi, Kalēji, Priedītes, Vīteri, Selena, Čiekuri, Strautiņu mājas, Liepas, Kļaviņas
Camping	Arranged and improved territory for placement of tents, mobile homes, trailers, and other lightweight construction objects, and is meant for accommodation of visitors. (Vispārīgie teritorijas plānošanas...)	Camping house “Pērtņieki”
Hostel	Private house where the owners have arranged separate rooms for visitors. Comfort level is average; breakfast is served or possibilities for cooking can be provided as additional service.	Albatross, Staroščiķi Lejaskalns

Tent pitches	Arranged outdoors territory for tourists accommodation in the tents; WC and water supply is provided	Līdaciņas, Priedītes, leather design workshop “Apkalnmājas”, Dzeneiši, Ezermalas, Kauliņi, horse ranch “Untumi”, Silvija
Fishermen's house	Accommodation is located near the body of water and offers a low comfort level overnight accommodation (on ground, in sleeping bags) under low/ cold temperature, it is mainly meant for fishermen, hikers, cycle tourists, adventurers, and exotic experience searchers, who enjoy wild nature activities regularly.	Kalēji
Recreation and sport camp	Arranged territory for various sport activities – football, volleyball, basketball, and other; necessary sport equipment are provided; accommodation offer includes separate rooms, facilities (shower rooms, WC), rooms or sheds for having food.	Jaunais Dinamietis
Hotel in the rural territory	Recreation place in the rural area, village or city with separate rooms for visitors, with or without breakfast.	Zaļā sala (new building)

Quality certificates (*Kulinārais mantojums*, *Latviskais mantojums*, Quality certificate of *Lauku Ceļotājs*, *Zaļā atslēga* certificate, etc.) are publicly visible only in 15 rural tourism accommodation places.

The customer’s satisfaction factor “Driveway and directional signs to the rural tourism accommodation establishment” is a factor of the *must-be* category, as it builds the distribution of communication and information in the environment, and is significant for the accommodation marketing. The biggest problems in the rural tourism accommodation establishments are with directional signs near houses – 47.5 % of accommodation establishments just lack them, or signs are with damages, or their titles do not match the information available on the tourism web portals (8.2 %). Relatively many rural tourism accommodation places (44.3 %) lack directions from the highways, which cause troubles to visitors to find a required rural tourism accommodation place. Inaccurate GPS coordinates (20.6 %) make the situation even worse.

The customer satisfaction factor “Environment” belongs to *must-be* and *reverse* category and builds the basic and additional service processes of the rural tourism accommodation establishment. The majority of the Rezekne municipality

rural tourism accommodation establishments respect this factor (a well-kept territory, mown lawns, the territory is not littered, a car can be parked near the accommodation place).

The assessment of the customer satisfaction factor “Quality of buildings and rooms” shows that in 63.63 % cases the experts give a positive evaluation to the sub-factor “Buildings and their parts are in functional order”, but in 36.37 % cases, the buildings and their parts just partially are or are not in functional order (for example, peeling paint on the front and window frames of the building, the staircase is not in functional order, the customer is not informed about the ongoing maintenance therefore it is not possible to stay in). The sub-factors “Rooms are clean – there is no dust and dirt on the furniture”, “Windows are clean”, “Rooms are not littered, there is no rubbish inside”, “Rooms are ventilated, there is no smell in them” match the *must-be* factor category and is important and should be valued in the guest service circle. The results of the examination show that the biggest threat comes from the sub-factor “Windows are clean”, as it was found that 74.54 % of hosts do not observe or just partly observe this factor. In 63.36 % of the cases, the sub-factor “Rooms are clean – there is no dust and dirt on the furniture” is in absolute order. However, the authors believe that the comparatively high unsatisfactory value of this factor is a serious threat to the impression of the general rural tourism accommodation services quality in the examined territory.

The sub-factors “Shared rooms’ correspondence to the quantity of guests, accommodation size, style, number and location of rooms”, “One can easily move around the furniture in the room”, “Rooms are warm”, “Facilities correspond to the number of guests”, “Accessibility and facilities for people with movement disorders”, “There is a separate smoking area”, “Internet access” depend on the subjective perception of guests and comprise *must-be*, qualitative, and reverse categories.

As the majority of the rural tourism accommodation places in Rezekne municipality are positioned as places for event/ parties’ arrangements, it means that the sub-factor “Correspondence of shared space to the quantity of guests, accommodation size, style, number and location of rooms” apply. However, it does not provide the necessary level of comfort for individual tourists (1 or 2 persons) (for example, a double room has 3 beds; there are bedrooms only for 5 and 10 persons). Thereby, the sub-factor “One can easily move around the furniture in the room” is hard to accomplish. In 90.9 % of the cases, the experts evaluated the sub-factor “Rooms are warm” in a confirmative way, however, they admit the result might be different during the heating season (cold weather). The sub-factor “Facilities correspond to the number of guests” in 82.0 % of the cases is appropriate, however, it should be emphasised that the level of morally outdated facilities is comparatively high. The sub-factor “Accessibility and facilities for

people with movement disorders” in 73.21 % of the cases is not observed or is observed just partly (12.5 %). As per the experts’, it is connected with the time when the rural tourism accommodation places were built, because the new objects are adjusted for people with movement disorders. The sub-factor “Internet access” mostly is not met or is met just partly. The experts believe Wi-Fi access is essential for a modern tourist.

The customer satisfaction factor “Guest rooms (living-rooms, bathrooms) evaluation” is *must-be*, qualitative, and reverse and determines the tourist repeated choice of the object. The sub-factor “Quality of beds: steady, does not creak, bend or crumple, the base, foot side and head side are without damages; the mattress is clean, without spots or smells, it is smooth and comfortable for sleeping”. This criteria is appropriate only in 23 % of Rezekne municipality rural tourism accommodation establishments (it should be taken into account that the experts were not able to test this sub-factor in every object). In general, the experts conclude, the quality of beds provides the low level of comfort and visual evaluation. The sub-factors “The size of a single bed corresponds to the 90/190 standard” and “The size of a double bed corresponds to the 150/190 standard” was mostly evaluated by the experts as average since the width of a single bed is within the range of 80 – 85 cm. Folding couches are offered in all bathhouses with accommodation services, it is difficult to value them as double beds, since two beds are joined together and the joint place feels inconvenient. The sub-factors “Bedside table or shelf for every guest” and “One chair for every guest” was mostly evaluated by the experts as average, as only one shelf and one chair was provided in a double room. The sub-factor “Place to hang on or put in clothes for every guest” mostly is observed, as there are closets in the rooms and hangers are placed on the walls. The sub-factors “Floor area with the shower is at least 3 m<sup>2</sup>” and “Shower curtain or shower cabin, non-sliding surface in the shower cabin or a rug, shelf or locker, door with a lock, toilet paper, wall socket” and “There is a sink in the bathroom, and there is a mirror above it” were evaluated as average in many objects, as the access to the shower was difficult; there was no wall socket, mirror, shelves in bathroom, and the floor area was less than 3 m<sup>2</sup> as well. The sub-factor “Beddings are not worn out” mostly is evaluated as average, as the beddings are clean, not torn, but morally out of date (washed-out colours, different sets combined together, etc.).

The factor “Water supply” is satisfied in more than 70 % of the cases, as there is access to hot water, without breaks in supply and with no smell. The experts were not able to test water supply in 3.3 % of the cases; as the result, “no information” response was provided.

The experts value the factor “Customer service, communication” as satisfied, and stress that Rezekne municipality rural tourism accommodation owners or staff welcome customers, provide them with necessary information (being asked or on

their own). The experts evaluate customer service as one of basic factors of customer satisfaction. The experts see the issue in communication that was visible in particular rural tourism accommodation places, for example, the lack of language knowledge or etiquette knowledge, forgetting that the customer has booked a room, coming to the arranged meeting in work clothes, unwillingness to show the rooms to a particular guest, offering to see them in the Internet instead.

An assessment of the customer's satisfaction factor "Catering" reflects a significant problem in the tourism product offer in general. The sub-factor "Offer includes breakfast" demonstrates, in according to the experts' opinion, an essential problem – availability of catering services in Rezekne district. That suggests that owners of rural tourism accommodation establishments are not ready to offer such a service. The problem is caused by the fact that 32.8 % of the guests also have no opportunity to cook their breakfast themselves. In 65.6 % of the cases, the sub-factor "Possibility to cook" is offered. However, the sub-factors "Available equipment (pans, kettles, fridge, etc.)", "Number of dishes corresponds to number of customers (glasses, plates, forks, etc.)" and "Similarity of tableware is observed" are just partially met, since the tableware are worn out, are of different style and creates a chaotic impression.

The factor "Additional Services" affecting customers' satisfaction is important as it can contribute to a tourist's choice. Mostly rural tourism accommodation establishments that are located near water bodies offer fishing opportunities, boat rides, and sports activities. However, all the auxiliary services offered are alike, which testifies about lack of variety of active tourism products in Rezekne municipality. 73.8 % of the observed accommodation establishments have beaches, but they are not always available to all tourists because the stairs do not have rails, wooden planks are unstable, dirty boats and catamarans are offered. Bathhouse services are offered at guesthouses and holiday houses at additional cost.

The sub-factors of the category "Information" affecting the customer's satisfaction as "Tourism information about surroundings, services and leisure facilities (booklets, maps)" and "Printed materials about rural tourism accommodation establishment, including materials in the room (menu, rules, information on auxiliary services)" are not observed respectively in 57.4 % and 73.8 % of the cases. Information on the services is provided verbally, there is a lack of information at the site about services and prices offered.

The "Safety" factor is not met (27.9 %) or met partially (13.1 %), for example, there are no instructions about fireplace and stove heating, bathhouse usage rules, and, in some cases, the experts did not have access to view all the premises and available information.

## **Conclusions**

The assessment of the quality of a rural tourism accommodation shall be based on the following quality indicators:

1. Demand for the rural tourism accommodation (for example, number of visitors, number of overnight stays, length of stay, etc.).
2. Perception of the rural tourism accommodation type, comfort level, associations of comfort level, satisfaction, etc.

These indicators can be used to analyse value customers' perceived quality.

In result of the research, it was found that a large part of the rural tourism accommodation providers incorrectly indicate classification of the rural tourism accommodation establishments, for example, at the website [www.booking.com](http://www.booking.com) the accommodation is positioned as a guesthouse, but information at Rezekne municipality's website differs misleading the customer. The owners of rural accommodation services have to review type of accommodation indicated at all places the public information is provided (booking sites, website, the Rezekne municipality website, booklets, maps, etc.).

The existing information on the rural tourism accommodation establishments – type of accommodation, services offered, prices, GPS coordinates – varies in different sources of information (Rezekne Municipality website, homepages of rural tourism accommodation establishments, at the website [www.booking.com](http://www.booking.com)).

The locations of the tourist accommodation establishments in the territory of Rezekne municipality are unevenly distributed (concentrated mainly by the Razna Lake and the Lubana Lake, and Rezekne neighbourhoods).

The overall assessment of the “perceived quality” of the rural tourism accommodation services in Rezekne municipality affects the customer's satisfaction as depreciation of buildings, furniture, inventory is visible. However, this conclusion does not relate to particular rural tourism accommodation establishments, but is connected to the offer in general. These are “tangible” (according to N. Kano – technical) factors, but “not-tangible” (according to N. Kano – human) factors in Rezekne municipality rural tourism housings in general can be characterized by the keywords “responsiveness” and “hospitality”.

In rural tourism places, the factor of cleanliness, which is “tangible” (according to N. Kano – technical) factor, is essential, though, it is an integral part of the “non-tangible” (according to N. Kano – human) factor. Thus, for example, dirty windows, spider nets outside the house in a rural tourism accommodation create a general negative impression of the offer.

The owners of rural tourism accommodation establishments should assess both current and the future demand, define precisely the potential market segment and build an offer accordingly. For example, if the main offer of a tourist

accommodation is sauna services with accommodation possibility, it should be positioned in that way. In addition, it is necessary to find the special INDIVIDUAL value of the accommodation house and link it with the customer's perception.

In Rezekne municipality, there are valuable and diverse natural and cultural resources that are not used to full extent, though they have potential to be used for development of a specialized, recreational, cognitive tourism product.

Future development of rural tourism accommodation establishments will be determined by several factors influencing development:

- Distance to *the magnetic object*. In accordance with the researchers, there are 3 magnetic objects in Rezekne municipality – the Luznava Manor, the Razna Lake, and the Lubana Lake. As well, there is a possibility to develop rural tourism lodgings of different quality in the immediate vicinity of Rezekne city, taking into account *the magnetic objects* in Rezekne and the offer of the existing accommodation services in Rezekne (Dembovska, Litavniece, & Silicka, 2017).
- Distance to the main public roads.
- The overall image of Rezekne municipality. The image is composed of the hospitality enterprises (including quality of service, existence and quality of catering services, auxiliary services and their quality and diversity, etc.) and infrastructure (getting to the rural tourism accommodation establishment from the main roads, accuracy of GPS coordinates, availability of the Internet, etc.)
- Evaluation of hospitality enterprises. According to the project researchers, the quality assessment of the rural tourism accommodation establishment should be a continuous process, the basic principles of which should be in line with the DEMING Cycle (PLAN – DO – CHECK – ACT), thus, at any moment the Tourist Information Centre can be sure of the quality of rural tourism accommodation services in the area.
- Ability to create new and innovative products essentially based on the experience economy.



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## СТОИМОСТЬ: ЭМПИРИЯ И ТЕОРИЯ<sup>1</sup>

### *Value: empirics and theory*

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**Abstract.** Disclosure of the essence of the category "value" is not a prerequisite for its use: the introduction of this concept is correct and simple a priori. At the same time, it is obviously desirable. Objectives: 1) to show the connection between the concept of "value" and the empirical level; 2) to justify the interpretation of value from the perspective of information theory. Results. Manifestations of the "value" category in economic practice: the notions of "fair price", "reasonable profit", statistics of input-output balances, the world practice of planning of long-term energy production projects, etc. An adequate interpretation of value is the information concept: at the basis of value as the result of labor, and the rarity of a thing is information. Value is an information measure of the object's worth. The complexity of operationalization does not ensue the unscientific (metaphysical) character of the concept of "value" as such. From the recognition of value as an objective basis for the observable price phenomenon, there appear very specific consequences: 1) feedback through the market must have an objective basis as a starting measure, that is, money must have a standard; 2) in some cases direct pricing (and / or their directive definition) is justified and appropriate.

**Keywords:** empirics, information, theory, value.

### **Введение**

### ***Introduction***

Ранее (Егоров, 2005, 2008, 2013) мы обосновали тезис: первооснова проблем неоклассической экономической теории (очевидно имеющих

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место) – отсутствие в ее рамках объективной меры, то есть отрицание категории «стоимость».

Кроме того, мы показали, что никаких объективных научных оснований для элиминации стоимости нет. В частности, раскрытие сущности стоимости не является обязательным условием для ее использования: корректно и просто введение этого понятия априорно, даже если мы пока не представляем ее физической (психологической, информационной...) природы.

Такая ситуация в науке отнюдь не редкость: так, в физике до сих пор нет согласия по вопросу о сущности гравитации, но разве кто-то отвергает на этом основании понятие всемирного тяготения?

Еще более сильный пример – понятие «энтропия», введенное в термодинамику априорно как некое отношение величин. При этом несколько десятилетий было совершенно непонятно, что есть носитель энтропии и что это такое; однако эти обстоятельства не помешали построению на этой понятийной основе теории тепловых машин. Истолкование энтропии с позиций молекулярно-кинетической теории было предложено значительно позже.

В то же время выявление сущности стоимости (и установление связи ее с эмпирическим уровнем) очевидно желательно.

Цель настоящей работы – экспликация сущности категории «стоимость», и ее эмпирическая интерпретация. Методы исследования: интроспекция и теоретическое конструирование.

### **Методы исследования** *Methodology of the research*

Стоимость – не «зарисовка с натуры», а идеализация; как понятие идеальное стоимость непосредственному наблюдению *не подлежит*. Однако, используя это понятие, можно построить теорию, которая поможет понять какие-то важные свойства реальности, и дать более богатое описание реальных процессов, не «улаживаемое» в рамках иных идеализаций.

В соответствии со спецификой объекта, методы нашего исследования: интроспекция и теоретическое конструирование.

Любая теория – *идеальный объект*, а не фотография реальности. Так, реальные треугольники и квадраты никогда точно не соответствуют идеальным геометрическим фигурам, что, однако, не мешает применять геометрию на практике (Егоров, 2006).

Для того чтобы теория могла существовать, достаточно непротиворечивости ее принципов, но адекватно описывает реальность теория, если:

- 1) принципы теории отражают значимые свойства реальности: аксиомы геометрии интуитивно представляются истинными, и мы принимаем истинность выведенных из них теорем;
  - 2) выводы из принципов теории соответствуют фактам.
- Желательно, чтобы теория соответствовала обоим критериям.

### **Эмпирический уровень проблемы стоимости** *The empirical level of the value problem*

Если мы имеем гарантированно точные принципы, то дедуцированная из них теория также будет гарантированно истинной. Проблема в том, как получить такую гарантию на практике, ибо принципы любой теории есть результат интуитивного озарения, интроспекции и тому подобных субъективных процедур.

Вместе с тем, «решение» этой проблемы позитивистами и конвенционалистами (считающими, что принципы могут быть какими угодно, вплоть до очевидного противоречия онтологии реальности, лишь бы дедуцируемая из них теория объясняла факты) – это такой же перегиб (в эмпиризм), как и абсолютизация рационализма в стиле Гегеля: «Если факты противоречат моей теории – тем хуже для фактов...»

(1) Есть ли в экономической реальности какие-то тенденции и черты, изоморфные стоимостному подходу?

По нашему мнению, они не просто есть, они настолько очевидны, что, начиная изучать неоклассическую микро-теорию, как правило, приходится делать волевое усилие, подавляя сопротивление априорных установок здравого смысла.

Каждому из собственного опыта известно (и фиксируется экономистами институциональной школы, социологами и др.) понятие «справедливой цены»: но если бы у человека не было априорной интуиции того, что цена (явление субъективное) есть проявление какого-то объективного свойства вещей (стоимости), то откуда взяться суждению о степени справедливости цен? Ведь с «рыночной» точки зрения любая цена «справедлива».

На что опирается эта априорная интуиция? Это можно установить интроспекцией при любой покупке: помимо собственно полезности вещи, на интуицию о разумности цены влияют представления о степени трудоемкости продукта и его редкости (влияют и соображения престижности и т. п., но это тема манипуляции сознанием потребителя).

Конечно, такого рода оценки субъективны, из чего, однако, не следует субъективности предмета оценки: так, до изобретения термометров оценка «тепло-холодно» тоже была субъективна, однако из этого не следует, что понятие температуры (меры нагрева) было тогда ненаучным (просто не было еще способа ее измерить).

Существуют известные контрпримеры, также основанные на интроспекции. Однако останутся ли они таковыми, если подвергнуть их более детальному анализу?

Обратимся к общеизвестной модели «торговли» бриллиантами за воду в пустыне (якобы «доказывающей», что никакой объективной ценности у бриллианта нет) и отметим:

а) эта «торговля» может служить контрпримером по отношению к трудовой теории стоимости, а не к идее стоимости (как объективной меры ценности) вообще – в рамках информационной концепции (см. о ней ниже) стоимость воды в пустыне должна быть высока;

б) еще важнее, что этот пример не удовлетворяет принципу независимости агентов (одному из важнейших в неоклассической модели человека): умирающие от жажды люди находятся в огромной зависимости от владельцев воды (отказ от обмена означает смерть), и если этот пример демонстрирует сущность какого-то явления, то это явление именуется «эксплуатацией». Такая «торговля» возможна только при силовом (внеэкономическом) доминировании обладателей воды<sup>2</sup>.

«Стоимостный здравый смысл» не ограничивается потребительским выбором: так, эксперты по ценным бумагам постоянно рассуждают о недооцененных и переоцененных активах – недооцененных/переоцененных относительно чего? Неявно подразумевается, что есть некая «настоящая» цена. Эта настоящая цена есть стоимость.

Впрочем, даже в законодательстве сугубо «рыночных» стран такие оценки зачастую прописываются явно. Рассмотрим практику регулирования естественных монополий в США:

В общем случае по антимонопольному законодательству предприятие-монополист «для создания конкурентной среды» принудительно разделяется (в полном соответствии с *mainstream*). Однако в случае естественной монополии (например, в электроэнергетике прокладывание дублирующих линий электропередач «для конкуренции» явно абсурдно) применяется иная процедура: рассчитываются издержки

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<sup>2</sup> Можно задать еще более общий вопрос: а при чем здесь экономика вообще? Разве обсуждаемый пример эксплицирует сущность экономических отношений? Ведь экономика (в реальной жизни, а не в неоклассических учебниках) – это способы координации больших групп людей в массовом производстве с разделением труда, а не прикладная психология экстремальных ситуаций.

предприятия, к ним добавляется «разумная прибыль», и на основе этого определяются тарифы для потребителей (Хокен и др., 2002). Очевидно, что это подход классической школы (аналогичный практике планирования в СССР): менеджеры США, когда здравый смысл согласуется с классическим подходом, следуют ему, а не «рыночным принципам».

(2) Оценка адекватности принципов – процедура неизбежно субъективная. Существуют, однако, вполне количественные (эмпирические) основания в пользу возврата к категории «стоимость»: так, на основе модели МОБ на представительном объеме статистики показано, что пропорции обмена между отраслями действительно соответствуют стоимостной гипотезе (Вальтух, 2001: с. 16–37).

Об этом свидетельствует мировая практика планирования долгосрочных проектов добычи энергоносителей, так как курсы валют и цены на углеводороды подвержены спекулятивным колебаниям, такое планирование производится не столько в финансовых показателях, сколько на основе оценок  $EROEI^3$ , то есть на базе объективной количественной оценки затрат/отдачи от проекта. Следует отметить, что в энергетические единицы пересчитываются затраты всех видов ресурсов, фактически при этом вводится энергетический денежный эталон (Егоров, 2012).

В более широком контексте отметим: сравнение, например, значений ВВП страны в денежном выражении на протяжении 10 лет в условиях даже умеренной инфляции не дает почти никакой значимой информации; в таких случаях даже убежденные сторонники *mainstream* обращаются к трендам показателей в натуральной форме (объемам выработки электроэнергии, потребления белковых продуктов и количества автомобилей на душу населения и т. д.), то есть следуют логике подхода классического.

Таким образом, ситуация с отрицанием объективности стоимости в современной экономической науке аналогична формально теократическому государству, жители которого сплошь атеисты: экономисты изучают в университетах микротеорию по неоклассическому катехизису Самюэльсона (1992), но при принятии реальных решений следуют вполне классическому здравому смыслу; экономические журналы ежегодно публикуют тысячи и тысячи статей в стиле *mainstream*, эксперты отмечают красоту и элегантность их логических конструкций – при этом

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<sup>3</sup> *Energy Return On Energy Investment* – «энергоотдача от энергозатрат» – отношение между затратами энергии на добычу энергоносителя и энергией, полученной в результате его использования.

всем заранее известно, что эта логическая красота не имеет никакого отношения к реальности<sup>4</sup>, и т. д.

### **Теоретический уровень проблемы стоимости** *The theoretical level of the value problem*

Теперь попробуем построить теоретическую модель стоимости (найти ее субстрат). Начнем с нескольких **определений**.

**Полезность** – способность удовлетворять потребность.

Объекты, обладающие той или иной полезностью, могут быть **редкими**, – то есть присутствовать в Универсуме в количестве, недостаточном для удовлетворения потребностей всех желающих.

**Ценность** – редкая полезность.

**Труд** – овеществление идеальной модели (овеществление мышления), создающее ценность.

Человек (и любой иной живой объект) есть система, поглощающая из окружающей среды порядок (информацию<sup>5</sup>): химический состав потребляемых человеком веществ на входе и на выходе один и тот же, разница в изменении структуры потребленных веществ. В результате потребления структура продукта частично или полностью разрушается, следовательно, содержащаяся в нем информация уменьшается. Это касается как продуктов питания, так и предметов длительного использования, основных фондов предприятий, то есть любой формы потребления.

Можно искать ценные объекты в окружающей среде (присваивающее хозяйство). Однако количество ценных продуктов в окружающей среде ограничено ее способностью к естественному воспроизводству. Для увеличения полезных продуктов человек преобразует среду, создавая объекты с желательной для человека структурой (удовлетворяющей какую-либо потребность)<sup>6</sup>, то есть *трудится*: акт труда состоит в соединении в единую систему различных типов ресурсов (рабочей силы, природных ресурсов, артефактов, информации) с целью *овеществления какой-либо идеальной модели*, следовательно, труд есть процесс увеличения информации.

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<sup>4</sup> В посвященном кризису 2008 года эссе с примечательным названием: «Как экономисты могли так ошибиться?» – нобелевский лауреат Пол Кругман отвечает на вынесенный в заголовок вопрос: «Они приняли красоту за истину».

<sup>5</sup> Об информационном подходе в экономике см., напр.: (Вальтух, 2001; Егоров, 2007).

<sup>6</sup> Объекты могут быть как материальными, так и идеальными: разработка научной теории и написание симфонии – это тоже создание информационных объектов, удовлетворяющих чьи-то потребности.

Результат труда превышает затраченные на него ресурсы и издержки за счет замены случайных действий целенаправленными для этого идеальная/информационная модель. Без информационной модели даже при нулевых трансактных издержках произойдет просто перенос ценности с одного типа ресурсов на другие<sup>7</sup>.

**Стоимость** – мера ценности объекта: некое общее свойство, позволяющее проводить сравнение (и на этой основе – обмен) качественно различных вещей.

Важно отметить: данное определение вводится *априори*, и ничего пока не говорит о природе (носителе) стоимости.

Введение этой категории также не означает, что она «на самом деле» есть: это *теоретический конструкт*. Как этот конструкт может быть интерпретирован?

По нашему мнению, адекватной интерпретацией стоимости является *информационная* концепция. Исторически ей предшествовали концепции трудовая и энергетическая:

**Трудовая концепция стоимости:** в ее рамках мерой стоимости служит количество затраченного труда, измеряемое, как правило, в единицах времени (Marx, 1978). Очевидно, при такой трактовке стоимость признается только за артефактами.

Трудовая теория стоимости оказалась недостаточно универсальной – стоимостью могут обладать и вещи, результатами труда не являющиеся (природные ресурсы). Труд создает стоимость, но он не *единственный* источник стоимости.

**Энергетическая концепция стоимости:** С.А.Подолинский (Podolinski, 1880) и другие «энергетисты» определяют труд через использование энергии: труд – такая затрата мускульной силы человека или используемых им животных и машин, результатом которой является увеличение энергии Солнца, аккумулированной на Земле.

Действительно, во многих актах труда человек совершает работу, превышающую его мускульные возможности, за счет использования внешних потоков энергии (в конечном счете сводящихся к энергии Солнца). Однако есть много видов труда, в которых не используется внешняя энергия (например сборка микросхемы). Труд в понимании «энергетистов» есть частный случай труда в нашем понимании (труд как воплощение идеальных моделей), то есть не охватывает всего объема понятия «труд». Мышление, результатом которого будут новые идеальные модели (в результате чего в будущем кто-то сможет их применить для

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<sup>7</sup> В этом заключается «особость» товара «рабочая сила» по Марксу: мышление выводит труд за пределы ограничений, свойственных термодинамическим системам (в которых, действительно, простор информации невозможен, см. (Егоров, 2005)).

преобразования среды), является трудом, а просто физические (энергетические) усилия – это еще не труд: хаотическое воздействие на окружающую среду неэффективно с точки зрения создания полезных объектов.

Энергетическая теория стоимости не подтверждается и конкретными расчетами межотраслевых балансов (Вальтух, 2001: с. 754–755).

Информационная концепция стоимости: из всех предметов универсума выделим множество предметов ценных (которые только и являются – по определению – носителями стоимости), в котором выделим два подмножества: артефактов и природных объектов. Попробуем найти то общее, что присуще как результатам труда, так и природным объектам (то есть точки соприкосновения трудовой теории стоимости и неоклассической концепции, связывающей цену в первую очередь с редкостью блага):

- 1) труд как овеществление мышления – это увеличение количества информации в продуктах труда, то есть овеществление информации;
- 2) природные объекты тоже могут быть квантифицированы на основе информации как в аспекте их сложности (в этом случае мы вычисляем информацию, разделив интересующий нас объект на элементы), так и в аспекте редкости (в этом случае объект рассматривается как элемент более общей системы, в которой вычисляется количество информации, соответствующее его относительной редкости);
- 3) из (1–2) следует: *в основе стоимости как результата труда, так и редкости вещи – информация*. Это позволяет уточнить определение: **Стоимость** – информационная мера ценности объекта.

Логически необходимая предпосылка информационной теории стоимости – допущение возможности увеличения информации в Универсуме. Этот вопрос подробно рассмотрен нами ранее (Егоров, 2005, 2007).

При обмене и труде образуются новые комбинации ресурсов (новые объекты) с новым набором информационных характеристик. При этом сумма значений информационных мер может увеличиваться, что приводит к появлению распределяемого излишка (это является побудительной причиной для обмена и для труда).

Ввести квантификацию для количества информации, определяющей стоимость объекта (или степень деградации структуры потребленных объектов), достаточно просто в любом отдельном случае (задав

конкретную степень детальности деления системы на элементы при использовании известной формулы Шеннона (Shannon, 1948)) и весьма сложно в случае общем. Главная сложность заключается в том, что стоимость имеется *только* у объектов, которые обладают, помимо структуры и редкости, *полезностью*. Если структуру и редкость можно квантифицировать на основе той или иной модификации формулы Шеннона, то полезность есть также функция мира идеального: даже если не принимать во внимание флуктуации, связанные с разбросом индивидуальных вкусов и предпочтений, и рассматривать некую среднюю полезность, то и она – функция не только свойств объекта, но и достигнутого обществом уровня знаний. Именно поэтому она исторична – имеет смысл утверждать о полезности какого-либо фактора труда только относительно *конкретного уровня науки и технологии*.

Так, уран в XIX веке почти не имел применения, а в XX веке стал стратегическим ресурсом, обладающим огромной стоимостью. Другой радиоактивный элемент – торий – имеет сопоставимую с ураном распространенность в земной коре, однако в современных промышленных атомных реакторах он не используется, и его стоимость существенно ниже. Однако если в будущем будут разработаны ториевые реакторы, стоимость его запасов станет сопоставимой с запасами урана.

Таким образом, информационная стоимость факторов и результатов труда может оцениваться *только для заданного множества идеальных моделей* («мира – 2» Поппера (Popper, 1972), то есть науки и технологии).

Что касается оценки информационной стоимости идеальных моделей (технологий, торговых схем и т. д.), то здесь необходимо отметить следующее: ментальный объект может быть выражен в знаках и представлять тем самым объект информационный.

Однако нельзя поставить в соответствие количество информации в такой записи с ее полезностью: описание изобретения может быть кратким, но принести огромный экономический эффект.

Поэтому стоимостная оценка идеальных моделей – это оценка выгод от их наличия по отношению к исходному состоянию.

Субъективная квантификация стоимости в сознании – *цена*. Цена тем точнее соответствует стоимости, чем точнее знания продавца и покупателя о предметной области, в которой происходит квантификация стоимости, соответствуют реальности.

Вычисление информационного значения стоимости в общем случае – процедура не только сложная, но и излишняя: прагматически важные величины цен в большинстве случаев проще получить посредством обратной связи (через рынок).

## Выводы *Conclusions*

Может показаться, что из всего изложенного следует, что мы фактически приходим к позиции Хайека (рынок – единственно адекватный механизм получения экономической информации, и только он может определять цены: (Найек, 1988)). Это, однако, не так:

а) из сложности операционализации не следует ненаучность (метафизичность) понятия «стоимость» как такового.

Проиллюстрируем этот тезис аналогией с управлением автомобилем: величину разворота руля для прохождения поворота можно рассчитывать на основе законов механики. Это, однако, сложно и не нужно: проще найти эту величину на основе обратной связи (шофер видит, что машина развернулась на нужный угол, и перестает поворачивать руль). В то же время из того, что шоферы не пользуются формулами механики, разве можно делать вывод, что автомобиль законам механики не подчиняется?

б) так же как в математике, доказательство *существования* решения задачи часто является важным шагом вперед, так и принципиальная возможность вычисления информационной стоимости фальсифицирует рассуждения о якобы априорной несоизмеримости предпочтений;

в) из признания стоимости как объективной основы наблюдаемого феномена цены вытекают вполне операциональные следствия:

- 1) обратная связь через рынок должна иметь объективный базис как исходную меру, то есть деньги должны иметь эталон;
- 2) в некоторых случаях прямой расчет цен (и/или их директивное определение) оправдан и целесообразен.

## Summary

Disclosure of the «value» category is not a prerequisite for its use: the correct and simple introduction of this concept a priori. At the same time, it is obvious it will be an important step in the development of the approach.

Manifestations of the category «value» in the economic practice: the concept of «fair price», «reasonable profit», the statistics of input-output balances, the world practice of planning of long-term energy production projects, etc. The interpretation of the concept of value is information: the basis of the value of labor as a result, and the rarity of things is the information. Value is the Information measure of the Cost of the object.

The complexity of operationalization does not ensue the unscientific (metaphysical) character of the concept of «value» as such. The consequence from the recognition of value as an objective basis for the observable price phenomenon: feedback through the market must have an objective basis as a starting measure, money must have a standard.

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## TELPISKĀ PLĀNOŠANA UN PRAKSE LATVIJĀ

### *Spatial Planning and Practice in Latvia*

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**Abstract.** *The current system of territorial planning in Latvia has been formed after regaining its independence in 1991. The European Union has had a great impact on the development of the concept and practice of spatial planning throughout the entire Europe and in each of the Member States, including Latvia. The common planning activities and initiatives at the European level had influenced planning practice in all the Member States. The aim of the research is to describe the development of the spatial planning system, as well as the features of planning practice in Latvia in the context of spatial planning activities at the European Union level. During the research, the author describes the development of the spatial planning concept, the typology and system of spatial planning in the European Union. Additionally, the author characterises the development of the legal framework for and practice in the spatial planning system of Latvia, as well as identifies the features of the Latvian spatial planning system and practice in the context of spatial planning activities at the European Union level. Research methods – content analysis, deductive and inductive methods, theoretical analysis of scientific literature, EU and Latvian legislation analysis, comparative analysis, etc.*

**Keywords:** *development programme, regional development, spatial plan, spatial planning, strategy.*

### **Ievads**

#### ***Introduction***

Telpiskā plānošana pēdējās desmitgadēs Eiropas Savienībā (ES) ir kļuvusi par nozīmīgu jomu, kas raisījusi plašas diskusijas un sabiedriskajās politikās veicina jauninājumu ieviešanu. Hīleis (Healey, 1997) norāda, ka telpiskās plānošanas aktivitātes var būt dažādās formās un dažādos kontekstos, atkarībā no juridiskā un institucionālā konteksta vai plānošanas kultūras un tradīciju variācijām. Savukārt Aldens (2006) atzīmē, ka telpiskās plānošanas vienreizējās iespējas ir saistītas ar tās starpdisciplināro dabu, kas saista sociālo un ekonomisko jomu, kultūras un vides dimensijas reģionu attīstībā. Tajā pašā laikā tieši daudzveidīgās plānošanas sistēmas dažādās valstīs, atšķirīgi telpiskās plānošanas instrumenti un kultūra ir veicinājusi kopēju aktivitāšu ieviešanu Eiropā, lai veicinātu sadarbību attiecībā uz lēmumiem. Kopējās Eiropas līmeņa plānošanas aktivitātes un iniciatīvas ir atstājušas ietekmi uz plānošanas praksi visās ES dalībvalstīs, t.sk. arī Latvijā.

Rakstā autore ir raksturojusi telpiskās plānošanas koncepta attīstību Eiropas Savienības politiku kontekstā, izvērtējusi tiesiskās bāzes dinamiku telpiskās plānošanas jomā Latvijā, īpašu uzmanību veltot periodam laika posmam no 2010. gada līdz mūsdienām, kā arī raksturojusi tās vietu ES telpiskās plānošanas sistēmu tipoloģijā un plānošanas praksi.

Pētījuma mērķis – raksturot telpiskās plānošanas sistēmas attīstību un plānošanas prakses īpatnības Latvijā Eiropas Savienības līmeņa telpiskās plānošanas aktivitāšu attīstības kontekstā. Pētījuma metodes – kontentanalīze, indukcijas un dedukcijas metode, zinātniskās literatūras teorētiskā analīze, salīdzinošā analīze.

### **Telpiskās plānošanas koncepta attīstība Eiropas Savienībā** *Development of the concept of spatial planning in the European Union*

Telpiskās plānošanas jēdzieni ir cieši saistīti ar reģionālās attīstības teoriju, kuras galvenais uzdevums ir skaidrot reģionu ekonomiskās izaugsmes un konkurētspējas atšķirību cēloņus un likumsakarības. Kopumā pēckara periodā ir attīstīts iespaidīgs skaits empīrisku pētījumu par reģionālajām telpiskajām struktūrām un to telpisko mijiedarbību, kā arī ietekmi uz attīstību un konkurētspēju. Tiek uzskatīts, ka modernā telpiskās plānošanas vēsture Eiropā sākās dažus gadus pēc Otrā pasaules kara beigām, kad Valters Kristallers 1950. gadā publicē karti ar centrālajām vietām Eiropā. Lai gan karte nav pamatota ar empīriskiem pētījumiem, tā ir pirmā, kas analizē Eiropas telpisko dimensiju. (Ežmale, 2012)

Akadēmiskās diskusijas par telpisko plānošanu aktivizējās 1964. gadā, kad tika publicēts ziņojums par reģionālo plānošanu un Eiropas problēmām, ar mērķi ieviest reģionālo plānošanu kā līdzekli telpiskai attīstībai ES dalībvalstīs un Eiropā kopumā. Savukārt reģionālās/ telpiskās plānošanas jēdziens pirmo reizi tiek pieminēts Eiropas Padomes dokumentā „Eiropas reģionālās telpiskās plānošanas harta” (Torremolinos harta) 1983. gadā, definējot plānošanu kā sabiedrības ekonomisko, sociālo, kultūras un ekoloģisko politiku ģeogrāfisku attēlojumu. (Ežmale, 2009) Mūsdienās Eiropas telpiskās plānošana ir cieši saistīta ar ES un arī dalībvalstu reģionālās politikas jomu, kā arī nozaru politikām.

Telpiskā plānošana tie definēta kā process, lai vadītu teritorijas attīstības aktivitātes un koordinētu dažādu nozaru politiku telpisko ietekmi ar mērķi ietekmēt telpisko struktūru attīstību nākotnē. Telpiskās plānošanas jēdziens tiek apskatīts gan kā sistēma telpiskās attīstības, fiziskās zemes izmantošanas vadīšanai noteiktā teritorijā, gan kā specifisks jēdziens Eiropā, lai raksturotu īpašu telpiskās plānošanas definīciju kā koordinācijas mehānismu (Ežmale, 2012).

Daudzi autori analizē telpiskās plānošanas un ar to saistīto terminu „telpiskā plānošana” un „telpiskā politika” atšķirības un saistību. Piemēram, Böhme (2002) telpisko plānošanu raksturo kā metodi vai procedūru, lai ietekmētu nākotnes aktivitāšu izvietojumu vai izstrādātu un ieviestu telpisko politiku jebkurā ģeogrāfiskajā mērogā. Telpisko politiku autors definē kā visu politiku sakopojumu ar mērķi ietekmēt izvietojuma un zemes lietojuma lēmumus vai aktivitāšu sadalījumu jebkurā ģeogrāfiskajā mērogā. Viņš atzīst, ka tādi autori kā Faludi, Esers un Konstadakopulos formulē telpisko politiku daudz konkrētāk, kā telpiskās attīstības politiku. (Böhme, 2002) Var secināt, ka telpiskās plānošanas aktivitātes var būt dažādās formās un dažādos kontekstos, atkarībā no juridiskā un institucionālā konteksta vai plānošanas kultūras un tradīciju variācijām. Minētie aspekti nosaka arī telpiskās plānošanas teorētisko aspektu pielietojumu praksē. Tomēr kopumā tiek atzīts, ka ES ir bijusi nozīmīga ietekme uz telpiskās plānošanas koncepcijas un prakses attīstību kā Eiropā kopumā, tā arī katrā no dalībvalstīm atsevišķi (ESPON, 2016).

Saistībā ar Eiropas līmeņa plānošanas aktivitāšu un iniciatīvu ietekmi uz plānošanas praksi, ES dalībvalstīs nozīmīgs jautājums ir telpiskās plānošanas teorētisko aspektu pielietojums praksē. Ir veikta virkne pētījumu par plānošanas sistēmām ES valstīs un galvenais to secinājums ir, ka plānošanas sistēmas ES valstīs ir atšķirīgas un tām ir liela ietekme uz veidu, kādā telpiskie plāni dažādās valstīs tiek formulēti un lietoti (Healey et al., 1997: 14. lpp.).

Eksistē divas galvenās pieejas, lai klasificētu telpiskās plānošanas sistēmas. Pirmā pieeja ir saistīta ar citu klasifikāciju tiesiskajās vai administratīvajās sistēmās (ESPON, 2006), kuru ietvaros darbojas telpiskā plānošana (sk. 1. tabulu).

1. tab. Teritoriālo pārvaldes sistēmu tipoloģija Eiropas Savienībā (avots: ESPON, 2006)  
*Table 1 Typology of territorial governance systems in Europe (source: ESPON, 2006)*

Valdības struktūra	ES 15, Eiropa	Jaunās ES dalībvalstis
Klasiska unitāra valsts	Grieķija, Īrija, Luksemburga	–
Centralizēta unitāra valsts ar stipru, bet neintegrētu vietējo pašvaldību līmeni	Portugāle	Bulgārija, Čehija, Ungārija, Rumānija, Slovākija, Kipra, Malta
Centralizēta unitāra valsts ar stipru, integrētu vietējo pašvaldību līmeni	Dānija, Somija, Nīderlande, Zviedrija, Norvēģija	Igaunija, Latvija, Lietuva, Slovēnija
Decentralizēta valsts ar stipru vietējo un reģionālo līmeni	Francija, Lielbritānija	Polija
Reģionalizēta unitāra valsts	Itālija, Spānija	–
Federāla valsts	Austrija, Beļģija, Vācija, Šveice	–

Savukārt otrā pieeja balstās uz plašu kritēriju pielietošanu klasifikācijas veikšanai. Daudzu autoru darbos un pētījumos (Deiviss, 1989; Njūmens un Tornlejs pētījumos, 1996; ES telpisko plānošanas sistēmu uzskaitījums, 1997) galvenokārt tiek analizētas četras telpiskās plānošanas sistēmas Eiropā: (1) salīdzinoši integratīvā, (2) tradicionālā zemes lietošanas vadīšanas, (3) reģionālā ekonomiskā un urbānisma pieeja (Ežmale, 2012), kuru raksturojums sniegts 2. tabulā.

2.tab. Eiropas Savienības telpiskās plānošanas sistēma (avots: autores veidota, pamatojoties uz Ežmale, 2102)

Table 2 *Spatial Planning Systems of Europe* (source: compiled by the author based on Ežmale, 2012)

Pieejas	Pieejas skaidrojums	Valstis
Salīdzinoši integratīvā pieeja	Izpratne par telpisko plānošanu balstās uz sistemātisku un formālu hierarhiju no nacionālā līdz vietējam līmenim un sabiedriskā sektora aktivitāšu koordināciju starp dažādām nozarēm.	AT, DK, FI, NL, SE, DE, BE, FR, IE, LU, UK, BG, EE, HU, LV, LT, PL, RO, SL, SV
Tradicionālā zemes lietošanas vadīšanas pieeja	Normatīvie akti ir galvenais instruments ilgtspējīgas izaugsmes un attīstības nodrošināšanai. Telpu plāno ar vietējo plānu palīdzību, nosakot nākotnes zemes izmantošanu atbilstoši zemes potenciālam, kā arī veicot zemes lietošanas izmaiņu kontroli ar atbilstošu normatīvo prasību palīdzību.	BE, IE, LU, UK, PT, ES, CY, CZ, MT
Reģionālā ekonomiskā pieeja	Atbalsta ļoti plašu telpiskās plānošanas izpratni. Šī pieeja saistās ar stingru centrālās valdības lomu attīstības vadīšanā un sabiedriskā sektora investīciju sadalē.	FR, DE, PT, IE, SE, UK, LU, LV, LT, SK
Urbānisma pieeja	Pieejā ir spēcīga arhitektūras aspektu ietekme, kas koncentrējas uz urbānā dizaina, pilsētainavu un celtniecības jautājumiem. Telpas vadīšana tiek nodrošina mazākajās iespējamajās telpiskajās vienībās un fiziskajās struktūrās ar celtniecības prasību palīdzību.	GR, IT, ES, CY, MT

Kā var secināt no 2. tabulas, tad daudzas Eiropas valstis satur vismaz divu Eiropas plānošanas sistēmu iezīmes, t.sk. arī Latvija. Plānošanas pieeju atšķirību nosaka vairāki faktori. Tāpēc ietekmējošo faktoru izpratne ir būtiska, lai varētu veikt dažādu valstu telpiskās plānošanas sistēmu un plānošanas dokumentu salīdzinošu analīzi. Papildus ir nepieciešams ņemt vērā, ka telpiskās plānošanas attīstība ir cieši saistīta ar to ietekmējošo faktoru attīstību, t.i., plānošanu var saprast tikai, izprotot kontekstu.

## **Latvijas telpiskās plānošanas sistēma** *Spatial planning system in Latvia*

Pašreizējā normatīvajos aktos noteiktā telpiskās plānošanas sistēma un reģionālā politika Latvijā ir attīstījusies pēc valsts neatkarības atgūšanas 1991. gadā, un tās attīstībā var izdalīt šādus posmus:

1. posms: 1994. – 1997. gads, tiesiskās sistēmas pamatu izveide;
2. posms: 1998. – 2001.gads, normatīvajos aktos tika iezīmēta teritorijas plānošanas apvienošana ar reģionālo attīstību;
3. posms: 2002. – 2007. gads, normatīvajos aktos tiek nodalīta teritorijas plānošana no reģionālās attīstības plānošanas, kā arī tiek veikta atšķirīgu telpiskās plānošanas prasību noteikšana dažādos plānošanas līmeņos;
4. posms: pēc 2007. gada, telpiskās plānošanas un reģionālās attīstības tiesiskās sistēmas pārveide administratīvi teritoriālās reformas un plānošanas efektivitātes paaugstināšanas kontekstā (Ežmale, 2012)

Lai arī reģionālās attīstības un telpiskās plānošanas sistēma Latvijā ir attīstījusies dinamiski, telpiskās plānošanas dokumentu izstrāde nacionālajā un reģionālajā līmeņos norisinājusies ne pārāk sekmīgi, jo pirmais ilgtermiņa telpiskās plānošanas dokuments nacionālajā līmenī (Latvijas ilgtspējīgas attīstības stratēģijas Telpiskā perspektīva) tika apstiprināts 2010. gadā, pirmais nacionālā līmeņa vidēja termiņa plānošanas dokuments - 2007. gadā (Nacionālais attīstības plāns), savukārt plānošanas reģionu teritorijas plānojumi – periodā no 2004. gada līdz 2007. gadam.

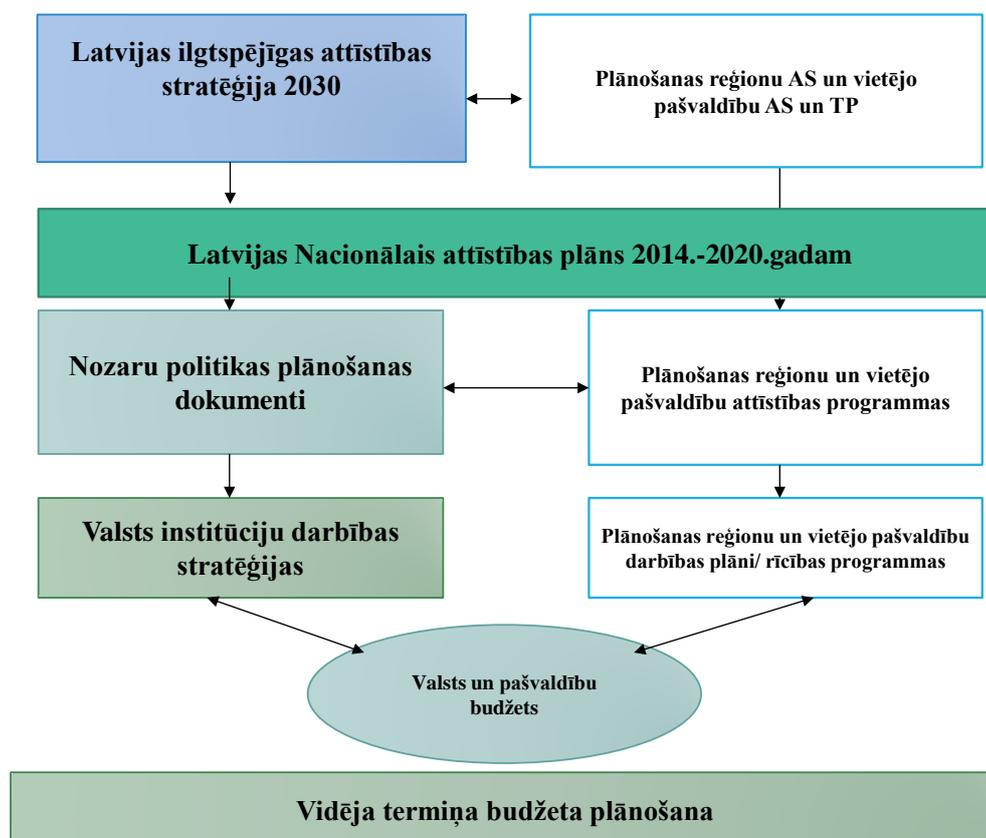
Savukārt vietējo pašvaldību teritorijas plānošanas process Latvijā sākās pēc neatkarības atgūšanas, kad 1994. gadā tiek apstiprināti Teritoriālpilnošanas noteikumi (MK, 1994), kas noteica pirmo teritorijas plānošanas sistēmu valstī, definēja teritorijas plānojuma saturu, valsts un pašvaldību kompetenci, kā arī sabiedrības līdzdalības nepieciešamību teritorijas plānošanas procesā. Jāatzīmē, ka normatīvajos aktos, kas nosaka teritorijas plānošanu vietējā līmenī, no 1994. gada līdz šodienai ir veikti grozījumi daudzas reizes, kas teritorijas plānošanas praksi padarīja sarežģītu.

Lai gan normatīvajos aktos tika noteikts termiņš, līdz kuram visām vietējā līmeņa pašvaldībām ir jāizstrādā teritorijas plānojumi, līdz 2007. gada 31. decembrim teritorijas plānojumi nebija izstrādāti 22 % vietējo pašvaldību. Vēl 2009. gada sākumā no 524 Latvijas vietējām pašvaldībām spēkā esošs teritorijas plānojums bija 499 pašvaldībām jeb 96 % no pašvaldību kopskaita (Ežmale, 2012).

Atbilstoši Reģionālās attīstības un pašvaldību lietu ministrijas (RAPLM) secinājumiem dokumentā „Telpiskās plānošanas sistēmas attīstības koncepcija” (2009) tika secināts, ka daudzas pašvaldības bija pieņēmušas lēmumus par

teritorijas plānojuma izstrādes uzsākšanu, bet daudzu gadu garumā netika veikta nekāda darbība tā realizēšanai. Savukārt RAPLM dokumentā „Pārskats par teritorijas plānojumu izstrādi 2008. gadā” tika konstatēts, ka daudzi pašvaldību plānojumi tika apstiprināti un iesniegti ministrijā nepilnīgi un formāli, lai izpildītu likumā noteiktās prasības.

Pamatojoties uz konstatēto, 2010. gadā tika apstiprināts Attīstības plānošanas sistēmas likums (APSL), ar kuru veica nozīmīgas izmaiņas attīstības plānošanas sistēmā Latvijā un noteica, kāda veida attīstības plānošanas dokumenti ir jāizstrādā dažādos plānošanas līmeņos (skat. 1. attēlu).

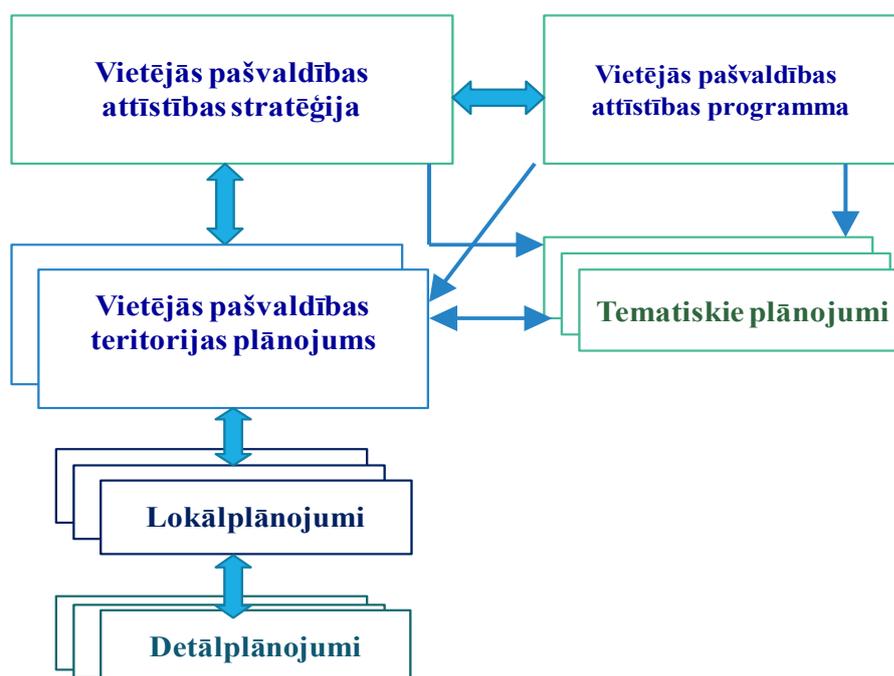


1. att. **Plānošanas sistēma Latvijā** (avots: VARAM, 2014)

*Fig. 1. Planning system in Latvia* (source: VARAM, 2014)

Kā redzam 1.attēlā, APSL nosaka, ka nacionālajā līmenī ir jāizstrādā Latvijas ilgtspējīgas attīstības stratēģija (LIAS) laika periodam līdz 25 gadiem, ietverot telpiskās attīstības perspektīvu un dokumentu vidējtermiņā (7 gadu periodam) - Nacionālo attīstības plānu. Likums paredz, ka reģionālajā un vietējā līmenī ilgtermiņa teritorijas attīstības plānošanas dokumentos formulē attiecīgās teritorijas attīstības prioritātes un telpiskās attīstības perspektīvu, bet vidējam termiņam tiek izstrādāts prioritāšu īstenošanai nepieciešamo pasākumu kopums – attīstības programma.

Vietējā līmenī APSL nosaka, ka ilgtermiņā ir jāizstrādā vietējās pašvaldības attīstības stratēģija (AS) un teritorijas attīstības plānojums (TP), kur AS tiek noteikta telpiskās attīstības perspektīva un plānota vietējās pašvaldības teritorijas kopējā attīstība, kā arī izvirzīti mērķi un prioritātes. Teritorijas plānojums tiek pieņemts normatīvā akta veidā, izdodot saistošos noteikumus, un tajā ir noteikta konkrētās teritorijas atļautā izmantošana (zonējums) atbilstoši stratēģiskajai sadaļai (telpiskā perspektīva AS). Kā attīstības plānošanas dokuments vidējam termiņam, vietējai pašvaldībai ir jāizstrādā attīstības programma, kurā, līdzīgi kā reģionālā līmenī, tiek noteikts pasākumu kopums teritorijas attīstības plānojumā izvirzīto prioritāšu īstenošanai (skat. 2. attēlu).



2. att. **Vietējās pašvaldības teritorijas attīstības plānošanas dokumentu hierarhija**  
(avots: LR Saeima, 2008)

*Fig. 2. Hierarchy of spatial development planning documents for a local government*  
(source: LR Saeima, 2008)

Vietējās pašvaldības teritorijas plānojumā nosaka funkcionālo zonējumu, publisko infrastruktūru, reglamentē teritorijas izmantošanas un apbūves noteikumus, kā arī citus teritorijas izmantošanas nosacījumus un aprobežojumus.

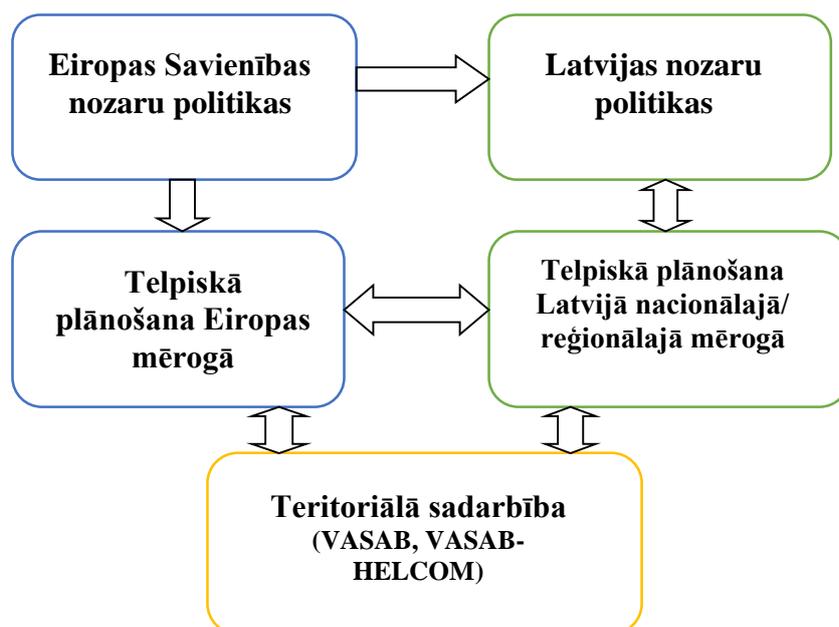
Lokālpilnoījumu vietējā pašvaldība izstrādā pēc savas iniciatīvas un izmanto par pamatu turpmākai plānošanai. Detālpilnojumā atbilstoši mēroga noteiktībai detalizē un konkretizē teritorijas plānojumā vai lokālpilnojumā noteiktajā funkcionālajā zonējumā paredzētos teritorijas izmantošanas veidus un

aprobežojumus, nosakot prasības katras zemes vienības teritorijas izmantošanai un apbūvei.

Visos teritorijas attīstības plānošanas līmeņos var izstrādāt tematiskos plānojumus. Tematiskos plānojumus ievēro, izstrādājot citus teritorijas attīstības plānošanas dokumentus.

### **Latvijas plānošanas prakse Eiropas Savienības kontekstā** *Planning practice in Latvia within the European Union context*

Telpiskās plānošanas sistēma Latvijā veidojās plašu diskusiju rezultātā starp plānotājiem, arhitektiem, vides aizsardzības speciālistiem, pamatojoties uz vēsturiskajām tradīcijām un pārņemot ārvalstu pieredzi. Uzsākot darbu, liela nozīme bija profesionālajai pieredzes apmaiņai, pilotprojektiem, demonstrācijas projektiem un tehniskajai palīdzībai, ko tajā laikā Latvijas plānotāji saņēma no tādām valstīm kā Zviedrija, Kanāda, Beļģija, Dānija, Nīderlande, Somija u.c. Lielu ietekmi atstāja arī Eiropas Padomes un Eiropas Savienības politika un dokumenti (skat. 3. attēlu)



3. att. **Telpiskās plānošanas un nozaru politiku sakarības dažādos plānošanas līmeņos**  
(avots: autores veidota, pamatojoties uz Ežmale, 2102)

*Fig. 3. Relationships between spatial planning and sectoral policies at different planning levels (source: compiled by the author based on Ežmale, 2012)*

Raksturojot telpiskās plānošanas institucionālo bāzi katrā no dalībvalstīm, ES dalībvalstu kontekstā, būtiski ir noteikt valsts struktūru, decentralizācijas

procesu un varas pārdali starp plānošanas līmeņiem. Savukārt analizējot valstu telpiskās plānošanas tiesisko sistēmu, tika ņemti vērā šādi aspekti:

- 1) plānošanas līmeņu skaits;
- 2) plānošanas līmeņu ietekme un nozīmīgums;
- 3) integrācijas pakāpe starp valsts, reģionālo un vietējo pašvaldību pārvaldes struktūrām. (Ežmale, 2012)

Pamatojoties uz minēto aspektu analīzi un Eiropas Savienības valstu teritoriālās pārvaldes sistēmu tipoloģija (skat. 1. tabulu), Latvija, līdztekus tādām jaunajām Eiropas Savienības dalībvalstīm kā Igaunija, Lietuva, Slovēnija, ir noteikta kā centralizēta unitāra valsts ar stipru un integrētu vietējo pašvaldību līmeni. Savukārt analizējot telpiskās plānošanas un reģionālās attīstības institucionālo bāzi Eiropas Savienības valstu kontekstā, Latvija atbilst šādai tipoloģijai:

- 1) pēc reģionalizācijas tipoloģijas līdzīgi kā Lietuva, Latvija atbilst administratīvas reģionalizācijas tipam;
- 2) pēc valsts struktūras tipoloģijas visas Baltijas valstis, t.sk. Latvija ir jaunās dalībvalstis;
- 3) pēc telpiskās plānošanas varas funkciju sadales tipoloģijas visas Baltijas valstis ir unitāras valstis ar reālo varu centrālajā līmenī;
- 4) pēc telpiskās plānošanas vietējo pašvaldību varas funkciju tipoloģijas visas Baltijas valstis, t.sk. Latvija ir ar spēcīgu vietējo pašvaldību plānošanas līmeni. (ESPON, 2006)

Eiropas Savienības Telpisko plānošanas sistēmu uzskaitījumā, kurā tiek ņemtas vērā valstu tiesiskās un administratīvās sistēmas, Latvijai ir identificētas divu telpiskās plānošanas ES dalībvalstu tradīciju iezīmes: reģionālā ekonomiskā plānošanas un salīdzinoši integratīvā pieejas.

Reģionālā ekonomiskā pieeja atbalsta ļoti plašu telpiskās plānošanas izpratni, kura ir saistīta ar daudzveidīgu sociālo un ekonomisko mērķu risināšanu, ņemot vērā atšķirības labklājībā, nodarbinātībā un sociālajos apstākļos dažādos valsts reģionos. Šī pieeja saistās ar stingru centrālās valdības lomu attīstības vadīšanā un sabiedriskā sektora investīciju sadalē. Telpas attīstība tiek nodrošināta ar reģionālo plānu palīdzību, kuri tiek izstrādāti nacionālajā/ reģionālajā līmenī saistībā ar efektīvu infrastruktūras izvietojumu, ekonomisko aktivitāšu zonēšanu, reģiona ilgtspējīgu izaugsmi, līdzsvarotu telpisko attīstību, kā arī fokusējoties uz reģionālajiem jautājumiem, savukārt vietējie plāni nodrošina reģionālo plānu izpildi. Savukārt salīdzinoši integratīvajai pieejai ir raksturīga izpratne par telpisko plānošanu balstās uz sistemātisku un formālu hierarhiju no nacionālā līdz vietējam līmenim un sabiedriskā sektora aktivitāšu koordināciju starp dažādām nozarēm. Valstīs, kurās dominē salīdzinoši integratīvā pieeja, telpa tiek vadīta ar hierarhisku telpisko plānu sistēmas palīdzību dažādos ģeogrāfiskajos līmeņos, ņemot vērā nozares, kurām ir ietekme

uz telpisko attīstību. Minētās iezīmes ir raksturīgas telpiskās plānošanas sistēmai un plānošanas praksei Latvijā.

Telpiskās plānošanas sistēmai un plānošanas praksei Latvijā ir šādas iezīmes:

- stingra centrālās valdības loma attīstības vadīšanā un publiskā sektora investīciju sadalē;
- Latvijā lēmumus par teritorijas attīstību pieņem trīs teritorijas plānošanas līmeņos: nacionālajā, reģionālajā un vietējā līmenī;
- katrā no plānošanas līmeņiem ir definēti specifiski uzdevumi un tiek risināti šim līmenim atbilstoši jautājumi;
- teritorijas attīstību plāno, izstrādājot savstarpēji saskaņotus teritorijas attīstības plānošanas dokumentus
- zemāka līmeņa teritorijas attīstības dokumentiem ir jābūt pakārtotiem un saskaņotiem ar hierarhiski augstāka plānošanas līmeņa dokumentiem;
- hierarhiski augstākie ir ilgtermiņa attīstības plānošanas dokumenti, kuriem ir pakārtoti vidēja termiņa attīstības plānošanas dokumenti, savukārt īstermiņa attīstības plānošanas dokumenti ir hierarhiski pakārtoti vidēja termiņa attīstības plānošanas dokumentiem.

### **Secinājumi** **Conclusions**

Eiropas Savienības telpiskās plānošanas sistēmai un praksei ir nozīmīga loma Latvijas telpiskās plānošanas attīstībā un praksē. Eiropas Savienības Telpisko plānošanas sistēmu uzskaitījumā, kurā tiek ņemtas vērā valstu tiesiskās un administratīvās sistēmas, Latvijai ir identificētas divu telpiskās plānošanas ES dalībvalstu tradīciju iezīmes: reģionālā ekonomiskā plānošanas un salīdzinoši integratīvā pieejas. Latvija ir centralizēta unitāra valsts ar stipru un integrētu vietējo pašvaldību līmeni. Latvijas telpiskās plānošanas sistēmai un praksei ir raksturīgas šādas iezīmes: (1) stingra centrālās valdības loma attīstības vadīšanā un publiskā sektora investīciju sadalē; (2) lēmumi par teritorijas attīstību tiek pieņemti trīs teritorijas plānošanas līmeņos; (3) katrā plānošanas līmenī ir definēti specifiski uzdevumi un tiek risināti šim līmenim atbilstoši jautājumi; (4) teritorijas attīstību plāno, izstrādājot šādus savstarpēji saskaņotus un hierarhiski pakārtotus teritorijas attīstības plānošanas dokumentus.

### **Summary**

The terms “spatial planning” closely relate to regional development patterns, but the development of the European spatial policy is an integral part of regional policy.

Researchers conclude that activities of spatial planning may act in different forms and context. However, the unique opportunities of spatial planning relate to its interdisciplinary nature. At the same time, the various planning systems existing in the European countries, as well as different instruments and cultures of spatial planning have facilitated the introduction of common activities in Europe with the purpose to favour trans-national society and communication in respect to decisions to be made in the field of spatial planning (CEMAT conferences, Interreg). The common planning activities and initiatives at the European level had influenced planning practice in all the Member States of the European Union (Ezmale, 2012).

The current system of territorial planning in Latvia has been formed after regaining its independence in 1991. The European Union has had a great impact on the development of the concept and practice of spatial planning throughout the entire Europe and in each of the Member States, as well as Latvia. The aim of the research is to describe the development of the spatial planning system, the features of planning practice in Latvia in the context of spatial planning activities at the European Union level. During the research, the author describes the development of the spatial planning concept, the typology and system of spatial planning in the Europe. Additionally, the author characterises the development of the legal framework for and practice in spatial planning in Latvia, as well as identifies the features of the Latvian spatial planning system and practice in the context of activities at the European Union level. Research methods – content analysis, deductive and inductive methods, theoretical analysis of scientific literature, EU and Latvian legislation analysis, comparative analysis etc.

As to the impact of European level planning activities and initiatives on planning practice in the Member States of the European Union, an important issue is the practical application of theoretical aspects of spatial planning that includes characteristic of spatial planning systems and typology e.g. Based on an analysis of several aspects (number of planning levels; level of integration between administration structures at different levels; impact and significance of planning levels), the typology of territorial administration systems of the EU Member States has been elaborated (Ezmale, 2012). In accordance with this typology, Latvia is regarded as a centralized unitary state having a strong and integrated level of local governments. Pursuant to the analyses of spatial planning systems of the European Union based on legal and administrative issues of the states, Latvia is characterized by two spatial planning traditions manifested among the Member States of the EU, namely, peculiarities of the approach of regional economic planning and that of comparative integrative planning systems. The spatial planning system and planning practice in Latvia have the following features: (1) a strong central government role in regional development and public sector investments; (2) decisions on spatial development are adopted at three spatial planning levels: national, regional and local; (3) specific tasks are defined and relevant issues addressed at each level of planning; (4) development of a territory is planned by elaborating mutually co-ordinated spatial policy documents.

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## THE ROLE AND IMPORTANCE OF THE GMINA IN TOURISM POLICY IN POLAND

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**Abstract.** *The aim of the article is to indicate the role and importance of the gmina as a special institution of the Polish tourism system in shaping the local tourism policy of the area. The article presents the concept and objectives of tourism policy, and describes the various entities of tourism policy in Poland and their tasks. Against this background, the article captures the gmina's tasks in the sphere of tourism together with the instruments of tourism policy that are at its disposal. The article uses a descriptive and qualitative analysis method that allowed to identify the role of the gmina in the tourism system in Poland. The analysis includes literature in the field of economic sciences, based additionally on legal acts related to the discussed issue. As an institution of the tourism system, the gmina has the task of satisfying the needs of the local community and stimulating local development, thanks to which it plays an important role in shaping the local tourism policy. The gmina has a wide range of activities on the local tourist economy. It should be emphasized that this is not an individual task of the gmina, although there is no doubt that it has a wide range of opportunities to influence this sphere of social and economic life. Tourism policy should be undertaken and implemented in cooperation with private sector entities conducting tourist activity, but also entities from outside the tourism industry (so-called paratourism entities) and their organizations and associations. Tourism policy should also be implemented together with other local government units, the area of which is covered by an initiative in the field of tourism development, including also higher-level entities (such as poviats and voivodships), as well as with local and regional tourist organizations and other non-governmental organizations.*

**Key words:** *gmina, tourism policy entities, tourism policy instruments*

### Introduction

The aim of the article is to indicate the role and importance of the gmina<sup>1</sup> as a special institution of the Polish tourism system in shaping the local tourism policy of the area. The topic of the article, due to its nature, fits in with the relevant and current issues of local development, especially tourism policy, which should be implemented and systematically coordinated with local socio-economic policy and the higher-level tourism policy (regional, national, EU), in line with current trends in the tourist market and the preferences of domestic and foreign tourists. The article uses a descriptive and qualitative analysis method

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<sup>1</sup> A gmina is the lowest level of territorial self-government units in Poland.

that allowed to identify the role of the gmina in the tourism system in Poland. The analysis includes literature in the field of economic sciences, based additionally on legal acts related to the discussed issue. The gmina, as the basic unit of local government, also referred to as the self-government community and the territory it inhabits, is aimed at satisfying the collective needs of its inhabitants. When the purpose of the gmina is formulated in such a general way, one can assume that, like other entities, the gmina also aims at local development, which is one of the main goals of its activity. Tourism plays a diverse role in the socio-economic development of areas, which is jointly dependent on the nature of the environment, the policy of local authorities and decisions taken by entrepreneurs (present and future) in the tourism industry. With a properly conducted tourism policy, taking into account the real local opportunities and determinants of tourism development, tourism can become a pole of growth, stimulating the development of the area outside its centre in other fields of the local economy. Tourism can be a tool to diversify the local economy, thus contributing to its greater resistance to unfavourable trends in sectors of economy currently dominant in a given area. It can also provide a new stimulus for the development of these areas, when the previously dominant feature is no longer the driving force of development.

### **Tourism policy and its goals**

Bearing in mind the benefits of tourism development and its role in the socio-economic development of the area (Chudy-Hyski, 2009), it is advisable to have an impact on it, so that it is possible to maximize the beneficial external effects generated by tourism. In this respect, tourism policy plays a role, which enables direct influence of the state (actors of tourism policy) on the tourism economy.

Tourism policy covers the whole of activities regulating socio-economic processes in the tourism sector and undertaken for the development of tourism in various spheres of social, economic and political life. It consists in the conscious support and shaping of tourism by various types of organizations and institutions, including local self-government communities, influencing through their activity everything what is important for tourism (Gaworecki, 2000). Due to the multifaceted nature of tourism and its integration with many areas of the economy, tourism policy consists of social, environmental and economic policy, and the tourism policy itself should not be treated as a sectoral approach but as one comprehensively combining different areas of economic and social life. Tourism policy is also connected, inter alia, with the cultural and promotional policy of the given administrative unit.

Among the main goals of the tourism policy are:

- satisfying the tourist needs of the society,
- rational use of tourism assets, labour resources and capital in the sphere of tourist economy,
- shaping the optimal size and structure of tourist traffic,
- coordinating the development of tourism, taking into account its functions and connections with other spheres of social and economic life (Kurek, 2007),
- development of tourist and paratourist infrastructure,
- creating favourable legal and organizational conditions,
- stimulating entities on the tourist market for pro-efficiency actions,
- initiating the creation and development of tourist products,
- supporting business entities that create a tourist offer (Migdal, 2015).

### **The gmina among tourism policy entities in Poland**

Tourism policy is implemented by institutions distinguished at various levels: international, national, regional, local, hence it has a multilevel nature. Lower-level actors coordinate the guidelines of the tourism policy implemented in their area of operation with senior policy objectives. As a tourism policy entity, one can define the institution and organization of various levels in which responsibility of tourism matters lies. These entities should create a logically connected system, including the ways of their impact on the real sphere of processes taking place on the tourist market.

At the national level, the tourism policy is regulated by the state. Among the main institutions that affect the tourist economy, the following can be mentioned (Alejziak, 2013):

- state legislative bodies,
- central non-tourism state administration bodies (e.g. the Ministry of Finance, labour, communication, environmental protection, foreign affairs, domestic affairs),
- the national tourist administration (NTA) in the form of a minister competent for tourism,
- a national tourist organization (NTO) in the form of the Polish Tourist Organization,
- advisory bodies of state administration and tourist administration,
- tourist economic organizations,
- tourist social organizations.

In Poland, the minister responsible for tourism is the authority responsible for the sphere of tourism at the central level (as of 1 January 2018, it is the Minister of Sport and Tourism). It is the supreme organ of state administration,

and its main tasks in the discussed area include the shaping and implementation of the tourism policy, which includes, among others, matters related to the tourism development of the country and mechanisms regulating the tourist market. Within the Ministry of Tourism, there is the Tourism Department responsible for programming development and shaping the legal and economic mechanisms of tourism, setting directions and priorities, and supervising the implementation of tasks in the field of tourist promotion on the domestic and foreign market (see BIP – Ministerstwo Sportu i Turystyki, 2008).

The Department of Tourism in particular supervises the Polish Tourist Organization (Polska Organizacja Turystyczna – POT), which creates conditions for cooperation of government administration bodies, local government units and organizations associating entrepreneurs in the field of tourism, including economic and professional self-government, and associations operating in this field. The main tasks of the Polish Tourist Organization focus on the promotion of the country, the functioning of the tourist information system, as well as the issue of tourist infrastructure. It is an entity whose operation is associated with the cooperation of such institutions as local government units, regional and local tourist organizations and other organizations associating entrepreneurs in the field of tourism (Ustawa, 1999).

The Polish Tourist Organization together with regional and local tourist organizations (ROTs and LOTs) form a three-level organizational system oriented at supporting and promoting the development of tourism at its individual levels, according to the area in which individual institutions implement their activities. Regional and local tourist organizations operate on the basis of the provisions of the Act on the Polish Tourist Organization (Ustawa, 1999) and the Law on Associations (Ustawa, 1989). Regional and local tourist organizations are established in order to implement the tasks specified in the Act on the Polish Tourist Organization, including: tourist promotion of their area of activity, supporting the functioning and development of tourist information, initiating, giving opinions and supporting development plans and modernizing tourist infrastructure, as well as cooperation with the Polish Tourist Organization. Regional tourist organizations (ROTs) operate at the voivodship level and constitute a form of cooperation between local government units of various levels (especially regional level) and tourist operators, industry organizations and other tourist organizations, as well as local tourist organizations (LOTs) and institutions interested in developing the tourist economy (e.g. cultural institutions, sports organizations, universities educating personnel for the needs of tourism). Local tourist organizations create a space for cooperation between local government units (especially at the gmina and powiat level), local entities of the tourist industry and local non-governmental organizations, in particular dealing with broadly understood issues related to

tourism. The area of LOTs' activity is rather a tourist-attractive area, as it may go beyond the territory of the gmina or powiat and even may combine the initiatives of units from the area of more than one voivodship (Borzyszkowski, 2011). ROTs and LOTs play the role of coordination in relation to the activities of the various actors in shaping the tourist product of the area.

One can recognize that the role of public authorities is to shape the space and relations in it, so that it favours socio-economic development in a given area, as well as to control this development. It can be assumed that this role is similar in the sphere of tourism development. Among the public authorities, local government units play a special role in the development of tourism at the regional and local level. Being equipped with the appropriate instruments to shape the regional and local tourist economy, they are the actors of tourism policy. Their role manifests itself in particular in the provision of tourist information services, including, for example, the issue of marking tourist routes and tourist attractions, as well as matters related to the maintenance and development of the paratourist infrastructure.

Among the local government units, the gmina level plays a special role in affecting the tourism-related sphere, mainly due to its direct contact with the entities of a tourism economy, both the demand and supply side and the fact that tourism development depends directly on the resources available in given area. The gmina is the host of the area, being at the same time one of the entities of tourist supply, understood as an arrangement of interrelated entities and facilities distinguished on the basis of the functions fulfilled in the process of shaping the tourist product (Zmyślony, 2008). The significance of the gmina's influence on the development of tourism in its area is determined by such aspects as its connection with government administration bodies, investment opportunities resulting directly from financial resources and competences, using tourism as a stimulus for local development, as well as the scope of cooperation with economic self-governments and the range of available instruments for influencing local business entities.

The impact of the gmina on the tourism economy conducted in its area takes place through shaping the social, spatial and economic order, and consists in balancing the tourism sector with other sectors of the local economy in the use of local resources. Possibilities of the gmina's influence on the course of economic processes in tourism have statutory mandate within the catalogue of its own tasks and the possibility of conducting direct activities to meet the needs of the community, understood in two ways, both as the needs of residents in the sphere of tourist and recreation consumption in terms of shaping its implementation, and also as the needs resulting from taking up economic activity by the residents in the field of tourism services (Gordon, 2003).

### **Tasks of the gmina in the sphere of tourism development**

The tasks of the gmina in the sphere of tourism development can be presented in the form of two groups, i.e. tasks directly related to the tourism economy, aimed at stimulating tourist activity as well as tasks aimed mainly at meeting the needs of residents (various factors of quality of life also translate into perception and attractiveness of the given area, and thus the development of tourism), (Pawlusiński, 2005). Irrespective of this division in the literature, there are also other ones. For example, B. Mejer (2010) points out that the scope of tasks of the gmina in the sphere of tourism consists of three groups: 1) tasks activating the local tourist economy, directly related to the functioning of this sector; 2) general-purpose tasks affecting the functioning of the tourism economy; 3) obligatory tasks imposed on gminas by virtue of legal acts. Referring to the Act on Local Government (Ustawa, 1990), among the tasks of the gmina directly connected with the sphere of tourism, there are tasks in the field of:

- culture, including the gmina's libraries and other cultural institutions, and protection and care of monuments;
- physical culture and tourism, including recreational areas and sports equipment;
- promotion of the gmina.

Treating the gmina's area as a tourist product and having regard to the perception of this product by a tourist, this list of tasks can be extended to those fields of the gmina's functioning that support entrepreneurship and make the gmina's area more attractive also in economic terms. It would be necessary to mention here all the gmina's tasks related to shaping space (e.g. spatial order, nature protection), infrastructure (e.g. roads, network infrastructure devices), social services (e.g. collective transport, health care), (Bem et al., 2017), as well as cooperation with the private and non-government sectors. The total of actions taken in the above-mentioned fields, supported by incentives aimed at activating entrepreneurship and supporting already functioning entities, contributes to the improvement of tourism development conditions in a given area. In this way, tasks supporting local development can also be treated as tasks improving the conditions for tourism development. This approach is confirmed, among others, by W. Alejziak (1999). There is a significant feedback in this respect. On the one hand, tourism is treated as a factor of local development, and actions aimed at stimulating this sphere of the local economy stimulate the development of the area. On the other hand, stimulating local development (in general) creates the basis for improving the conditions for tourism development (development of the area through tourism means development of tourism through local development and vice versa).

The tasks of gminas in the sphere of tourism also result from the provisions of other acts. This applies in particular to spa gminas and those with the status of a spa protection area. Such gminas are obliged to carry out tasks related to the preservation of the healing functions of the spa, including (Ustawa, 2005):

- protection of natural conditions of a spa or spa protection area;
- creating conditions for the operation of facilities and devices for spa treatment and development of the gmina's infrastructure in order to meet the needs of people staying in the gmina for the purpose of spa treatment;
- creation and improvement of the gmina's infrastructure for spas or spa protection areas.

Also, the provisions of the Act on Tourist Services (Ustawa, 1997) impose specific duties on gminas that already perform their tourist function, for example in the field of grading campsites and keeping records of other accommodation operators.

### **Instruments of the gmina's tourism policy**

The gmina, as a unit of state administration in the area, has wide possibilities of influencing the course of economic processes in its area. It has the instruments to shape the course of local development processes as well as the development of tourism as one of its possible components. These instruments of local intervention are characterized by A. Sztanto (1999), who explains that they may be "any information, act or omission of the local authority, affecting the development of local business entities or the activities of institutions, bodies, tangible and intangible objects, as well as people interacting with these entities. The instruments also include actions and information necessary for the construction, implementation and verification of the correctness of the application of the above instruments." The quoted definition allows us to recognize any activity undertaken by the gmina aimed at shaping local development as an interventionist instrument. Taking into account the criterion of the form of influence, the cited author classifies the gmina's instruments of shaping development into nine basic groups, distinguishing instruments of:

- administrative coercion,
- cognitive,
- economic and market influence,
- direct impact,
- infrastructural stimulation,
- information,
- education,

- conceptual and organizational as well as other.

Instruments of the local tourism policy give the opportunity to create favourable conditions for functioning (conditions for the implementation of tourism activity understood on the one hand as tourist business, and on the other – as tourist consumption) of tourist business entities (producers, distributors, organizations, consumers). Their application consists in direct involvement of the gmina's authorities in improving the possibilities of performing the tourist function of a given area, as well as in undertaking initiatives related to the creation of a tourist product and having an impact on the service of tourist traffic. Generally speaking, the scope of the gmina's activity in the area of shaping space for the needs of tourism development consists in the gmina's investments (tourist and paratourist infrastructure) and coordination, initiation and further stimulation of activities undertaken by other entities for the development of tourism in a given area (Nawrot & Zmysłony, 2004). In the sphere of tourism development, the gmina may appear in a threefold form, i.e. (Vaughan et al., 1999):

- as the main entity responsible for planning the development of the tourism sector at the strategic level;
- as the manager of tourism and infrastructure resources that can initiate and regulate their creation and use;
- as the unit responsible for promoting the tourist reception area, which also includes local tourist operators.

The division of interventionist instruments in the local (and regional) tourism policy is carried out by A. Panasiuk (2009). He lists their exemplary types broken down into passive and active instruments such as: economic (passive: local taxes and fees; active: tax breaks, tourist investments, promotion of tourism, creation of a tourist offer, public-private partnership, shaping the tourism brand), administrative (passive: records of the accommodation base, records of travel agencies, procedures for applying for EU funds, elaboration of a tourism development strategy, a spatial development plan; active: implementation of tourism strategies), organizational (passive: creating a LOT and a ROT, active: active cooperation of entities forming a LOT and a ROT, creation of cluster structures, euroregional cooperation) and human resources (passive: issuing health entitlements; active: training of tourist staff for local governments and the tourism industry).

A different division of instruments of the gmina's impact on tourism is proposed by R. Pawlusiński (2005), who lists five groups of them: planning instruments (various types of strategic documents), financial (e.g. budget expenditure on tourism), organizational and legal instruments (regulatory), institutional instruments (establishing cooperation and creation of entities operating in the field of tourism development), information instruments

(creating and providing information on the area of the gmina, its resources and the status of development, including tourism).

Yet another division of instruments for shaping the tourist economy by the gmina's self-government authorities is presented by J. Majewska (2012). Accepting the nature of the impact and function as the criterion of classification, the author distinguished the following tools: planning, organizational, information, economic and financial, infrastructural stimulation and others. Planning instruments in the gmina are applied in the form of: the gmina's development strategy, spatial planning documents, long-term investment plans, multi-annual financial plans, local development plans, local revitalization programmes, promotion programmes of the gmina, action programmes to stimulate local entrepreneurship and others. Organizational instruments are related to the autonomy of the gmina in terms of the choice of organizational and legal form of the tasks, freedom to shape the internal organizational structure of the gmina's office depending on the needs, resources and conditions, the possibility of undertaking business and acting as a producer of goods (services) that tourists benefit from, as well as cooperation with various public, private and non-governmental entities in the field of local development and the development of the tourism economy. Information and promotion instruments regarding influence on development processes in tourism, which are related to the impact on the behaviour of other entities (e.g. enterprises of various industries, inhabitants) to encourage or discourage them from undertaking specific activities consistent with the gmina's preferences from the applied development directions. Information incentives can be transmitted via planning documents of the gmina, but also with the use of other channels of information about the characteristics of the area, in particular the state of its resources and preferred forms of their use, local enterprises, implemented investments, infrastructure development, including tourist infrastructure, local tourist products, a desired image of the gmina, etc. The use of information instruments directly in the sphere of tourism is reflected in the form of establishing tourist information points, marking trails and tourist attractions, etc. Promotion instruments of the gmina are used to influence entities within the gmina (residents, local entrepreneurs, social organizations) and outside (acquisition of external investors, new residents, tourists, institutions of various levels and various forms of ownership). Promotional activities are undertaken in order to shape, consolidate and disseminate the preferred image of the gmina's area as a place of particular attractiveness for tourists, entrepreneurs from the tourism industry, but also from other industries. The promotion of the gmina is at the same time the promotion of the tourist product of the area (given area as a tourist product). The economic and financial instruments of the gmina in the sphere of tourism development result from the scope of financial independence

owned by the gmina. They are associated with the freedom of public funds as part of the independently developed budget, with power to impose taxes and a certain freedom to shape elements of fiscal technique, income policy, access to capital markets and the possibilities of applying for external financing, as well as policy in the field of shaping prices and the scope of provided services and resources. Financial instruments are also reflected in the possibilities of granting public aid. Infrastructural stimulation instruments are related to the creation of convenient conditions for the functioning of the population, business activity and tourists.

### **Conclusions**

Impact on the tourism economy at the local level is not an individual task of the gmina as a territorial self-government unit, but nevertheless the gmina has great potential for influencing this sphere of social and economic life. Activities in the direction of tourism development should be undertaken and implemented in cooperation with private sector entities conducting tourist activity, but also entities from outside the tourism industry and their organizations and associations. It should also be implemented together with other local government units (also at higher levels), the area of which concerns the initiative in the field of tourism development, as well as with local and regional tourist organizations and other non-governmental organizations.

The gmina's undertaking of activities towards the development of tourism in a given area should be preceded by an analysis of its own capabilities and existing conditions that allow the identification of the local potential in the implementation of the tourist function, which involves both the creation and development of new tourist and pro-tourist businesses, consumption and meeting the daily needs of residents in face of increased competition for local resources due to tourism. The analysis should also take into account the financial possibilities of the gmina related to the implementation of objectives in the field of tourism development of the area, in terms of its own and external (repayable and non-returnable) sources of financing.

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# REGIONAL TOURISM BRAND – NEED OR NECESSITY IN THE ASPECT OF SOCIO-ECONOMIC DEVELOPMENT OF POLISH MOUNTAIN RURAL AREAS

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**Abstract.** *The paper discusses the issue of the regional tourism brand, which is a significant differentiator of the area in the market and gives the opportunity to include tourism in the model of socio-economic development of the region. The analysis of regional branded tourist products includes mountain rural areas of Poland. These areas are an example of a region with unfavourable farming conditions, which makes the competitive position of these areas in a much worse position than other rural areas in the country. Due to the difficulties in the sphere of social and economic life occurring in mountain rural areas, they require other alternative development incentives. Tourism can be one of these, but to make the development through tourism effective, attention must be focused on building a strong regional brand, which is the competitive strength of the area. Mountain rural areas have their own specific potential, which allows them to build regional branded tourist products easily distinctive from lowland rural areas. The aim of the paper is to indicate the importance of the region's tourism brand on the example of mountain rural areas of Poland, including its constituent elements. The paper uses a descriptive and qualitative analysis method that allowed to identify problems of mountain rural areas development and the role of tourism and in particular the tourism brand in the development of such areas. The analysis includes literature in the field of economic sciences, including economies of regions, economies of tourism, and territorial marketing. The paper covers the issues of development of mountain rural areas with an indication of their main socio-economic development problems. Then, against the background of the concept of the region in economic terms, mountain rural areas have been presented as a tourist region where tourism can be an important factor of development. The text also covers selected issues related to the creation of a regional tourism brand, and characterizes the regional tourism brand of mountain rural areas, together with their constituent elements.*

**Keywords:** *brand, branded tourist product, mountain rural areas.*

## Introduction

The subject of the paper is a regional tourism brand in the aspect of the socio-economic development of Polish mountain rural areas. The aim of the

paper is to indicate the importance of the region's tourism brand on the example of mountain rural areas of Poland, including its constituent elements. The paper uses a descriptive and qualitative analysis method that allowed to identify problems of mountain rural areas development and the role of tourism and in particular the tourism brand in the development of such areas. The analysis includes literature in the field of economic sciences, including economies of regions, economies of tourism, and territorial marketing. The paper discusses the essence and importance of tourism in the socio-economic development of problem areas. In particular, the importance of the tourism brand of the region's product was emphasized. In this approach, the tourist product of mountain rural areas is all tourist and para-tourist products, material and non-material, co-creating a comprehensive regional tourist product. The subject of the paper is current and very important. It acquires great significance for contemporary problems of local and regional development of less-favoured areas, which due to their characteristic economic conditions encounter a barrier to development. Two current socio-economic phenomena have been taken into consideration, namely the development of disadvantaged areas on the example of mountain rural areas and the development of tourism, including the creation of a regional tourism brand. For many years the issue of socio-economic development of mountain rural areas has been within the range of interest of countries within which such areas exist. This is evidenced by various EU directives and numerous publications in the field of economies of regions, regional policy, economic issues of rural development and agriculture, and on many other areas of socio-economic analysis.

The development of mountain rural areas by tourism is an excellent alternative to currently ineffective agricultural or forestry development. Although tourism can constitute a significant share in the region's economy reaching even 70-80 %, it also includes the participation of other industries. Thanks to this, the tourism development of the rural area is not monofunctional. This fact means that the local (regional) economy developing thanks to tourism is more resistant to unfavourable trends in the economy, which, after all, run with varying intensity in various industries. In view of the above, mountain rural areas that undertake a tourism development direction, should aim to create a strong tourism brand visible at the national, European and even world level. Only the right brand of a tourist product is a guarantee of effective sales of a regional product and full use of tourism as a stimulus in social and economic development.

### **Socio-economic problems of mountain rural areas development**

Mountain areas are rural areas, which are characterized by particularly difficult conditions for agricultural activity. For this reason, in relation to mountain areas the issue of rural development takes on special significance. Mountain areas belong to areas with unfavourable (less-favourable) natural conditions for agricultural production. The typical features of mountain areas that are important for this kind of production include: a shortened vegetation period, low temperatures and their large diurnal and seasonal differentiation, significant atmospheric precipitation, a low soil class with a high content of skeletal parts, varied exposure and a strong slope of fields. Dispersal and fragmentation of fields result in a longer travel time to them and the accumulation of field works in a short period of time, which means the shortening of time of use of agricultural machines, and thus the increase in average costs of their use. In addition, the higher costs associated with keeping livestock in harsher climatic conditions, as well as the increased costs of obtaining plant products, also significantly burden the efficiency of production processes in mountain farming. The whole of the factors resulting from the specificity of mountain areas determines the natural profile of agricultural production, a consequence of which there are limited possibilities of selecting effective directions of management and economic development of these areas. All this makes most of the mountain farms unable to survive without external intervention.

In Poland, on the basis of the Article 18 of Council Regulation (EC) No. 1257/1999, mountain areas have been demarcated (Rozporządzenie..., 2004) because of their specificity, which requires increased expenditure of both labour, means of production and equipment, while significantly restricting their use. The areas located within the Polish part of the mountain ranges – the Sudetes and the Carpathians have been included in the mountain areas with unfavourable farming conditions (abbreviated as the mountain LFA – less-favoured areas). The Carpathians, in terms of natural conditions and their impact on the agricultural use of mountain lands, are similar to the Alps. However, in the Carpathians, comparable climate and vegetation floors have developed at lower altitudes than in the Alps. The difference in height between the location of the upper limit of a moderately warm floor in the Western Carpathians (650 m above sea level), and the location of this floor in the eastern Alps (920 m above sea level), is 270 m. This difference is mainly due to the fact that the Carpathian mass is located more to the north than the Alps, which is why Poland has set the lower limit of mountain areas at 500 m above sea level.

Less-favoured areas are the areas for which the European Commission has provided financial assistance to farmers. Financial aid for farms located in LFA

areas is aimed at ensuring the continuity of agricultural land use and maintaining landscape values of rural areas, and through the use of good agricultural practice (GAP) also promoting environmentally friendly agriculture (GAP includes the principles of farming, which mainly concern: rational management of both mineral and natural fertilizers, compliance with the principles of soil and water protection and preservation of valuable plant and animal species occurring in agricultural areas, including all activities related to the protection of agricultural landscape). These payments are aimed at counteracting the depopulation of rural areas and the loss of their agricultural character and the related social and economic consequences (Przewodnik..., 2005).

In individual member states of the European Union, for a number of different reasons, mountain areas occur in areas that are in a situation of socio-economic crisis (otherwise, these areas are defined as peripheral, requiring support, disadvantaged, handicapped, etc.). There are many reasons for the socio-economic crisis. In the case of Poland, mountain rural areas are considered as areas in the state of socio-economic crisis, among others, on the following grounds:

- peripheral geographical location;
- specific climatic and environmental conditions;
- occurrence of the effects of progressive civilizational and economic development, called the causes of increased social awareness and life aspirations of society;
- improper implementation of the socio-economic and ecological policy of the state, affecting the implementation of this policy at the regional and local level.

Therefore, mountain areas, as agriculturally handicapped areas, should be treated in a significantly different way than other agricultural regions of the country. Rural mountain areas constitute a socio-economic space for which it is necessary to implement development policy, understood as a set of interrelated activities undertaken and implemented to ensure sustainable development of the country, as well as socio-economic and territorial cohesion (Ustawa, 2006).

Postulated in the literature, the sustainable development of rural areas is conditioned by the enrichment of the diversity of these areas not only by expanding the scope of socio-economic activity, but also, especially with regard to mountains, by shaping and protecting the diversity of cultural and natural landscape, which is related to the preservation of biodiversity. It follows that the implementation of sustainable development of rural areas depends on the development of their diversity understood more broadly than multifunctionality (Stola, 2002). This should be reflected, among other things, in forms of business (not only agricultural) adapted to specific mountain conditions.

### **Mountain rural areas as a tourist region**

For the economist, the region is primarily an area with a specific economic specialization, resulting from the use of internal and external economic resources and the flow of growth factors such as: capital, labour, technology, information and others (Filipiak et al., 2005). As both a geographical and economic category, the region is a territorial production and service complex, distinguishing itself from the surrounding areas by specific forms of development (Kupiec, 1999). In view of the above, economic, social, tourist, administrative and other regions can be identified. The universal character of the above-mentioned definitions of the region emphasizes the necessity to choose the criteria used for its delimitation. With regard to the tourist region, common characteristics that are fundamental for the development of tourism are emphasized.

In the literature, the tourist or tourist-recreational region is referred to as the region's type distinguished due to its specialization; this is an area where there is a large-scale service activity including tourist and recreational services (Korol, 2007). Or in other words, it is an area that performs a tourist function due to a certain homogeneity of features of the natural and socio-cultural environment as well as internal service connections (Kurek, 2007). Defining the tourist region, Kornak and Rapacz (2001) use the common understanding of the term region and indicate that it is an area (part of the country) that fulfils the following conditions and:

- has certain tourist values (leisure, sightseeing and specialist) whose number, structure and quality make it attractive for tourists; it is reflected in the size and intensity of tourist traffic;
- has a communication system that allows reaching the area;
- has specific tourism development, that is, facilities and equipment (e.g. accommodation, catering, sports and recreation, etc.) encouraging to stay in this area and use its advantages.

These conditions, being at the same time the characteristics of a specific area, determine the nature of the tourist region and the ways of its use by tourists. Each tourist region is characterized by different, generally non-uniform attractiveness. Usually only parts of the region, its fragments, are attractive to tourists, which causes a greater influx of tourist traffic. Other parts of the region fulfill other functions, usually not significant for tourism or leisure (Kornak & Rapacz, 2001).

Due to the existing natural, geographical and spatial or topographic conditions of tourism development, which is treated both as a tourist activity and as an economic activity, mountain areas constitute a tourist region delimited by using a geographical and historical (post-glacial formation) criterion. In face of

the situation prevailing in the mountain rural areas in Poland, an important goal of actions undertaken for the economic development of these areas is the sustainable balance of activities in economic, social, ecological and spatial terms. Mountain rural areas have almost ideal conditions for the implementation of such a specific goal. An unquestionable “golden mean” for the above-mentioned problems of mountain rural areas development is an alternative solution in the form of diversification of economic activity, which in this case consists in combining agricultural activity with tourist, recreational, service, processing and other activities. Then, these areas, treated as less-favoured in terms of the implementation of the agricultural function, may as a tourist region derive benefits from the possessed assets and develop thanks to the attraction of tourist traffic.

### **Creation of a regional tourism brand**

A tourist product can be considered in territorial terms as a complex tourist product offered by a certain area or region. The concept of the product of the area became the subject of the scientists' discussion due to the fact that the geographical area itself is not a market entity offering its own products in a market. In view of the above, the tourist product of the area can be treated as a collection of naturally and artificially produced tangible and intangible goods and other elements included in the overall tourist product of the area (region), which is administered by tourist market entities (e.g. a local government unit, a city, a production and service enterprises, a museum, a sport and recreation facility, a ski resort, etc.) operating within the administrative boundaries of the analysed area.

A clear indication of the features of a tourist product is a guarantee of obtaining a distinction of individual character in the market, easily distinguished from the other products. The difference (a diversified nature) of a tourist product contributes to the positive development of its image, which then allows it to gain and maintain a market advantage over a competitive environment. The creation of a brand is defined as the activity consisting in creating a positive product image different from the substitutes, which is also a simple system of recognizing product features through their traceability.

A brand may be a name, date, symbol, design or combination thereof, created to identify the goods of a given seller or their group and to distinguish them from the competition (definition by the American Marketing Association), (Kaczmarek et al., 2005). A brand product is a product with a unique personality, something that sets it apart from others. The brand allows you to gain an advantage over the competition, highlight the product on the market and make it be chosen by customers. A brand related to a tourist product, and in

particular to an area treated as a tourist product (a tourist product of a region or a regional tourist product), can be understood as an idea of a specific value resulting from the image of the area. The brand referring to the area, and hence the territorial brand, can be considered from the perspective of:

- sender – as a projection of the region's identity,
- recipient – as the image of the region outside its borders,
- product – as a brand of the product produced in the region (Florek, 2017).

The use of a brand brings many benefits that can also be found in the tourist market. Brand management in the tourist services market is also taking special significance for reasons such as the growing importance of tourist services in the economy, the intangible nature of the tourist product, the important role of staff in shaping the quality of services, and the diversity of tourist products (freedom in shaping its structure). In the case of tourism, the essence of the brand acquires a bit different character. On the one hand, the brand may be products offered by entities providing tourist services (hoteliers, restaurateurs, farmers, etc.). On the other hand, using the broad understanding of the essence of a tourist product, the brand can be defined as regions or tourist destinations, or individual tourist attractions (Panasiuk, 2006). Therefore, the tourism brand should be identified with the branded tourist product and understood as the product features perceived by the buyers. From the marketing point of view, a recognizable and distinctive set of functional, material and emotional values, which is important for specific groups of buyers in the purchase process, can be considered as a tourism brand.

Interpreting the tourism brand, two shots should be taken:

- narrow, treated analogically as in the case of brands used in other sectors of the economy;
- broad, related to areas and tourist attractions, as a complex of activities directed to a local or regional tourist product.

Therefore, a tourism brand in a narrow perspective should be associated with the service offer of individual tourist market entities. In broad terms, it concerns regions, towns and individual tourist attractions. In this context, reference to the theory of territorial marketing justifies determining the place as a product (Florek, 2017). It should be added that tourist services, which are a brand in a narrow perspective, may influence the development of brands in broad terms. However, the brand of a given area “in itself” cannot exist. The market success of a given space is possible due to the smaller or larger share of sub-brands existing in a given area.

Branded tourist products can be created and developed:

- in individual categories (types), e.g. as a single service or a package of services (such as an agrotourist product of a selected farm), as a tourist trail (e.g. the Icon Trail), an object or an event (e.g. a harvest festival);
- in certain types of tourism, e.g. as urban and cultural tourism, recreational, active and specialist tourism, rural tourism, business tourism, border and transit tourism;
- according to various concepts of space in which they can be “embedded”, e.g. in the historical and cultural (Silesia, Podhale regions), geographical (Sudety, Bieszczady) or administrative (local government units of different levels) space (Panasiuk, 2006).

However, it should be noted that the share of particular sub-brands in the branding process of the area (region) should be determined individually and modified accordingly to current needs. The choice of the number and type of functioning sub-brands in the process of creation the region's brand depends on the goal that the creator, the originator of the brand's idea, intends to achieve.

Summing up, it should be emphasized that the processes of shaping the brand of a tourist product should occupy an important place not only in the activity of the supply side entities of the tourist market (e.g. agritourism farms, tourist operators), but also in the tourism policy of local, regional and central authorities. Creating a tourism brand of the region through the use of existing tourism sub-brands is one of the ways to achieve the goal such as increasing the competitiveness of the Polish brands in the European and global markets.

### **Tourism brand of mountain rural areas**

Mountain rural areas have a number of favourable conditions for the development of business activity, such as tourism. In rural mountain areas there are many tourist products extremely spatially diversified, which increases their attractiveness. Tourist products of mountain rural areas may have a national, regional or local range. The potential of mountain rural areas and local communities in Poland is huge, but used with varying intensity. There are many tourist attractions around which tourist products with specific characteristics can be created, and consequently, they have a noticeable image and brand (e.g. architecture, especially traditional and wooden, folklore, customs, inns and regional cuisine, fortifications, narrow gauge railways), (Majewski & Lane, 2003).

A comprehensive product of mountain rural areas can be defined as a mountain tourism brand, which is easily identifiable by potential tourists and that stands out from the market offer in a competitive environment. The

mountain tourism brand of Poland is co-created by sub-brands of mountain rural areas, among which both tangible and intangible goods as well as elements of the tourist attractiveness of the area can be indicated. In view of the diversity of the product of mountain rural areas, it is possible to indicate equally diverse types of sub-brands co-creating the Poland's mountain tourism brand. Poland's mountain tourism brand includes the following sub-brands of mountain rural areas:

“Traditional and regional products” – a wide sub-brand constituted by a variety of tourist products, e.g. cheese and other dairy products – bunc, oscypek, żywiecka bryndza (these are kinds of cheese), goat's cheese called “Wołoski” both white and smoked, ready meals and dishes such like kwaśnica or żur łemkowski, etc.

“Mountain tourism” – this sub-brand refers to the characteristic terrain and tourist infrastructure necessary for the implementation of tourism, recreation and sports activities in the mountains (e.g. ski stations and their equipment as part of ski resorts and areas; sports and recreation facilities, hiking, biking, horse-riding tourist routes marked out for diverse needs of tourists; accommodation, gastronomic and a paratourist base, i.e. commercial and service facilities, car parks, medical service points, pharmacies, security issues, etc.).

“Spa values” – a special sub-brand that encompasses resources improving health, such as healing waters, therapeutic muds, thermal springs and other riches occurring in the analysed area.

“The natural and landscape abundance of the mountains” – a sub-brand including such well-known branded tourist products as the Bieszczady National Park, but also Pieniny National Park, Tatra National Park or Karkonosze National Park.

The sub-brand “mountain forests and their functions” – e.g. excellent areas for the organization of hunting, species-differentiated wild game. Mountain forests are also an area of research, an area providing products and semi-finished material in the form of wood, undergrowth, honey. This sub-brand covers all other functions of forests, ranging from economic, educational, environmental, social, recreational and with tourist function ending, all which are fulfilled by mountain forests in Poland.

“Wooden architecture” – this sub-brand occurs in the socio-cultural environment and has living functions for the indigenous people or is covered by legal conservation, e.g. the Museum of Folk Architecture in Sanok (an open-air museum), etc. The sub-brand “wooden architecture” is also co-created by secular and sacred building of different religions.

The sub-brand “Polish hospitality and folklore” includes both hospitality, especially mountain or rural but also customs, habits, religious rituals, costumes and dialects, songs and dances of the Polish mountain village.

“Traditional agriculture” – a sub-brand that is characteristic especially in the mountains. It consists of picturesque agricultural landscape (so-called checkerboard of fields), as well as mountain pastures with the purpose of breeding herbivorous animals that are an attraction for tourists, as consumers of agritourist products.

“Organic farming” – a sub-brand initiated in the early 90s of the twentieth century, has gained recognition both among Polish society, as well as outside of Poland. The general conviction about the high taste, nutritional, health and healing values of some Polish herbs, fruits, vegetables, etc., existed for many centuries among foreigners, and it was based on the exemplary integrity of the Polish farmers and their poverty, which in a natural way excluded the use of artificial agrochemical and agrotechnical procedures (fertilizers, mechanization) in agriculture.

“Agrotourism in the mountains” – is also a well-known tourism brand, both in Poland and abroad. The specificity of this economic activity carried out in Poland differs significantly from the nature of agritourism e.g. in Austria or France. However, this different character, manifested in, for example, smaller than in other countries, the degree of commercialization of products offered by the mountainous village, has a positive impact on the image of Polish agrotourism in the international market. The good position of agritourism in the competitive market has also been shaped by hospitality deeply rooted in Polish society, and above all the culinary arts of the mountainous village, which is a perfect complementary element for the remaining parts of the agritourist product offered by Polish mountain farming.

Analysing the potential of mountain rural areas, one could indicate further types of branded tourist products (sub-brands). Nevertheless, to sum up, it should be pointed out that mountain rural areas are undoubtedly the strong brand of the Polish tourist market.

## **Conclusions**

Mountain rural areas stand out by a specific combination of features that are characteristic both for rural areas and mountain areas. The combination of these features means that these areas are classified as less-favoured areas with unfavourable farming conditions. This situation means that the profitability of agricultural production is in doubt and the population dealing with agriculture is often forced to migrate to seek other sources of livelihood. Thus, mountain rural areas are threatened by depopulation and loss of agricultural character. Hence, the need to support their socio-economic development is underlined.

It should be pointed out that, in addition to direct support programmes for agricultural activity, there is another alternative path to the development of

mountain areas. It involves the use of positive externalities generated by tourism and stimulation of tourism development by local government units. When tourism becomes a development factor, then the given area, apart from the agricultural function, also starts to perform other functions in a wider scope. The agricultural population, thanks to the support of tourist traffic, has the opportunity to obtain additional incomes, which makes it easier to run farms and reduces the propensity to migrate.

For tourism to be able to constitute a strong factor in socio-economic development, local and regional tourism policy should aim to create branded tourist products. One can dare to say that only a strong and recognizable brand is able to ensure that regional tourist products will have a strong competitive position and will constitute a significant stimulus attracting tourist traffic. Creating a strong regional tourism brand is the easier, the more characteristic and specific tourist value that distinguishes the region. Precisely such values exist in mountain rural areas.

The tangible and intangible values of culture and nature, as well as the specific and characteristic tourism development constitute the basis for the functioning of the Polish mountain tourism brand. It is not a homogeneous brand. Partial regional tourist products can be distinguished within it, that was made in the paper. Each of them is a distinctive product in the tourist market, and all together create the strength of the Polish mountain tourism brand.

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# INVOLVEMENT OF SCHOOLS IN THE PROCESS OF PROTECTION FROM DOMESTIC VIOLENCE

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**Abstract.** *Specific activities of the schools, functions and responsibilities delegated by national and international laws lead to an obligation to involve in some criminal proceedings for violence against children in close environment, for example reporting about domestic violence against children to competent authorities, providing them with the relevant data, etc. The aim of this work is to establish schools' obligations relating to information about the possible violence against child in the near surrounding. The tasks were achieved using the following methods: method of analysis of scientific literature, a comparative analysis, method of systemic analysis, the traditional method of the analysis of documents. Additionally, the empiric method was used and deep one-on-one interview with the experts was implemented. The aim was to identify the approach towards the need of school's participation in criminal proceedings regarding violence in the near environment of the persons who are directly familiar with the examined problem. The analysis suggests that the duty to report is often performed defectively, and the application of legal liability for failure to comply with this obligation is ineffective. Different reasons lead to this situation both legal and non-legal: incomplete special legal regulation, lack of legal knowledge, psychological, social and other factors determined by specific activities of schools. Not inadequacy of the legal regulation but its inappropriate implementation is most problematic. Enforcing detailed national as well as schools' local legal regulation, training of all staff, application of special preventive programs, including special measures in to common practices, cooperating with competent institutions are the measures which could lead to the adequate performance of the obligations. Accordingly, schools have human and legal resources to involve in some criminal proceedings for domestic violence against children more actively, especially in reporting about cases of violence.*

**Keywords:** *domestic violence, responsibility of the school, violence against children.*

## Introduction

For the last five years the Law on protection from violence in close environment (Official Gazette, 2011) is implemented in Lithuania. The provisions of the EU Directive on the rights of crime victims (EU Parliament and EU Council, 2012) were started to apply in 2016. According the data of Lithuanian Police Department (Bajorinas, 2016), the registered calls regarding violence in close environment and the number of pre-trial investigations is constantly

increasing: in 2012 – correspondingly 18268 and 7586, in 2013 – 21615 and 10015, in 2014– 29339 and 10374, in 2015 – 38510 and 10703. The criminal activities of that kind in 2015 amounted 14,8 % of the total criminal activities, and this indicator is also increasing comparing the data of the last five years: in 2012 – 9,2 %, in 2013– 10,5 %, in 2014 –12,5 %. In 2015 children most often suffered from violent criminal acts – the generation of physical pain (779 (36 %)), minor disturbances of health (91 (4,2 %)) – which is primarily attributable to the violence in the near environment (Vileikienė, 2016). Of course, these figures firstly show not the increase of violent incidents in the near surrounding, rather the growing number of cases, that become known to law enforcement authorities and criminal proceedings are initiated. However, the prevalence and nature of violence in the family, and there remains raising concern: the numbers decrease, but it should be noted, that these criminal offences are latent, as in most cases the victims do not report about the crime to the police (FRA, 2014). In recent years the most serious forms of violence against children were recorded in previously unknown for institutions, working in the field of protection of the child's rights, families, i.e. not in social risk families. One of the effective factors determining the appropriate implementation of legal mechanisms in the field of the protection from violence in close environment is a successful inter-institutional cooperation: law enforcement officers, social workers, health care institutions, the authorities of the special institutions, specialized assistance centres, non-governmental organizations, professionals in other fields. Educational and training institutions have a significant impact as well on this process. Active cooperation is especially important in protecting particularly vulnerable victims in criminal proceedings - minors: informing the competent authorities about domestic violence in the presence of minors, accompanying minors during survey in the criminal proceedings, providing of relevant data for the case, etc. Various scholars have examined different aspects of involvement of schools in prevention of violence, especially in bullying cases (Whitted & Dupper (2005); Watkins & Wagner (2000); Timm (2015); Parkes (2013); Davis & Davis (2007); Margevičiūtė (2017)), but rarely questions in respect of obligations of the school in connection with the criminal proceedings are discussed.

The object of this research is the obligation of the institutions of formal education to inform the competent authorities about possible events of violence against children. The Istanbul Convention (Council of Europe, 2011), not ratified by Lithuania, – is a modern and comprehensive instrument in the field of protection against violence in the near surroundings, it requires promoting reports about suspected or probable violence against children observed. Therefore, the objective of this work is to establish schools' obligations relating to information about the possible violence against child in the near surrounding. In order to

achieve the raised objective further tasks are settled: 1. to reveal the main responsibilities of schools and their staff, relating to the report on the violence in the near environment; 2. to discover the main reasons of the failure to implement the obligations and to discuss related problems. The tasks were achieved using the following methods: method of analysis of scientific literature, a comparative analysis, method of systemic analysis, the traditional method of the analysis of documents.

In addition to the above-mentioned methods, the empiric method was used and deep one-on-one interview with the experts was implemented. The aim was to identify the approach towards the need of school's participation in criminal proceedings regarding violence in the near environment of the persons who are directly familiar with the examined problem, to identify existing practices, problems and their causes. Survey was performed in six institutions providing aid to children in different towns of Lithuania: one expert from child protection division of the municipal administration, two persons from institutions of the educational assistance, one expert – social educator from general education school, a psychologist and a specialist from a specialised aid centre, where the trainings for the staff of educational establishments in the field of violence in the near environment were held. Experts were selected randomly, considering their professional experience.

### **The obligation of schools to inform about the violence against child in the close environment**

The functions of schools are not limited to education and the provision of education services. Law also obliges schools to secure the environment, preventing from violence in any form. The purpose of the whole education system is to ensure the implementation of the rights of the individual (Official Gazette, 1991). Therefore, the protection of the rights of the child is entrusted to schools in the municipal level, through the development and implementation of violations of child's rights (Official Gazette, 1996). One of the rights of the child, enshrined in both the international and national legislation, is the right to freedom from violence, including from parents, legal guardians or any other person acting as guardian of the child (United Nations, 1989). The Convention on the rights of the child among a variety of other measures for the protection of the said law provides for the obligation to examine cases of violence against children, and to report them to the competent authorities, to investigate and, if necessary, to begin criminal proceedings. The school, in contrast to the other institutions established to protect rights of the child, have a specific form of daily communication and close contact with the child and his family. Therefore, they have a real opportunity to observe and recognize the phenomenon of violence against children, and to provide the

necessary protection and assistance, including the legal, which includes the obligation to inform the competent the authorities.

However, practice shows that the competent authorities get information on violence against children from schools extremely rarely. According the data of the expert (specialist in the department of child's rights protection) in 2015 only one report from educational institutions on child abuse has been presented to the department, other reports were received from neighbours, relatives, the biggest part of the reports were presented by the police authorities. Expert (social educator) pointed out that the school where he is employed has directly contacted police only once. The decision to apply to police institutions was based on the serious nature of the infringement (sexual violence against a child in the family) and clear indications and instructions provided in special regulation in such cases. When rights of children are violated in the near environment, when the child is being violently treated or parents or legal representatives abuse their rights, any person has the right to recourse to law enforcement or other institution, including the child. But for a variety of reasons the child appeals for assistance quite rarely: expert (social educator) pointed out that no child himself has not applied to any school employee in the case of domestic violence. Consequently, the greatest responsibility lies with the adults who are around. The duties of the school in this area can be divided into general and specific obligations.

The obligation of a general nature, set on any natural and legal person, is to protect the child from negative influence of social environment, as well as to provide the necessary assistance (health, social, legal, etc.), support and protection. Legislation establishes the obligation to report to the police and (or) the institutions of national or municipal level protecting rights of the child of the known potential child - victim of crime, and in the case of criminal offences of a sexual nature to do so without delay, and in spite of the rules of confidentiality. Special and more detailed responsibilities of schools and their staff are laid down in special provisions. Any member of the community of an educational institution has an obligation to report about observed violence against children to the head of the school, and consequently the head immediately, not later than the next day, must inform the corresponding state and municipal institutions according their competence, as well as parents (guardians). It should be noted that this provision (in the case of violence against a pupil to notify his/her parents) is not appropriate in the case of violence in the near surroundings. Such an obligation is a surplus (perpetrator knows that there was violence), and in some cases, it may be the opposite of the child's interests (can lead to repeated violent outbreak, the perpetrator can impede the authorities during investigation process). On the other hand, the message to the other parent (not possible perpetrator) in some cases

(especially when the parents live separately) may be logical and appropriate for the child's protection.

Failure to comply with the obligation to report may also be viewed as a violation of the law. Special provisions lay down the administrative responsibility for administrative bodies of teaching institutions for non-communicating the institutions acting in the field of protection of the rights of the child in the municipality level or law enforcement institutions on violations of the rights of the child. And in the case of the most serious offences the criminal liability may be applied. Thus, the non-application of special rules does not necessarily mean that they do not work, however, only the consolidation of legislation does not guarantee neither the proper fulfilment of duties, neither the victims' protection. It is closely related to the reasons why schools do not notify the competent authorities about the cases of domestic violence. According the information provided by the research experts, the reasons why the schools do not inform the competent authorities of the potential child abuse cases in the near surroundings can be distinguished further: the causes of legal nature, of the psychological and social nature, and the reasons and factors determined by the specifics of the operation of the school activities. Further in this research the groups of the reasons indicated above will be analysed, the emerging problems discussed, possible solutions provided.

### **Legal reasons for violations of the obligation to report about violence**

One of the main factors that determines very reserved cooperation of schools with law enforcement agencies reporting on domestic violence cases is the lack of domestic violence regulatory knowledge. The expert of specialized assistance centre, where trainings for teachers in domestic violence were held, pointed out that persons, working directly with children (teachers, kindergarten teachers, social workers), highlighted the need for legal knowledge, required for solving conflict situations. With regard to domestic violence, a number of training participants said they do not know anything about the applicable legislation in such cases. So first of all, the insufficient amount of knowledge of personnel must be stressed: they need to be education on what is domestic violence, to whom it should be reported about the known cases, what legal procedures are obligatory investigating cases of violence and providing assistance to the affected children, what is the scope of responsibilities and legal liability of schools in this process.

Other identified by the experts cause of restraining schools to notify authorities about violence against children in the family, is the question of certainty and adequacy of information. This raises doubts and fears to be accused of defamation. In this case, attention should be drawn to basis of the pre-trial investigation, prescribed by law - probably correct information, "reason to

believe”, “sufficient data on the criminal offense” (Official Gazette, 2000). The legislation does not impose disproportionate requirements on reports gathered from schools on known child abuse cases in the family. In accordance with a reasonable, prudent person standard, the main criteria, under which there is an obligation to submit a report, it is likely correct, sufficient data that provide the basis for the conclusion of possible violence against children.

Another problematic issue that raises doubts about the active intervention and providing information about violence – the scope of protection of private life of the students and their families. This question is relevant also applying various forms of preventive measures (the content of lessons, projects, programs, expert advice and so on.). The right of parents to educate children according to their beliefs is enshrined in national and international legislation. However, it is not absolute: the protection of children from domestic violence is relevant exemption and it is provided directly in the text of the Convention on Human Rights (Art. 8 Par. 2) (Council of Europe, 1950). This right may be restricted in accordance with the law and if it is necessary in a democratic society for the prevention of disorder or crimes, as well as to human health or other rights and freedoms. And although the test allowing restrictions is checked on a case-by-case law of European Court of Human Rights, taking a child from a violent home environment can be regarded as a legitimate aim to intervene in family life in order to protect the health of individuals or other rights and freedoms. Thus, the protected common right to privacy is in competition with other values: the right to disseminate information, the public interest and the protection of others. In this case, there is no rule of automatic supremacy and the test of the optimal balance applies. Of course, the fact of violence against a child in the near environment and all circumstances are not information of a public nature, but communication to the competent authorities of violence against children in the family does not constitute illegal interference in the private life of a person.

The right to privacy includes confidentiality of private information. Legal norms of professional ethics, and various specific legislative requirements pose a confidentiality requirement on school psychologists, social educators, health care professionals. However, this requirement is not absolute. In addition, it does not exempt from the obligation to protect children and defend their rights. This conclusion is supported by the principle of the best interests of the child, implemented at national and international level. The said conclusion also is formed analysing the principle of confidentiality systematically together with already discussed general obligations of the educational institutions: child’s protection, help to the child and family, and so on. Also, this conclusion is supported by the legislation. Article 28 of the Istanbul Convention requires that professional confidentiality rules should not become an obstacle to reporting of

violence to the competent authorities.

In the light of these considerations, a clear, detailed and consistent action plan is needed in case of observed violence against child cases, the list of participating subjects (social educator, psychologist, the class teacher, the child welfare committee and other bodies), and the distribution of specific roles and responsibilities among team members in the institutional structure, including the appointment of coordinating personal, determining of deadlines, giving binding nature to decisions and recommendations. That result could be achieved using the local legislative level: the school board may approve the strategic objectives of school, the annual operating plan, the scheme of domestic violence detection, notification, the child support measures. Those documents could be to introduce to students and their parents. The activity promoting accountability, independent actions of schools would correspond to aims of national educational strategy (Official Gazette, 2013).

### **Other reasons for violations of the obligation to report about violence**

Various psychological and social causes also affect, and often even determine the response and attitude of schools towards violence against children in the close environment cases. Although it is recognized that education carries out its purpose the best if the development of education is far ahead of the general development of the society, however, at least for the present a school is a part of the society, where violence is often tolerated, where beating of children still is the popular method of education (Majauskienė & Paulauskienė, 2007). This can lead to not only an invalid child protection from violence, but it also could cause a failure to comply with other school functions: it is hardly to be expected that a teacher, whom the spouse physically and psychologically abused throughout the night, the next working day will be able to properly perform all of her obligations (the example provided by the expert – psychologist of the school).

Thus, the existing education system (for example, the procedure for appointing the heads of the office, dysfunction of educational aid) is in favor for a situation, when the activities of the education professionals are determined simply by their personal preferences and experiences: a personal initiative, aim to improve, or the experience as the perpetrator or the victim. This is especially important in the case of the leader – the chief management of the school, when some of his/her personal problems, psychological traumas, an approach to the violence in the near environment, gender stereotypes, personal preferences, improper application of management methods (e.g., autocratic management) may lead to the priorities of school activities, methods, the improper practice. The specifics of the activities of the school raises the need for a conducive, enabling leadership when the head is a strategic leader (Skarbalienė, 2015). To avoid the

dependency on the inappropriate personal characteristics of the school leader helps the shared leadership, which is very adequate for educational institutions (Urbinovič & Navickaitė, 2016). Thus, the school employees' personal characteristics have a huge impact on dealing with such a sensitive social issue as a domestic violence against children. Therefore, the personal courage, responsibility, leadership of education specialists are to be achieved and encouraged as more effective assistance for a child measures.

Another group of the reasons, having impact on the school's role in the legal proceedings in cases of domestic violence, are the issues, determined by the specifics of the activities of the school. The experts of this research pointed out that often the decisive criterion in deciding on the possibility of the intervention is the effect on school's finances and reputation. Specific means of legal protection may be related to the change of the educational institutions for the victim, this means the reduction in funding for the former school. The information in the public space can lead to negative consequences for the competitiveness of the school, its rating, the results of the evaluation, public opinion, and thus may end with the decrease of the number of pupils. The competition of schools with each other is connected with limited financial resources (because of the funding, the number of students and the level of skills, etc.). Research show that competing is not a valid method neither for the whole education system, nor for relationship between the schools or teachers, nor it is a proper educational method, and it should be substituted by equally good quality assurance (Sakadolskienė, 2015).

The experts who participated in the study, pointed out that observed cases of violence against children within the family, neither during the internal, nor during the external assessment process were not considered as quality indicators of school performance, and even if they were noticed, they would have rather been pointed as a negative, but not a positive aspect of the school's reputation. In addition, set formal indicators of the aid for a pupil, are often such that in order to measure them complex and large research is needed (for example, the security level of the pupils, the level of school's awareness of pupils' social problems, etc.). Therefore, the identification of violence and intervention, cases of providing aid should be considered as one of the indicators of the quality of the school activities. Of course, not the quantity, but the content of the services provided should be evaluated. However, at the present moment the measures for prevention and aid for victims foreseen in the state regulation are evaluated in terms of appropriations and the number of personnel involved in the events (for example, trainings), but their quality and effect remain underestimated. This indicates that the orientation of the educational system towards the child is more declarative than real. Therefore, the offer foreseen in the good school conception not to overestimate the evaluation of schools and not to make it more important than the evaluation

of the mission of the school (Minister of Education and Science, 2015) is highly welcomed.

To sum up the nature of not legal factors, it should be stressed that the decisions and actions of the schools in violence against children within the family cases though formally may not be led by any other motives other than the safety and wellbeing of the child, and the priority of his/her interest, in reality may be influenced by different social factors. The recognition of violence against children in the family and information of the competent authorities, the initiation of a comprehensive assistance is necessary in order to ensure the protection of the rights of the child, to conduct properly the obligations assigned to schools and their employees, to implement State's international obligations.

### **Conclusions**

Due to the nature of their activities, the delegated by national and international legislation functions and responsibilities the schools have a responsibility to participate in certain actions of criminal proceedings on violence against children in the near environment: for example, to report on the alleged cases of violence to the competent authorities, to provide the relevant data in the case to law enforcement authorities, and others. The performed analysis enables to make a conclusion that often the school obligation is carried out incorrectly, and the application of legal liability for failure to comply with this obligation is not effective. This situation is resulted by the legal causes, in particular the insufficiency of knowledge of the foreseeable regulatory environment. The obligation to report about any child abuse event within the family occurs, and, properly implemented, is not in competition with other responsibilities: protection of private life, the request of the confidentiality. To remove the irregularities made by the failure to act would be possible educating all levels of staff (teachers, education sector workers, as well as the heads of the bodies of the schools, children and their parents), implementing special preventive programmes. The other reason of the legal nature of not properly reporting about the violence towards the children in the close environment – incomplete special legal regulation: there is a lack of the algorithms in response and intervention to violence, insufficient legal regulation of the activities of psychologists, therefore it is required to adopt a clear, detailed and coherent plan of actions, a list of the participating entities, the allocation of specific functions and responsibilities, activities, methods, setting the terms, complexity and specificity of the aid to the victim of violence. Lack of a comprehensive state regulation and its negative effect may be facilitated by the internal decisions of the schools' administration and the community, cooperation with the competent authorities. No less significant are other reasons of failure or improper performance of obligations:

psychological, social (tolerance of violence, unsuitable management methods), and other factors that determine the specifics of the activities of the school (poor funding, performance measurement system, the improper competitive environment of the education system). Therefore, the devoted, enabling, shared leadership should be encouraged among school community. In addition, the granting of the need for aid and providing such aid for the children suffering from violence in their families should become a measurement of the school activity, and such activity should be encouraged and appreciated. The analysis confirms the stated assumption that the problem is not the regulatory dysfunction itself, but rather improper implementation of the regulation. The schools have human and legal resources to more actively engage in the criminal proceedings, and in particular initiating the process, and thus to increase the protection of the rights of the child.

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## CERTIFICATION CRITERIA MATRIX FOR EXPERT RATING OF PROFESSIONAL SERVICES

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**Abstract.** *In the Latvian certification system of individuals, there is necessary to ensure appropriate process realization in the interests of public protection and government needs, which gets incorporated into the EU common structure. An assessment of the certification system and its institutional structure is done with the aim to develop proposals for the improvement of the Latvian certification system for reducing costs, while ensuring both high system efficiency and recipients services and the public interest. To achieve its goals, the research study provided a summary of the situation in Latvia, as well as in the neighbouring countries: Lithuania, Poland, Estonia and Finland. During the research study, there were used both the secondary and the primary sources of information. Primary research was carried out in Latvia and consisted of two parts: expert interviews and focus groups. The results of the research are guidance to the overall approach and the criteria by which to guide one in the future, for setting which professional service providers require a mandatory certification. A matrix was made in the process of the research, which helps to define a certified profession, taking into account the need to protect the public interest and the level of national involvement in the regulation of specific areas of professional services.*

**Keywords:** *certification, regulated and non- regulated professions, risks.*

### Introduction

In the Latvian certification system of individuals, there is necessary to ensure appropriate process realization in the interests of public protection and government needs, which gets incorporated into the EU common structure. The research study was done within the framework of a project “Support for the Implementation of Structural Reforms in the Government” administered by the State Chancellery.

There are regulated and non-regulated occupations. (On Regulated Professions and Recognition of Professional Qualifications; Article 1, Paragraph 12.). So, there can be separated two types of recognition of professional qualifications:

- “De jure” professional recognition of regulated professions. To be eligible to work in these occupations, the national legal acts (laws of the Republic of Latvia, the regulations of the Cabinet of Ministers or the ministerial normative documents) state that the person must have

documents confirming the recognition of educational and professional qualifications.

- “De facto” recognition of professional non-regulated professions. In this case, the employer and / or professional organization is in need of information about the applicant's qualifications.

The object of the research study is both regulated and non-regulated occupations.

Regulated professions covered by the research study: security staff, architects, competent specialists of occupational health and safety, detectives, building, road and bridge construction professionals, surveyors, real estate appraisers. Non-regulated professions: dangerous machinery safety specialists (experts), energy auditors, accountants, geodesists, cartographers, real estate agents (brokers); land installers, tourist guides.

**Aim of the research study.** The assessment of the certification system and its institutional structure is done with the aim to develop proposals for the improvement of the Latvian certification system for reducing costs, while ensuring both high system efficiency and recipients services and the public interest.

**Materials and methods.** The research design of the evaluation was a mix of qualitative and quantitative methods for data acquisition and analysis. Within the framework of this evaluation, an analysis was done on certification and accreditation documents and secondary data, interviews with key stakeholder groups, as well as an analysis of the focus group and other Member States' successful experience.

Table 1 **Research design of the evaluation** (source: created by the author)

Accordance, utility and professional competence evaluation of certification and accreditation		
1. Secondary data analysis 75 quantitative indicators 48 document analysis in Latvia	2. Interviews 30 structured interviews 15 qualitative indicators	3. Focus group and case analysis - method of participation in the focus group - 4 foreign experience analyses
The purpose of the assessment		
Objective 1 – To evaluate the accordance of the compliance assessment system with the protection of the legitimate interests of the society Objective 2 – Present proposals for its maintenance or activities to increase the efficiency of particular service areas or the provision of separate services.	Objective 3 – To develop recommendations for improving the organization of certification and the accreditation system in Latvia Objective 4 – To develop proposals for common criteria for its implementation or maintenance Objective 5 – Create a universal matrix for evaluation of certification necessity	

The evaluation methodology consists of three successive stages of data collection and analysis: (1) analysis of secondary data; (2) interviews; (3) focus group and case analysis. These steps are subordinate to the evaluation objectives. The first two stages examined the accordance of the certification system, the quality and usefulness of implementation and management. However, at the third stage, there were developed proposals for improving the implementation of the certification system and a strategic discussion on its implementation.

At the first stage - the analysis of secondary data - documents related to the accreditation requirements for certification institutions and additional requirements, as well as the available statistical (quantitative) indicators, were collected and analysed. The primary goal of this phase was to collect and compile information for accomplishing the first three evaluation tasks, but the secondary goal - to contextualize the interview questions suggested in the evaluation according to the situation in Latvia. At the second phase, structured interviews were carried out with key group members involved in accreditation. At this stage, the information was supplemented to answer the questions of evaluation that were in line with the first two evaluation tasks.

At the third stage, a focus group and case analysis was carried out to make proposals for improving the programme based on the focus group and case analysis. Successful experience from other countries was viewed based on successful examples of activity implementation policy. Significant members involved in the programme were invited to take part in the focus group. Using participatory and creative methods, the focus group verified the key conclusions of the evaluation and made suggestions for improving the programme.

To achieve its goals, the research study provided a summary of the situation in Latvia, as well as in the neighbouring countries: Lithuania, Poland, Estonia and Finland. During the research study, there were used both the secondary and the primary sources of information. Previous research studies, databases and Internet resources, which can provide the necessary information about the certification principles, criteria, institutions, costs, etc., were used as secondary sources of information.

Primary research was carried out in Latvia and consisted of two parts: expert interviews and focus groups.

Primary investigation has obtained the arguments and facts about the system of certification in Latvia and possible improvements to increase the system functionality and reduce costs.

## **Results**

As a result, there was summarized the information about institutions involved according to the evaluation system, duties and responsibilities of the

accredited accordance evaluation institutions or representatives of the certified professions in each country analysed in this research. The Latvian system was compared with the certification systems of Estonia, Lithuania, Poland and Finland. The responsibility of certification in Latvia is carried out by “Standardization, Accreditation and Metrology Center” Ltd., which consists of three structural units - standardization, accreditation and metrology offices, which are the basis for the national quality assurance infrastructure. Accreditation is obligatory for those institutions that are determined by law or by the Cabinet of Ministers, but for non-regulated professions it is voluntary, i.e. the desire of the organization itself. Basically, the accreditation process in Latvia monitors how are evaluated such factors as: 1. Education; 2. Competence (academic and practical); 3. Experience; 4. Legal status; 5. Resources required for the provision of the service; 6. In addition, the certification procedure carried out by the certifying authority is evaluated.

In Estonia, however, the certification of professions is carried out by the Estonian Qualifications Authority. There are, in total, 16 sectors or groups of professions that are monitored by the administration. Each sector is supervised by the sector council. The sector council appoints a certification organization, which participates in competition, organized by the council. The organization winning this competition earns the right to carry out certification for five years.

In Lithuania, the certification system is formed by the Lithuanian Qualifications Framework, which has different levels of qualification that characterizes the individual's level of competence. This framework is aligned with the European Qualifications Framework. There are 29 regulated professions in the Republic of Lithuania (compared with 91 in Latvia).

Almost all the professions studied are regulated in Poland. The only exception is competent specialists of work safety, which is an unregulated profession.

Each of these certification processes involves four sections. First of all, the monitoring institution, which in most cases is the ministry responsible for the field. Second, the institution that directly manages and organizes the certification process. Third, the law. Finally, the fourth phase is the target audience. As a target audience, there can be two - legal entities and individuals – and in most professions both exist, and not just one.

In Finland, the practice and knowledge of the profession can be gained in educational institutions, as well as in practice, through a six-month process at the workplace, during which the trainee acquires the skills necessary for the job market. For example, vocational secondary education is sufficient to qualify as a trainee or apprentice. You can then qualify for a higher secondary vocational qualification by completing a competency test. Similarly, adult education and training are based on norms regulated by a separate law. Students can then go to

universities or polytechnics, which are more job-oriented. There are a number of regulated and unregulated professions in Finland. As regards regulated professions, there is a need for an appropriate level of education and a certain degree of qualification.

The analysis resulted in guidelines for optimal distribution of duties and responsibilities among state, private and public organizations. As the results of the research, there is provided guidance to the overall approach and the criteria by which to guide one in the future, for setting which professional service providers require a mandatory certification. There has been made a matrix, which helps to define a certified profession, taking into account the need to protect the public interest and the level of national involvement in the regulation of specific areas of professional services.

A risk analysis and assessment was carried out as the first step in the development of certification criteria. One can distinguish two probabilistic risk methods:

- The objective of the event is based on the given repetition frequency calculation;
- The subject is based on personal experience, an expert assessment consultant's opinion.

The certification system and the potential risk calculation are very difficult and often impossible. Therefore, this research study used a subjective method of using expert and consultant ratings. In total - 15 specialities were considered and 22 risks assessed. The lowest ratings for risks were: international risks; national, ecological and technogenic risks; technical and insurance risks. The most frequently encountered are: subjective; economic; tax and legal risks. Most risky professions: security specialists of dangerous equipment; people involved in construction of buildings, roads and bridges.

The potential risk to mitigate the impact of specific countermeasures is needed to provide the necessary protection. The most important mitigation measures identified in the analysis of international and Latvian research studies showed were as follows: education; insurance; work experience; monitoring and control.

The education criterion exists in all the Member States and applies to all professions which are certified. On various occasions, general or special education is used as criteria, as well as various educational levels: secondary and higher education. There are countries where the gained suitable education from the state view point is considered to be sufficient proof of professional ability to work in their chosen profession, as it is, for example, in Finland.

In spite of the right to work in the acquired speciality, also the non-regulated occupations often use the certification. In such cases, it works on a voluntary basis and is conducted by professional organizations such as associations or chambers

of commerce. Often in such a situation, both the public and the local government bodies are involved in the process of monitoring the service quality. Local governments are involved in cases where the service is associated with a specific territory, as it is, for example, architects, real estate agents, tourist guides. Public bodies are significantly less involved in the supervision of service quality provided by unregulated professions, and it is done mostly through the consumer protection system.

Insurance is often used in risk protection. Liability insurance is a versatile tool that provides protection of the recipient, especially financial. In the profession assessment or certification/noncertification decision making, there are recommended several matrix options. They many have possible modifications. Based on the research study's analysis, you can change the determinants of risk indicators.

A simple risk assessment leads to conclusion that most professions are subjects of tax, economic, legal and political risks. Life and health risk doesn't matter in many professions, but the focus group participants believe that it is one of the main certification / non-certification criteria:

- |                                   |                         |
|-----------------------------------|-------------------------|
| 0- risk is impossible;            | 3- there may be a risk; |
| 1- risk cannot be excluded;       | 4- risk is very likely. |
| 2- risk is probably half (50/50); |                         |

Education is a key component of anti-risk measures. Accreditation is only one of the possible ways for improvement, so this criterion is expanded as “requirements for education”, where: 0 - no demands; 1 - primary education; 2 - secondary education, courses; 3 - first level higher education; 4 - second level higher education, a master's degree.

The Law of Free Service Provision (Free Service Provision Law; paragraph 1, point 10), points out 14 public protection measures to be carried out by its performers. Ratings are associated with the degree of realization of these measures: 0 – do not exercise; 1 – 1 to 3 protective measures; 2 – 4 to 6 protective measures; 3 – 7 to 9 protective measures; 4 – 10 to 14 protective measures.

One of the ways to improve the attitude towards work events is the use of a code of ethics. This is especially appreciated by the Western European countries, but Latvia it is included in paragraph 3, point 5 of the Law “On Regulated Professions and Recognition of Professional Qualifications” as an Additional Requirement for Regulated Professions. Evaluation: 0 – absent; 1 – has been prepared but not implemented; 2 – is in the association as advisable; 3 – is in the association as a mandatory requirement for all; 4 – is included as a requirement of the legislation.

Table 2 **Matrix** (source: created by the author)

Matrix	Risks				Total risks A=I+II+III+IV V	Anti-risk measures				Total anti-risk B=VI+VII+VIII+IX X	Valuation B-A
	Health/ life	Finance/ tax	Commercial/ economic	Legal		Education requirements	Protecting the public	Insurance coverage	Code of ethics		
0	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Architects	3	4	4	2	<b>13</b>	4	0	0	0	<b>4</b>	-9
Guards	4	1	3	3	<b>11</b>	2	2	4	3	<b>11</b>	0
Geodesists	1	2	2	2	<b>7</b>	4	0	0	0	<b>4</b>	-3
Dangerous equipment security experts	4	2	2	2	<b>10</b>	0	3	0	1	<b>4</b>	-6
Occupational Health and Safety Specialists	4	2	1	3	<b>10</b>	4	3	4	0	<b>11</b>	+1
Detectives	3	2	2	3	<b>10</b>	4	3	0	3	<b>10</b>	0
Accountants	0	4	4	4	<b>12</b>	3	3	0	2	<b>8</b>	-4
Surveyors	2	2	2	3	<b>9</b>	4	0	0	0	<b>4</b>	-5
Tourist guides	1	1	1	0	<b>3</b>	3	2	0	0	<b>5</b>	+2

It is possible to expand the range of both risk and anti-risk measures. For example, for architects, the “impact in time” is a significant risk. It can be divided as “0 - none, 1 - up to a month, 2 - to year, 3 - 1-5 years, 4 - more than 5 years”. On the other hand, in the anti-risk measures, the matrix can be supplemented by the “State supervision” popular in Latvia and the “Municipal supervision” more used in comparable countries.

The matrix shows the calculation logic, however it is clear that a risk assessment is not and cannot be so simplified. Therefore, an accurate risk assessment follows this sequence and conditions:

1. Matrix is added to a number of peer reviews, with the size and significance of the risk determination for each profession. For, example:

Table 3 **Multiple expert assessment Matrix** (source: created by the author)

Profession	Expert I			Expert II			Expert III			Weighted average
	Risk amount	Notability	Weighted value	Risk amount	Notability	Weighted value	Risk amount	Notability	Weighted value	

For the risk assessment according to probability (risk value) and the degree of effect (the importance), experts use the following values:

Table 4 **Risk assessment probability and degree of effect** (source: created by the author)

Evaluation system	Risk probability	Risk effect
4	The risk is very likely	Catastrophic
3	Risk is possible	Critical
2	The risk is probably half 50/50	Serious
1	Risks cannot be excluded	Minor
0	Risks cannot be	Minor

2. Qualitative and quantitative risk analysis and evaluation. This research study employs qualitative analysis, because, for quantitative analysis, it is necessary the assessment of occurred risk in terms of money. To use this exercise, it requires a lot of financial information that the author of this research study did not obtain.

### 2.1. Risk qualitative analysis.

It does not give an accurately measurable risk value, but allows you to set the priority risks (ranked in order of impact amount). It is based on the nominal or descriptive scales, which include the possible consequence analysis, viewing two dimensions - risk probability and risk consequences. (Working Environment Risk Assessment Guidelines, 2003)

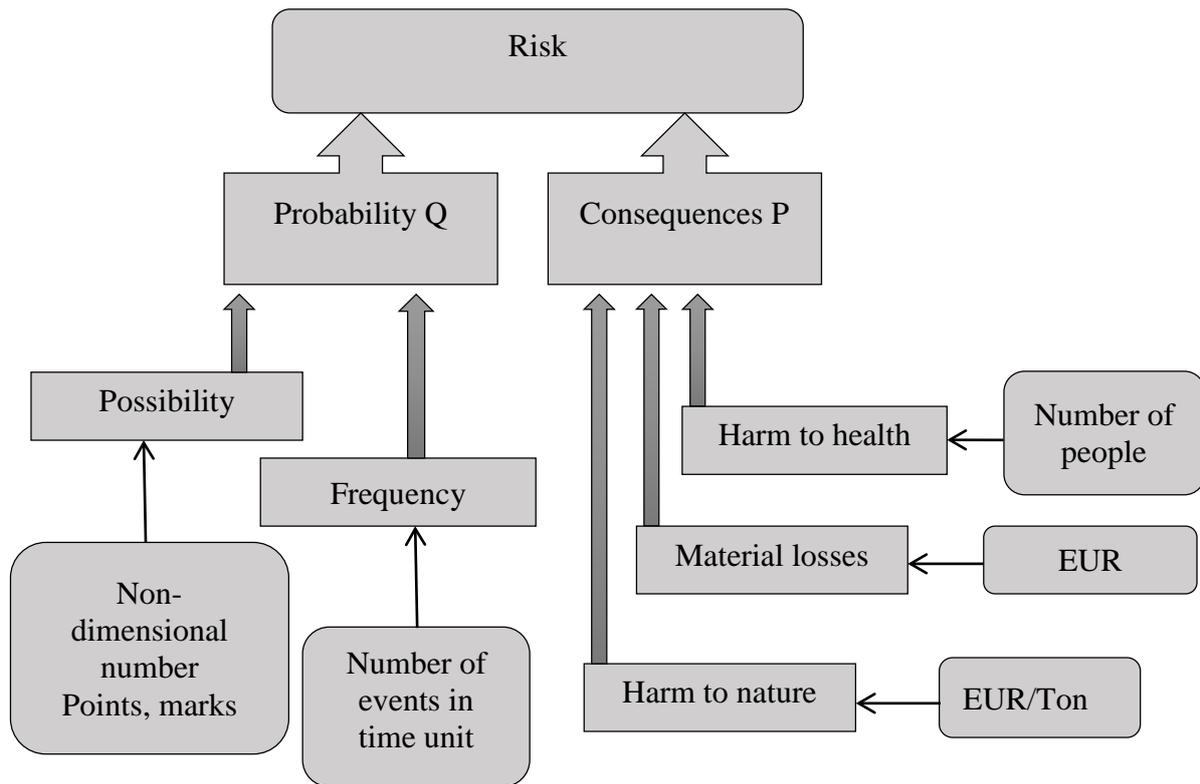


Fig.1. Components of risk assessment - probability and consequences  
(Darba vides risku novērtēšanas vadlīnijas, 2003, 17)

1st variant.

Table 5 An example of a qualitative analysis of risk (Vellers, 2012)

Probabilities	Consequences				
	Insignificant	Little	Medium	Big	Catastrophic
Almost sure	Medium	Medium	High	High	High
Quite possible	Low	Medium	Medium	High	High
Possible	Low	Medium	Medium	Medium	High
Low possibility	Low	Low	Medium	Medium	High
Rarely	Low	Low	Low	Medium	Medium

In Table 5, the interaction of probability and consequences can be traced, which is wider than the evaluation offered in Table 4. Multiplication of probabilities and consequences is the expected value of risk (or risk value). However, it is the average value i.e. if you run an activity several times, the risk can sometimes appear and sometimes not. Therefore, Table 5 was offered to the experts for the initial evaluation, the average results of which are shown in Table

2nd variant.

Table 6 Risk Assessment Matrix (Melbourne University, 2003)

Identify the danger	Risk Assessment			Rating (R=ExVxS)	Risk level
	Exposition (E)	Probability (V)	Consequences (S)		

This method, in practical application, forms the following risk assessment (Table 7), where: K - catastrophic or extreme risk when shares are needed immediately; L - high risk, intervention of the work protection specialists is needed and a plan of activities is required; V - average risk, security measures must be specified, priorities must be set; M - low risk, order is necessary in work management and work protection. The method we recommend to regulated professions for their risk assessment.

Table 7 Definitions of Risk Assessment Matrix (Melbourne University, 2003)

Exposition (E)		Probability (V)		Consequences (S)		R
Continuous	10	No doubt	1,0	Catastrophic	20	<b>K &gt; 20</b> <b>L &gt; 10</b> <b>V 3 - 10</b> <b>M &lt; 3</b>
Often	6	Possible	0,6	Big	10	
Sometime	3	Probable	0,3	Medium	5	
Rarely	2	Small	0,1	Small	2	
Very rare	1	Very small	0,05	Insignificant	1	

The risk management model (required activities) can be applied for qualitative risk evaluation on a 5 point scale. The model was developed in Finland at the Tampere University of Technology and is often used to assess the work environment risks for companies with relatively simple technological processes of production.

3rd variant.

Table 8 Risk assessment matrix II (Melbourne University, 2003)

Possibility of a risk	Risk consequences		
	Low danger	Danger	High danger
Not possible	<b>Insignificant risk I</b>	<b>Acceptable risk II</b>	<b>Tolerable risk III</b>
Low possibility	<b>Acceptable risk II</b>	<b>Tolerable risk III</b>	<b>Insignificant risk IV</b>
Possible	<b>Tolerable risk III</b>	<b>Insignificant risk IV</b>	<b>Unacceptable risk V</b>

4th variant.

R. Simon, a Professor of Business Administration at Harvard Business School, offers an interesting approach to long-term risk assessment (Simons, 1999). The method is named the Harvard business risk calculator. The calculator indicates weaknesses which can contribute to the increasing risks and points them out for the management of the organization. The calculator is not a precise methodology, and its results only indicate the direction.

The Harvard Business Risk Calculator covers three internal weak points: growth; culture; information administration.

Table 9 **Harvard Business Risk Calculator** (Vellers, 2012)

<b>Growth</b>			
Pressure on work execution	Growth rate	Lack of leadership experience	
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	Result (sum)
<b>Culture</b>			
Reward for entrepreneur ideas	Leadership resistance to bad news	Internal competition	
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	Result (sum)
<b>Information administration</b>			
Transaction complexity and speed	Disadvantages in diagnostic execution assessments	Decentralized decision-making level	
1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	Result (sum)

Harvard Business Risk Calculator: 9-20 points: a safe zone; 21-34 points: a precautionary zone; 35-45 points: a dangerous zone.

2.2. Risk quantitative analysis. Quantitative risk assessment is based on mathematical methods, using the principles of probability theory, algorithms, empirical coefficients, functions, methods of analysis, as well as a variety of software programs. Risk quantification is the assessment of the risk event occurrence in terms of money. To use this evaluation, it requires extensive financial information that the author of this research study was not available to acquire.

3. The anti-risk measures. It should be noted that risk cannot be transferred, but can be divided.

Dividing ways: insurance; outsourcing; joint venture; franchise.

Possible additions are carried out to risk assessment analysis, but in the proposed Matrix, the second section - anti-risk measures are important. It should be noted that the risk cannot be transferred, but can be divided.

Insurance offered in the Matrix.

There is no standard list of risks that are worth to insure because the priority risks vary depending on the company's activities and specifics. Insurance is often a cost-effective risk management method, as it provides protection against the risk of a price that is lower than the risk value.

Typical risks to be insured are: threats to property (fire, storm, vandalism, etc.); loss of income (strike, fraud, etc.); accidents; environmental pollution; professional responsibility.

Matrix offered insurance, which provides for three types of insurance: Accident, Environmental Pollution, Professional Liability. However, a further analysis is required here, where the main aim is for the insurance to be lower than the price of risk. Otherwise, the insurance will not have an expected effect.

There is also carried out an initial redistribution of risk between the public and private partners. In the case of the research study, it may also occur between the state, municipalities and the private partner. The Latvian accreditation and certification system provides public and private responsibility in risk management. Only in one case (tour guides), it is entrusted to the municipalities. Redistribution of risks is also possible in this aspect.

## **Conclusions**

Recommendations are developed to assess risks and compare the experience of different countries.

- It is advisable not to regulate some of the currently regulated professions (architects, building, road and bridge construction professionals, real estate appraisers).
- It is desirable to reinforce the role of education in the evaluation of professions (architects, dangerous machine safety specialists, energy auditors, building, road and bridge construction professionals, geodesists, land installers, surveyors, accountants).
- For certain professions (security staff, accountants, tourist guides) the process of certification can be divided into degrees, levels.
- For professions such as architects, building, road and bridge construction professionals and real estate agents (brokers), a mandatory requirement for civil liability insurance cover has to be introduced.

A country comparison has revealed differences and similarities and good examples that could be taken over:

The security certification systems are similar in all the countries analysed in the research study. However, it is necessary to differentiate security personnel according to the degree of danger and the necessary knowledge. The existing certification system in Latvia is suitable for security personnel who uses firearms. However, security guards are also, for example, museum hall supervisors who do

not need a full security training programme. Therefore, it is advisable to take over the certification system for security staff in Estonia and divide it into several levels, setting educational requirements for each level according to the range of work duties.

In general, the certification system for architects works in most of the analysed countries. The used systems are very diverse - from strictly state-regulated (Poland) to completely liberal (Finland), where the architect's diploma is also regarded as proof of competence and skills. Currently, Latvia is operating a system, within the framework of which the process of certification is held by the Latvian Association of Architects. However, a number of weaknesses have been identified in this system. The main problem is that the certifying and supervising institution is one and the same. The solution would be the involvement of a third party, which could be a state institution controlled by the Ministry of Economics that supervises the construction sector. A similar situation is also with the certification of other construction specialists.

In Estonia, the certification of dangerous equipment security specialists is carried out by a public organization, but in Poland – a state organization. In Lithuania, the activities of this profession are not regulated, while in Finland and Latvia, the employer is responsible for work safety when personnel is handling dangerous equipment. In all the countries analysed, except for Latvia, one of the main criteria for professional activity in this field is education, indicating that it have to be the higher. In Finnish companies, most of the employees have a master's degree and a doctor's degree, the lowest acceptable level of education for working with dangerous equipment is the bachelor's degree in the particular specialty.

Lithuania and Poland do not provide for the certification of competent specialists in labour protection. There is no such a procedure in Finland, but special attention is paid to the employer's responsibility. In Estonia, only health professionals are certified. Latvia is the only one of the countries that are analysed in this research study, where there is certification and accreditation of competent specialists in labour protection.

In the analysed countries, there is no unified approach to detective certification. In Estonia and Lithuania, this profession is not regulated by law and certification is not required. In Finland, the most important aspect is education, and only in Poland it is necessary to take a special examination to become a detective. The Detective Activity Law was adopted in Latvia, but only documents are evaluated in the process of certification.

In Estonia, Latvia and Lithuania, the certification of accountants is carried out by public organizations, in Poland - by a state institution, in Finland - by the Chamber of Commerce. In all the countries of this research study, accountants are

required to have a certain level of education. As the basis for the change, the Estonian system is recommended, where accountants are divided into 6 levels.

In Estonia, Lithuania and Poland, the profession of tourist guides is regulated and certification requires obtaining certain education and a test of knowledge. In Finland, this profession is not regulated. Several studies have been devoted to the profession of tourist guides in Latvia and its certification problems. Compared with the other countries analysed in the research study, Latvia has chosen an unconventional way - the issue of certification of tourist guides is entrusted to the municipality. The recommendation is to take over the most significant experience from Lithuania and Estonia. In Lithuania, tourist guides have three categories. In Estonia, tourist guides are divided into 10 levels. In Lithuania, the government, but it can also be the municipality, approves a list of museums and cultural objects, in which only state-licensed guides may work. Financially, the certification process is supported by the Tourism Fund.

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## DEVELOPMENT OF FINANCIAL LITERACY IN LATVIAN STUDENTS

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**Abstract.** *The development of the information and communication technologies goes hand in hand with changes in the financial environment, development of the offering and opportunities, and an ever increasing necessity for financial education to develop and advance in the schooling sector. It is therefore essential for school curricula to include the acquisition of knowledge and skills which support the development of financial literacy in order to assure that students are able to take care of their financial wellbeing in the future.*

*The main aim is to find out what financial skills Latvian students need to develop in order to improve their financial literacy.*

*Based on research studies conducted by other researchers, the research study is being conducted to look for the necessary skills and knowledge which financial literacy comprises and which might assure financial wellbeing in the future regardless of the constant development of the financial environment. The data of the Financial Module of the year 2012 OECD PISA study, in their turn, are used to analyse the financial literacy of Latvian students at the age of 15 by finding out the knowledge and skills students in Latvia have with regard to finances. By calculating the percentage of students able to solve the tasks given to them, the research study analyses which tasks Latvian students find difficult and which ones are easy for them.*

*The research study explains what knowledge and skills financial literacy comprises. The results show that Latvian students find analytical tasks difficult, i.e., tasks which require substantiation of their opinion, whereas they find it easier to deal with tasks where use of mathematical skills is sufficient.*

*The possible reasons for the current situation are provided and suggestions for improving it are offered in the research study.*

**Keywords:** *financial education, financial education management, financial literacy, students' achievements*

**Acronyms:**

*ICT – Information and Communication Technologies*

*OECD - Organisation for Economic Co-operation and Development*

*PISA – Programme for International Student Assessment.*

### Introduction

Financial literacy is among the key skills in life in the 21st century which students must have nowadays in order to secure their wellbeing in the future

(OECD, 2014b; APEC, 2012; Clark, 2009). The listing also includes such competences as understanding the world, understanding health, ICT, critical thinking, creativity and strong working ethics (Clark, 2009).

The development of the information and communication technologies goes hand in hand with changes in the financial environment, development of the offering and opportunities, and an ever increasing necessity for financial education to develop and advance in the schooling sector. It is therefore essential for school curricula to include the acquisition of knowledge and skills which support the development of financial literacy in order to assure that students are able to take care of their financial wellbeing in the future.

On February 2014 a memorandum on implementing a strategy for developing financial literacy (2014-2020) was signed in Latvia in order to promote the gradual increase of the financial literacy rate of the population. Partners who signed the memorandum have been involved in several activities during the past few years, mainly focussing on developing various materials and making them available in the public space, organizing seminars and other activities. However, these activities don't belong to compulsory education and don't reach all students at schools.

The main objective of the research is to find out what financial skills Latvian students need to develop in order to improve their financial literacy. Based on previous studies conducted by other researchers, our research is focused on the necessary skills and knowledge which financial literacy comprises and which might assure financial wellbeing in the future regardless of the constant development of the financial environment. The data of the Financial Module of the year 2012 OECD PISA study, in their turn, are used to analyse the financial literacy of Latvian students by finding out the knowledge and skills students in Latvia have with regard to finances. By calculating the percentage of students able to solve the tasks given to them, the research study analyses which tasks Latvian students find difficult and which ones are easy for them.

## **Material and Methods**

The research study includes a review of sources devoted to financial literacy to analyse the definitions of financial literacy offered in the literature and to look for the specific knowledge and skills which financial literacy comprises.

The second part of the research study includes an analysis of the financial literacy performance of Latvian students within the OECD PISA 2012, based on the ability of the students to solve tasks of specific content, context and process, along with conclusions. It was the first PISA cycle that evaluated financial competencies of Latvian students. The next evaluation will be held during PISA 2018, providing possibility to compare data of these two research cycles and to

develop conclusions and comprehension whether the steps that have been taken so far in financial education have made some improvements.

The OECD PISA includes an assessment of how much the students who are about to complete the lower secondary school have acquired the knowledge and skills necessary for comprehensive participation in social life as well as an evaluation of the ability of the students to analyse the experience gained during their studies and to apply it in various situations in life outside school and in their further studies. The targets of the OECD PISA are to help develop and implement an evidence-based education policy and national education reforms to facilitate the labour market and competition. This is why a range of research studies are conducted and internationally fully verified and comparable databases are created for use in analyses leading to recommendations which can be used in education (Kangro et al., 2015).

The OECD PISA's target audience is students aged between 15 years and three full months and 16 years and two full months and studying in the seventh or higher forms of any type of educational institutions within the respective country at the time of the testing. This age range has been chosen to make it comparatively easier to include the students in the study sample based on their year of birth, without considering particular birth date of participant.

Approximately 29,000 students representing about nine million fifteen-year-old students of 18 member states (13 OECD states and five partner states) participated in the Financial Module of PISA 2012.

In Latvia, 970 participants from 215 schools took part in the financial module in Latvia, and, of these, 84 % were students of form 9, and 12 % were students of form 8. Within two hours, each student taking part in the financial module had to fill out one of the four different brochures testing financial knowledge and containing different arrangements of the clusters. Each brochure included four clusters of tasks: two clusters of financial tasks (40 tasks in total), one mathematical and one reading task cluster. Also a brief survey about the experience of the students in money matters was included (Kozlovskā, 2018).

## **Results and Discussion**

In the definitions found in the literature, financial literacy is mainly associated with ability to use own knowledge and skills in making decisions which influence financial wellbeing (Remund, 2010; Cackley, 2011; Thiessen, 2014; LKA; 2012). This is an essential aspect which characterises any competence. It is important for an individual to be able to use their theoretical knowledge, understand their meaning, and to be able to actually apply it in their daily life. Skills and knowledge have significance only if we know how to use them expediently and handle them in the respective situations. However, these

definitions emphasise only the use of knowledge and skills, leaving out the significance of the knowledge itself and of the motivation to use the knowledge to improve not only one's own wellbeing, but also that of the entire society.

There are also definitions which have a stronger emphasis on the financial concepts and understanding them (LKA, 2012; Huston, 2010; Thiessen, 2014; Akdag, 2013). It is essential for an individual to understand the financial concepts because that is the only way of being able to analyse situations and understand them, but it is not enough. Simple understanding of financial concepts does not mean that the individual is able to use them in his/her daily life.

Management of money is also mentioned as a key element of the definition of literacy, but, even though it is of great importance, financial literacy does not mean efficient management of money only (Huang et al., 2013; Akdag, 2013). It is a very simple and primitive way of defining financial literacy, without going into more profound explanations.

The author believes that such definitions are incomplete, and, therefore the definition offered by the OECD will be used for the purposes of this research study, as the author believes it to be the most complete and to include all the aspects of financial literacy. Thus,

***Financial literacy is knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life.*** (Kangro, 2014; OECD 2014a; OECD, 2014b).

Previous studies have led to conclusions that financial literacy should be mastered as early as possible in order to assure that the next generation has the skills required to find one's way around in the ever growing complexity of economics. The school might be a suitable environment where students could acquire such skills (Akdag, 2013; Hinojosa et al., 2010; Posnanski et al., 2006; Cordray, 2008; Dowdell et al., 2008; United States Department of the Treasury Office of Financial Education, 2002; Mandell et al., 2009).

A topical question is what exact skills and knowledge students are to acquire to have financial literacy.

In its studies, the OECD evaluates financial literacy based on 3 elements – content, process and context. According to the OECD experts, the key directions of the content which characterise students' knowledge and understanding of financial matters are (OECD, 2014a; Geske et al., 2015):

- *Money and transactions* – This category, which represents the first core content of financial literacy, includes the awareness of the different forms and purposes of money and handling simple monetary

transactions such as everyday payments, spending, value for money, bank cards, cheques, bank accounts and currencies.

- *Planning and managing finances* – This category, which covers essential financial literacy skills, includes planning and managing of income and wealth over both the short term and long term, and in particular the knowledge and ability to monitor income and expenses, as well as to make use of income and other available resources to enhance financial well-being.
- *Risk and reward* – This category incorporates the ability to identify ways of managing, balancing and covering risks (including through insurance and saving products) and an understanding of the potential for financial gains or losses across a range of financial contexts and products, such as a credit agreement with a variable interest rate, and investment products.
- *Financial landscape* – This category relates to the character and features of the financial world. It covers knowing the rights and responsibilities of consumers in the financial marketplace and within the general financial environment, and the main implications of financial contracts. It also incorporates an understanding of the consequences of change in economic conditions and public policies, such as changes in interest rates, inflation, taxation or welfare benefits.

Authors of other research studies also mention that the essential core financial knowledge includes everything about and around money, awareness of wishes and needs, budget-formation principles and other key items (Koenig, 2007; New Zealand Ministry of Education, 2014; OECD, 2014b; Hinojosa et al., 2010; United States Department of the Treasury Office of Financial Education, 2002). Understanding the key items of finance is the first step to wellbeing. By understanding what, how, where and why, the individual will be able to make informed and justified knowledge-based financial decisions.

In today's variable circumstances when changes take place in the labour market, it is important for people to be able to manage their financial resources skilfully in thinking about their future, building up savings, participating in pension fund actively. Thus, they can take care of their old age themselves, without waiting for support from the state. In the literature, financial management and understanding of investments and financial contributions as well as the ability to build up savings are mentioned as evidence of financial literacy (Grinstead et al., 2011; Koenig, 2007; United States Department of the Treasury Office of Financial Education, 2002; Dowdell et al., 2008; OECD, 2014b).

Understanding regarding credits and loans, knowing the risks and benefits associated with them, ability to find one's way around in the offering and make informed decisions based on own knowledge also suggest having financial

literacy (Koenig, 2007; United States Department of the Treasury Office of Financial Education, 2002; Dowdell et al., 2008).

In the studies, financial literacy is also linked with understanding of the financial environment. It is understood by this that the individual has skills and knowledge associated with consumer rights and obligations in the financial market, an understanding of the influences of the economic and political circumstances on the financial market. The individual should also be able to seek advice, to know where to look for advice and how to avoid fraud, as well as be able to protect themselves (New Zealand Ministry of Education, 2014; United States Department of the Treasury Office of Financial Education, 2002, Akdag, 2013; Dowdell et al., 2008; OECD, 2014b). Protection of own finances and being aware that, in the contemporary world, more attention should be paid to the safety of personal data in particular, which is frequently linked also with financial security, are questions that are not directly addressed by the OECD in its study (OECD, 2013), but they might be significant as information technologies and opportunities develop.

Most of the researchers have the same opinions regarding what knowledge and skills make up financial literacy. However, the researchers believe that, with regard to financial matters, the school should put more emphasis on the practical skills instead of the theoretical ones. Students should, for example, understand why to save up instead of what saving up is (Akdag, 2013; Putniņa et al., 2012; Williams et al., 2011; United States Department of the Treasury Office of Financial Education, 2002). Therefore, it is essential that there are not only competent teachers in the process of educating students, but also parents who act as models and examples and involve students in daily events associated with planning finances, spending and making decisions, and also other organisations and institutions associated with the financial sector (Avard et al., 2005; Lusardi et al., 2010; Schuchardt et al., 2009; Koenig, 2007).

In its studies, the OECD also examines the students' practical skills in dealing with financial matters. The following skills are evaluated in the OECD PISA study - ability to identify and apply concepts of the financial area, understand, analyse, reason, evaluate and offer solutions. The PISA defines 4 areas of financial literacy (Geske et al., 2015):

- *identify financial information*
- *analyse information in a financial context*
- *evaluate financial issues*
- *apply financial knowledge and understanding*

All of these areas are targeted at students' ability to find their way around in the financial environment by using their knowledge regarding finances, being able to determine what is relevant in the particular source of information, interpret,

compare, oppose, synthesise and generalise. The student is able to offer opinions and reasoning based on knowledge and understanding and to provide explanations in respective contexts.

It is important that students are competent in financial matters in real-life situations. This is why the OECD PISA study includes an evaluation of how students solve financial matters in situations which characterise (Geske et al., 2015):

- *Education and work*
- *Home and family*
- *Individual*
- *Societal*

All of these situations are topical and essential for young people. Firstly, education because most of them will continue their studies after the completion of the elementary school. Students should understand what alternatives they have, what the costs of their studies and other expenses associated with education are. Secondly, work. Some students might start working after finishing the elementary school, or they might already have some jobs apart from studies.

Young people should also be aware of the household costs and be competent in them in order to become independent when they start living separately from their family (for example, in a hostel). As they become older and start earning their own living, receive pocket money or maintenance allowance, students should be able to make financial decisions. When opting for products and services as well as when assessing matters associated with contractual obligations (e.g., when taking loans), they must be able to consider the risks and take responsibility for their decisions. Students must be aware that their individual decisions may have impacts on the society in general (for example, decisions associated with the tax system, consumer rights and obligations).

In the Financial Module of PISA 2012, students had to solve tasks which included the above-mentioned content areas, contexts and processes. Table 1 summarises the data regarding the tasks of specific contents, processes and contexts as well as shows the percentage of the students who were able to solve the tasks correctly. It can be seen in the table that most of the tasks to be completed by the students were those related to home and family and private situations, and less those concerning education and work and public life situations.

Table 1 Count of students as a percentage, which have been able to solve specific content areas, context and process tasks (PISA 2012 results in Latvia)

Context	<i>Home and family</i>			<i>Individual</i>			<i>Education and work</i>			<i>Societal</i>		
	<i>Money and transactions</i>	<i>Planning and managing finances</i>	<i>Risk and reward</i>	<i>Financial landscape</i>	<i>Money and transactions</i>	<i>Planning and managing finances</i>	<i>Risk and reward</i>	<i>Financial landscape</i>	<i>Planning and managing finances</i>	<i>Financial landscape</i>	<i>Risk and reward</i>	<i>Financial landscape</i>
Process	<i>Money and transactions</i>	<i>Planning and managing finances</i>	<i>Risk and reward</i>	<i>Financial landscape</i>	<i>Money and transactions</i>	<i>Planning and managing finances</i>	<i>Risk and reward</i>	<i>Financial landscape</i>	<i>Planning and managing finances</i>	<i>Financial landscape</i>	<i>Risk and reward</i>	<i>Financial landscape</i>
<i>identify financial information</i>	32%; 47%		81%		55%; 15% <sup>1</sup> 62% <sup>2</sup>	74%		8%				
<i>analyse information in a financial context</i>	14% <sup>1</sup> ; 14% <sup>2</sup>	74%			27%	58%; 68%; 76%	48%		23%	70%		31%
<i>evaluate financial issues</i>		78%; 91%	31%	67%	69%		27%		5%; 83%; 52%; 48%		85%	47%; 77%
<i>apply financial knowledge and understanding</i>	96%	54%	49%; ; 89%; ; 28% <sup>1</sup> 55% <sup>2</sup>		33% <sup>1</sup> 21% <sup>2</sup>			61%	53%			

1 – correct answer, 2 - partially correct answer

As can be seen in Table 1, there were tasks which most of the Latvian students were able to solve as well as tasks which only a small percentage of the Latvian students were able to tackle. The students are best able to solve tasks which concern home and family. This is possibly because these are topics the students encounter daily in discussions with their parents or being involved in the management of the household themselves. The tasks found more difficult by the

students are those requiring analysis of information particularly in the context of finances, in any content area. This may suggest that students have poor skills in analysing information or that they are not competent in such situations because they do not encounter them daily and lack the practical skills.

The analysis of the tasks leads to a conclusion that students have problems with tasks associated with investments, analysis of specific situations, and drawing relevant conclusions regarding the future. Possibly, the students lack experience which is based on prediction of the further situation, making decisions based on risk assessment and prediction. The tasks involving calculation of term deposit or savings account interest caused no problem for the students. This is possibly because such tasks require mathematical skills in doing calculations and selection of the most suitable answer based on them. The tasks regarding investments are mainly about being able to analyse and make a decision and substantiate it. This is more complicated, and it requires the respective knowledge and practical skills to be able to understand the risks and know the options. The students also find it difficult to handle tasks which require substantiation of their choice or opinion. This suggests lack of experience, as, apparently, there have been no such situation in their daily life, and they have not had any experience in facing the consequences of their own decisions and assuming liability for them. It could mean that our students have problems with critical thinking which don't let them make reasonable decisions. Critical thinking has an important role in making reasoned judgment and choices, in particularly in economics and finances (Heijletjes et al., 2015; Mulnix, 2012). Therefore, it is so important to develop critical thinking if we want student to be able to make good decisions in financial life.

A study about The Use of Critical Thinking (CT) was conducted in Latvia in 2008. It explored approaches in the education system – it's impact and effectiveness in Latvia. The research showed that there are problems with the implementation of critical thinking in schools in Latvia (Baltic Institute of Social Sciences, 2008). Similar results were detected in PISA 2012 financial module. PISA 2018 data might be expected to show that situation is changed, although Minister of Education and Science only recently admitted in public space that the development of critical thinking has to be related to the content of learning at schools.

## **Conclusions**

The study data show that the students are very good at the tasks which concern their daily experience and require use of their mathematic skills. The tasks associated with investments and topics unknown to the students in their daily life as well as tasks requiring in-depth analysis and expression of substantiated

opinions, which might sometimes be based on personal experience, cause difficulties.

Attention should be paid to the development of financial literacy, and the responsible institutions should facilitate the provision of financial education to students already on the elementary school level. Latvian students find financial tasks difficult, particularly those involving expression of own opinion and supporting it with own knowledge and experience.

A suggestion to the policy-makers might be that they offer acquisition of financial matters where students can use their knowledge in practice, in various simulation games, individual projects, group-work. Additional attention should be paid to the ability of students to express their opinions and substantiate them. Possibly, schools should practise debates on various topics, discussion clubs, question and answer games.

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# СОЦИОКУЛЬТУРНОЕ КОНСТРУИРОВАНИЕ ПРОСТРАНСТВА КАК ФАКТОР ПОВЫШЕНИЕ ТУРИСТИЧЕСКОЙ ПРИВЛЕКАТЕЛЬНОСТИ РЕГИОНА

## *Socio-Cultural Construction of Space as a Factor to Make a Region More Attractive for Tourists*

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**Abstract.** *This study aims at the analysis of the current situation in the tourist industry of Pskov region, its economic efficiency and means of making the area more interesting for holidaymakers. The research problem is the low tourist flow in the area and the low economic efficiency of the industry. The tourist companies which promote Pskov region can be described as conservative and rigid. They offer visiting traditional tourist attractions such as churches, monasteries, and estates of famous historic persons. The key results are the following. Mythological and fictional characters can be successfully used as attractors. Nowadays, British tour operators offer three types of “fictional” tours. Firstly, tours devoted exclusively to locations described in myths and fiction. Secondly, tours that combine traditional and fictional sights. Thirdly, visiting places for which local myths and legends were intentionally coined. The authors suggest that tours of the third type should be actively used to boost the popularity of Pskov region. Thus, modern mythopoeia is regarded not only as a creative activity but also as an economic instrument of constructing a new socio-cultural space. The results of the study are based on the careful examination of statistic data and the analysis of texts on British sights. The list of primary methods include analogy approach, description, hypothetico-deductive and axiomatic methods.*

**Keywords:** *culture-related potential, local myth, mythopoeia, tourist attraction, tourist flow, tourist industry.*

### **Введение** ***Introduction***

Актуальность темы обусловлена сложной экономической ситуацией в Псковской области как экономически проблемном «периферийном» регионе и необходимостью разработки мероприятий по повышению привлекательности региона для туристов, поскольку именно туризм может

послужить стабильным источником пополнения областного бюджета. Целью статьи является когнитивно-аналитическое описание одного из способов социально-культурного конструирования пространства, а именно локального мифотворчества. Задачи включают описание основных проблем местной туристической индустрии, установление тех из них, которые могут быть решены путем социально-культурного конструирования, а также анализ британского опыта использования локального мифотворчества и определение базовых когнитивно-жанровых характеристик экскурсионного мифа, которые обуславливают его роль в диверсификации турпродукта и увеличении турпотока. Методы исследования включают как общенаучные (метод аналогии, описание, гипотетико-дедуктивный и аксиоматический), так и лингвистический (дискурсивный анализ) методы.

### **Результаты исследования** ***Research results***

В результате исследования было установлено, что на турпоток региона существенное влияние оказывают четыре фактора: 1) сезонность; 2) ограниченное число регионов, формирующих турпоток; 3) незначительное количество традиционных экскурсионных объектов; 4) тематическая однотипность объектов. Социально-культурное конструирование пространства посредством мифотворчества позволит минимизировать негативное влияние двух последних факторов. Сегодня местная туристическая индустрия использует исключительно культурно-познавательный потенциал региона; в качестве объектов-аттракторов туристам традиционно предлагаются монастыри, храмы и имения знаменитых деятелей культуры. Такой односторонний подход приводит к стагнации турпотока. Учитывая отсутствие в Псковской области географических объектов, связанных с популярными персонажами, именно создание локальных мифов может повысить туристическую привлекательность региона. Анализ британского опыта локального мифотворчества позволил определить характеристики современного мифа, которые определяют эффективность его воздействия на туристов: 1) соблюдение норм таинственно-романтического повествования; 2) учет фоновых знаний предполагаемого адресата; 3) опора на местную культурную специфику, в том числе и фольклорную; 4) непротиворечивость реальной истории объектов.

Территория многих стран, особенно таких крупных как Российская Федерация (РФ), характеризуется разнообразием природных характеристик и гетерогенностью уровня социально-экономического развития. Следовательно, в границах одного государства располагаются

административно-территориальные образования, для которых актуальны различные хозяйственные, демографические, этнические, геополитические и другие проблемы. Особенную остроту хозяйственно-экономические проблемы приобретают в так называемых «периферийных» регионах, удаленных от основных экономических центров страны.

В решении экономических вопросов важную роль играет туризм, развитие которого способствует созданию рабочих мест и, соответственно, росту занятости населения, повышению его благосостояния, привлечению инвестиций в местную экономику и т.д. Зачастую данная отрасль выступает в качестве катализатора развития региональной экономики, обеспечивая рост производственных показателей смежных отраслей.

Нельзя не согласиться с исследователями, которые констатируют, что в настоящее время туристско-рекреационный потенциал большинства субъектов РФ используется не в полной мере, объясняя это неразвитостью соответствующей туристской инфраструктуры, низким качеством ее функционирования и управления («Федеральная целевая программа,» 2011). В результате туристская проблемных регионов характеризуется определенной статичностью, т.е. неспособностью адаптироваться к постоянно меняющемуся потребительскому спросу. Как следствие, внутренний турпродукт проигрывает зарубежным аналогам в конкурентной борьбе.

Данное положение можно наглядно проиллюстрировать статистическими данными по Псковской области, которая входит в число таких проблемных субъектов РФ. В структуре стоимости путевок, реализованных на территории области, на долю внутреннего туризма приходится всего 10 % несмотря на то, что в последние годы наблюдается падение спроса (примерно на 30 %) на зарубежные путешествия («Информационный туристский центр Псковской области,» 2017), что обусловлено, с одной стороны, значительным повышением стоимости туров в результате девальвации рубля, с другой стороны – существенным падением уровня жизни населения региона.

Вышеназванные факторы в совокупности с популяризацией внутреннего туризма способствовали увеличению числа туристов, посетивших Псковскую область, с 302 тыс. человек в 2014 году до 380 тыс. человек в 2017 («Культура, туризм и отдых в Псковской области,» 2016). В то же время эти данные нельзя признать бесспорными, так как официальная статистика рассматривает в качестве туристов только иностранных и российских граждан, приехавших в регион с соответствующей целью и поселившихся в гостиницах и аналогичных объектах размещения. Более реалистичными представляются данные о том, что количественные параметры турпотока на 40-50 % выше, поскольку значительная доля гостей

размещалась у своих родственников, друзей, знакомых («Информационный туристский центр Псковской области,» 2017).

Несмотря на положительную динамику отраслевого развития в целом туристская индустрия Псковской области не избавилась от своих хронических недостатков. Представляется возможным выделить четыре основных проблемы, препятствующих росту регионального турпотока.

- (1) Значительная роль сезонного фактора, вследствие чего 65-70 % туристов посещают регион в течение трех летних месяцев. Данный период, как известно, совпадает со временем отпусков у значительной части экономически активного населения, которое при планировании отдыха традиционно предпочитает южные направления. Так, в 2017 году у россиян наибольшей популярностью пользовались туры в Таиланд, ОАЭ, Турцию. Среди российских регионов лидерами по числу посетивших их туристов стали Краснодарский и Ставропольский края, что в целом соответствует тенденциям российского рынка туристских услуг («Федеральное агентство по туризму,» 2017). В результате число потенциальных потребителей Псковского турпродукта значительно сокращается, что препятствует реализации планов местных властей по удвоению турпотока.
- (2) Географическое разнообразие турпотока слабо выражено: две трети туристов составляют жители Санкт-Петербурга и Ленинградской области, Москвы и Московской области. В значительной степени подобная ситуация обусловлена, во-первых, высоким уровнем доходов жителей данных субъектов РФ, во-вторых – относительной близостью этих регионов к Псковской области, что позволяет существенно снизить долю транспортных расходов, которая в среднем составляет 22 % от стоимости турпакета. Расширение географии потенциальной клиентской базы может быть обеспечено либо за счет государственного дотирования внутренних пассажирских перевозок, либо за счет увеличения продолжительности пребывания туристов в регионе, что приведет снижению доли транспортных расходов в стоимости путевки. Сегодня в среднем турист проводит в Псковской области 2-3 дня.
- (3) Ограниченный список местных достопримечательностей, востребованных туристами. Сегодня у значительной части российских и иностранных туристов турпродукт Псковской области ассоциируется с четырьмя объектами: музеем-заповедником «Михайловское», Псковско-Печерским монастырем, Псковским Кремлем и Изборской крепостью.

Расширение данного списка возможно без серьезных финансовых вливаний посредством включения в него объектов, находящихся в городах, расположенных в 2-3х часах езды от места размещения туристов. Таким образом, границы туристской дестинации могут быть расширены за счет гг. Великие Луки и Невель (Псковская область), Смоленск и Великий Новгород (РФ). Для туристско-рекреационного кластера «Псковский» центрами дестинации также могут являться гг. Полоцк и Витебск (республика Беларусь), Тарту (Эстония) и Сигулда (Латвия). Практическая реализация мероприятий трудноосуществима вследствие существования визового режима между Россией и странами Балтии. Однако, представители бизнеса и администраций соседних стран, в частности Финляндии и Эстонии, периодически выходят с инициативой введения для граждан РФ, решивших посетить вышеназванные государства с туристическими целями, безвизового режима с временными ограничениями (не более 3 суток) (Клейменов, 2017). В условиях санкционного противостояния Европейского Союза и РФ положительное решение данного вопроса возможно лишь в долгосрочной перспективе.

- (4) Узкая специализация экскурсионного продукта, ориентированного на предоставление потребителю услуг преимущественно культурно-исторического характера. Подобный профиль обусловлен наличием большого количества исторических памятников в регионе. Следует отметить, что в системе действующих туристических маршрутов задействовано относительно незначительное число данных объектов либо из-за их транспортной недоступности, либо по причине их ветхого состояния. Ситуацию усугубляет слабый интерес потенциальных потребителей к отдельным региональным (локальным) достопримечательностям вследствие низкой исторической грамотности значительной части российских граждан или в результате несоответствия существующей идеологической парадигмы общественного развития предыдущим ценностным установкам. Несмотря на проведение государственными и общественными организациями масштабных мероприятий по популяризации отечественной истории, интерес ко многим событиям прошлого или отдельным историческим личностям у большей части населения (особенно молодого и среднего возраста) остается относительно невысоким.

Таким образом, учитывая отсутствие в Псковской области физико-географических объектов (горного рельефа, теплого моря), благоприятствующих развитию туризма, перспективы данного сегмента региональной экономики напрямую зависят от культурно-познавательного потенциала туристической дестинации, возможностей ее трансформации в соответствии с рыночной конъюнктурой.

Современное информационное общество характеризуется усилением конкуренции и обострением борьбы за привлечение потребителя, следовательно, особую актуальность для формирования и укрепления туристского потенциала территорий приобретает использование специальных приемов и технологий. К числу таких технологий, по мнению авторов, относится мифологизация туробъектов как вид речемыслительной деятельности, направленной на социокультурное конструирование территории привлекательной для определенного типа потребителя.

Обращение к мифу при создании текстов туристического дискурса (рекламных проспектов, интернет сайтов, экскурсий) представляется естественным в эпоху постмодернизма, которая характеризуется ремифологизацией сознания, противостоящей, по мнению Е. М. Мелетинского, процессу демифологизации повседневности (Мелетинский, 2012). Традиционно мифотворчество рассматривалось как способ постижения действительности, который помогал древнему человеку выжить в условиях недостатка информации и способствовал его духовному развитию (Мелетинский, 2012; Фрейденберг, 1998). Однако, такая трактовка не применима к современному мифу, который не объясняет основы мироздания и не дает ответы на животрепещущие вопросы, а лишь порождает иллюзию ясности и одновременно развлекает адресата.

Более того, необходимо оспорить и утверждение о том, что миф «всегда трактовался как результат бессознательной деятельности и как продукт свободной игры воображения» (Кассирер, 2000). Современный миф туристического дискурса, в отличие от традиционного, является результатом целенаправленной деятельности творческого сознания. В своих поступках современный человек руководствуется в том числе и рациональными схемами, поскольку в его сознании сосуществуют и рациональная, и мифологическая составляющие. Высокая смысловая неопределенность современных текстов свидетельствует о возможности использования мифотворчества в качестве способа осмысления реальности, что позволяет автору текста сформировать оригинальный ментальный конструкт, вложив новые смыслы в известные слова и традиционные фреймы репрезентации знания.

Сегодняшний процесс мифотворчества отнюдь не хаотичен, что подтверждает существующий в гуманитаристике тезис о мифологичности

группового сознания. Таким образом, формально-содержательная ригидность туристического текста определяется ориентацией автора на когнитивные и онтологические установки предполагаемого адресата. Наполнение традиционных форм новым содержанием подчиняется нормам, принятым в конкретном лингвокультурном сообществе. Соблюдение этих норм является залогом коммуникативного успеха текста, что, в свою очередь, обуславливает повышение привлекательности описываемого туристического объекта, превращение его в коммерчески прибыльное предприятие. Следовательно, деятельность субъекта туристического мифотворчества, представленного отдельной личностью (гид, копирайтер) или группой людей (коллектив научных сотрудников, маркетологов), коренным образом отличается от мифотворчества автора художественного текста, которое было описанного в научной литературе. Мотивы и импульсы текстопорождения в туристическом дискурсе не сводятся к чистой радости творчества, они направлены на извлечение материальной прибыли. Новый миф создается в соответствии с планом, а ведущей функцией оказывается не компенсаторная, как принято считать, а прагматическая. Сверхъестественное и мистическое сознательно используется в качестве элемента смысловой структуры, обеспечивающего дополнительную привлекательность аттрактора.

Новый миф должен не только вербально воздействовать на адресата, но также создавать возможность для возникновения новых ритуалов, участие в которых, в отличие от традиционных мифов, финансово обусловлено. За дополнительную плату турист может прожить, прочувствовать специфику описываемой эпохи. Например, сотрудники замков, переоборудованных в отели, культивируют местные мифы о привидениях, проживающих в замке, что повышает спрос на номера в отеле и, соответственно, их стоимость.

Анализ британских сайтов, рекламирующих достопримечательности своей страны, показал, что на современном рынке туристических услуг потребителю предлагается три типа туров, в которых мифологические (вымышленные) персонажи выступают в качестве аттракторов:

- (1) маршруты, включающие объекты, описанные в мифах или художественных текстах;
- (2) маршруты, включающие как туристические объекты, связанные с «жизнью» персонажа, так и традиционные туристические аттракторы;
- (3) маршруты, включающие объекты, для которых были специально созданы оригинальные мистические или авантюрно-романтические истории.

Маршруты первого типа обычно связаны с сюжетами книг о Шерлоке Холмсе или Гарри Поттере. Туристам предлагается посетить дом-музей

Шерлока Холмса на Бейкер стрит 221 б, в котором сыщик и его верный биограф прожили 25 лет, а также рынок «Ковент Гарден», где Шерлок Холмс нашел гуся, проглотившего голубой карбункул, или вокзал Кингс Кросс, откуда отправляется экспресс в школу магии и волшебства Хогвартс, а также Лондонский зоопарк, где Гарри беседовал со змеей и т. д.

Маршруты второго типа сочетают традиционные объекты и места, упомянутые в художественных произведениях или связанные с жизнью автора. Туристы могут пообедать в ресторане отеля Langham, где Конан Дойл был представлен Оскару Уайльду, пройти от театра Ковент Гарден до кафе «Рояль», увидеть бывший Скотланд Ярд и другие достопримечательности.

Следует отметить, что именно разработка маршрутов третьего типа представляется наиболее перспективным способом повышения туристической привлекательности регионов, которые не входят в традиционное для данной лингвокультуры мифологическое (художественное) пространство. Создание новых локальных мифов, формирующих и наращивающих региональную идентичность, уже доказало свою экономическую эффективность, о чем свидетельствуют результаты анализа многочисленных сайтов британских туристических объектов. В стране находится значительное число средневековых замков, «а каждый уважающий себя замок должен иметь собственное привидение. Привидение – это своего рода визитная карточка замка, оно, если верить рассказам гидов и местных жителей, обладает своими характеристиками» (Клейменова, 2011).

Однако, автор нового мифа не свободен в своей деятельности, поскольку содержательные аспекты его мифотворчества ограничены тремя группами факторов.

(1) культурный багаж адресата как языковой личности. Современный миф направлен в прошлое, но прошлое не идеализированное, а романтизированное и эстетизированное для большей привлекательности. Например, в замке Инверари (Шотландия) обитает призрак юного арфиста.

*Первый замок, построенный на этом месте, был дотла сожжен маркизом Монтрозе в 1664 году. Самому герцогу удалось бежать, а вот его арфист, как гласит легенда, отстал и был убит в бою. Его призрак, одетый в цвета рода Кэмпбеллов, часто можно увидеть в залах замка, а из библиотеки доносятся звуки арфы. (Woolf, 2014)*

Выбор музыкального инструмента неслучаен. В европейской мифологической традиции завораживающие, гипнотизирующие звуки арфы ассоциировались с древними дохристианскими богами и могли усыпить дракона. Сама арфа, традиционный атрибут царя Давида, считалась символом ключа в другие миры.

(2) пространственно-временные границы целостного воображаемого мира, которые заданы характеристиками экскурсионного объекта. Новый миф окказионален, его события развиваются внутри конкретной исторической ситуации, трансформирующейся в коммуникативную. Например, история о привидениях, живущих в средневековом замке Конуи (Северный Уэльс), основывается на исторических данных о его владельцах.

*Один из наследников Роберта Винса покинул Конуи и отправился на войну в дальние края. Когда настало время его возвращения, жена и сын пошли в сторожевую башню. Стемнело, но рыцарь так и не приехал. Возвращаясь в свои покои, жена и ребенок поскользнулись на крутой лестнице и разбились. Приехавший врач, доктор Дик, ничем не смог им помочь. Слуга, убоившись гнева своего господина, запер врача в комнате с погибшими. По прибытии рыцаря комнату открыли, но доктора Дика там не оказалось. С той поры его никто не видел. Раздавленный горем рыцарь сошел с ума и вскоре скончался. Его призрак до сих пор ищет пропавшего врача в замке и будет продолжать свои поиски пока не найдет свою жертву. (Castles of Britain, 1995-2018)*

(3) проверенные временем каноны таинственно-романтического повествования, которое привлекательно для массовой аудитории. Привидения, истории о несчастной любви, о рыцарях и прекрасных дамах обладают значительной мифотворческой силой. Например, появление белых привидений в британской традиции связано с трагическими событиями. Эти персонажи, незлобные и безвредные, обычно бродят по тем местам, где гуляли при жизни, и неохотно вступают в контакт с посетителями. Например, в замке Хантли (Шотландия) живет Белая Дама, дочь бывших владельцев.

*Она влюбилась в слугу. Родители были в ярости и в наказание девушку заточили в башню. Никто не знает сама ли она выбросилась из окна или ей помогли, а может это был несчастный случай, но ее бездыханное тело было найдено у подножия башни. (Howell, 2016)*

Серые приведения, в свою очередь, также немало страдали при жизни, но виновник их мучений обычно не конкретное лицо или группа лиц, а стечение внешних обстоятельств. Например, в замке Раффолд (Rufford Old Hall в западной части Ланкашира) обитает Серая Дама, муж которой не вернулся из похода.

*Серая Леди по имени Элизабет была женой сэра Томаса Хескета. Ее призрак – это воплощение классической легенды о горюющей женщине, которая ждет возвращения мужа с войны. Она ждала его много недель, постепенно слабея душой и телом, а муж так и не вернулся с поля брани. Интрига заключается в том, что призрак сам*

*рассказывает свою историю, если попросить его об этом (Howell, 2016).*

Изучение британского опыта создания мифологических туристических аттракторов позволяет говорить о современном мифотворчестве как об эффективном способе социально-культурного конструирования пространства, который позволяет устранить две из четырех проблем, препятствующих росту турпотока в проблемных регионах: расширить список местных достопримечательностей, востребованных туристами, и изменить специализацию традиционного экскурсионного продукта. Представляется экономически целесообразным создавать и популяризировать локальные мифы, которые, с одной стороны, построены по канонам таинственно-романтического повествования и основаны на фоновых знаниях предполагаемого адресата, а с другой стороны, учитывают местную культурную специфику, в том числе и фольклорную, а также реальную историю рекламируемых объектов. Использование результатов мифотворчества позволит повысить туристическую привлекательность региона и, следовательно, увеличить рентабельность туристических объектов.

### **Summary**

The paper describes the current situation in the tourist industry of Pskov region. The authors enumerate its four main problems: (1) the seasonal character of the tourist flow; (2) a limited number of regions, which maintain the tourist flow; (3) a small number of the traditional tourist attractions; (4) a poor thematic variety of the tourist attractions. The results suggest that the region can be made more appealing to tourists if a new socio-cultural space is constructed and “fictional” tours are organized. The paper examines three types of such tours based on fiction and local mythology that are offered by British companies: (1) purely fictional tours based on famous books; (2) mixed tours based on both famous fictional locations and the traditional ones; (3) tours based on sights for which local myths are coined. The third type seems to be the most promising for Pskov region as the area does not enjoy famous fictional locations. According to the authors, local mythopoeia can enrich the list of tourist attractions. However, such deliberately coined myths cannot become tourist attractors unless they meet some requirements. On the one hand, they should follow the basic principles of romantic adventure stories and should take into account the background knowledge of would-be tourists. On the other hand, they should be based on local folklore, cultural peculiarities of the region and should take into account the real history of the sights.

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## CO-PRODUCTION OF INNOVATIVE PUBLIC SERVICES – A THEORETICAL BACKGROUND

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**Abstract.** *Co-production is currently one of the pillars of the public sector reform around the world. The potential of this concept is increasingly recognized in the design and improvement of public services in cities. Co-production is a partnership among citizens, public institutions and enterprises, which enables all the parties to be more involved in the management of the city and contributes to greater control over public resources (Horne & Shirley, 2009). In the subject literature, it is pointed out that these reforms are directed to the implementation of effective public services, are a response to the deficit of active citizenship and active communities and enterprises that are insufficiently involved in the processes of designing and co-creating innovative public services in cities. The basic - and basically still valid today - conceptualization of co-production was carried out in several works published in the first half of the 1980s. The aim of this paper is to analyse the state of research on the issue of co-production in public services and to identify the main research areas related to this subject. The paper was based on a systematic review of literature, which included, among others, the emergence of basic literature and selection of publications, bibliometric analysis and content analysis. The results of the conducted research show that the issue of co-production in public services is a new subject, still not well recognized in the literature and which may constitute a current and interesting area of research.*

**Keywords:** *co-production, innovations in public sector, public services.*

### Introduction

Co-production is now an innovative approach to changes in the way public sector services are provided, based on establishing new relationships among citizens, public institutions and enterprises that enable all the parties to become more involved in the management of public services and contribute to greater control over public resources (Horne & Shirley, 2009). Co-production is currently one of the pillars of the public policy reform around the world and is part of the trend of contemporary innovative public management (Bovaird, 2007).

The literature on the subject indicates that these reforms are directed to the implementation of effective public services and are a response to the deficit of active citizenship and enterprises that are insufficiently involved in the processes of designing and co-creating innovative public services (Sienkiewicz-Małyjurek,

2016). The literature indicates also some assumptions justifying the development of the idea of co-production in the provision of public services (Stokłuska, 2017):

- the needs of citizens are more effectively met when they themselves are involved in cooperation with service providers;
- the recipients of services often play a key role in the problem-solving process;
- the main beneficiaries involved in this approach are the beneficiaries themselves, their families, the social groups they belong to, local entrepreneurs - cooperating with professional service providers, including institutions managing individual public services.

The aim of this paper is to analyse the state of research and research trends in the area of co-production - an innovative concept of management in the public sector and to identify the main research areas related to this subject in economic sciences. The paper was based on a systematic review of literature, which included, among others, the emergence of basic literature and the selection of publications according to accepted criteria, bibliometric analysis and content analysis. The first part of the paper presents the literature definitions of the subject of the research and the research method. In the further part of the study, the results of the analysis of bibliometric data of world literature with regard to the time factor, the frequency of publication and the scope of the problem under analysis were presented. Next, the results of the conducted research were discussed, the conclusions drawn and the limitations of existing research indicated.

### **Co-production in innovative public services – a literature review**

In foreign literature on the subject, co-production becomes one of the most important topics concerning innovative management in the public sector (Bovaird 2007; Bovaird & Löffler 2012; Alford, 2009; Osborne & Brown, 2011). The co-production assumes that residents engage their own time and effort in producing public services that they will use themselves (as opposed to volunteering, where citizens are involved for other people) (Verschuere, Brandsen, & Pestoff 2012). The general idea of co-production was initiated in several works published in the first half of the 1980s. According to Brudney and England, who at that time attempted to define the phenomenon of co-production, they noticed that the work on conceptualization was carried out in two strands: the first were economic analyses, the second one was run by political scientists dealing with public administration (Każmierczak, 2014). The effects of these works retain their value to this day - creating the foundation for studies in later

years, including today. The co-production theory prepared by economists at Indiana University at that time seems particularly important - in their view, the concept of co-production refers to “ordinary” citizens and their direct involvement in the process of producing services (Parks et al., 1981). An important definition for the development of co-production concepts is the one adopted in the OECD report, which indicates that it is: a way of planning, designing, delivering and evaluating public services that uses direct input from citizens, service recipients and civil society organizations (Together for Better Services, 2011). From this definition, according to its authors, it follows that: the scope of tasks of recipients of services - citizens within the framework of co-production is very wide and ranges from the simplest activity, which is simple feedback about the service, to long-lasting and rich in content relations with professional service providers; co-production is something other than contracting public services in the private sector (e.g. through outsourcing) - if co-production is based on the undefined / open scope of inviting citizens to participate, contracting services requires a formal agreement with its provider and its precise specification; the basis for co-production practices is the voluntary involvement of citizens (Together for Better Public Services, 2011).

The consequence of the increase in interest in co-production observed for around 17 years has become the extension of the meaning of this concept and the justification of its applicability at each stage of the process of managing public services. Researchers point out that the contemporary concept of co-production refers to areas such as: (1) launching a service that includes policy planning, prioritization, financing methods; (2) service design; (3) providing a service that includes: management and service provision; (4) evaluations (including monitoring and evaluation) (Voorberg, Bekkers, & Tummers 2014).

As V. Pestoff notes: the definitions of co-production fall within the range from the “mix of contributions that public service agents and citizens bring to public services” to “partnership between citizens and providers of public services”. In the differences between them - according to Pestoff - there are cultural differences, differences in focus, or both. Above all, however, differences in the definition of co-production prove that its researchers and observers have taken different points of view, which leads to a better understanding of the phenomenon and an ever-more visible perception of its complexity (Pestoff, 2012). Sienkiewicz-Małyjurek cites the results of international surveys confirming that co-production affects the innovation of services, and the basic determinants in this respect are: the level of involvement of local communities, the level of structuring solutions and the ability to cooperate (Sienkiewicz-Małyjurek, 2016). Similarly, in the work of Kaźmierczak, we can read about the results of various surveys conducted in European countries confirming that co-production practices occur in all analysed

public services categories, albeit not at the same intensity, e.g. co-production mainly occurs in the planning and direct delivery of public services, and depending on the type of services. Of Europeans, 70 % -80 % would be willing to engage in activities that improve the quality of public services, in particular health (Każmierczak, 2014). As the quoted author points out, undoubtedly empirical research on the phenomenon of co-production has not yet emerged from a very initial, “exploratory” phase, and is therefore incomplete in the state of reliable knowledge about, on the one hand, its scale, forms, conditions, on the other - about attitudes towards her and their determinants. The above-mentioned research shows that co-production is a real, innovative approach to the process of providing public services, which is affected by many different factors, which may take various forms of cooperation. There is a large research potential to explore this phenomenon.

### **Research methodology**

The aim of this paper is to analyse the state of research and research trends in the area of co-production - an innovative concept of management in the public sector and to identify the main research areas related to this subject in economic sciences. The research method used in the evaluation of publications in the field of co-production of innovative public services was a systematic review of literature using bibliometric analysis techniques. A distinctive feature of the systematic review of literature is verifiable and reliable due to the rigor of methodical review of the state of knowledge and the use of quantitative techniques of description and analysis of literature (Klincewicz, 2008). For the needs of bibliometric analysis, such research techniques were used as: analysis of trends by means of time series, citation analysis, identification of researchers and centres from which the main research trends originated, and general analysis of the content of the most frequently quoted publications.

The scope of the literature research was as follows: (1) the subject of the study was selected; (2) analysis of changes in the number of publications in subsequent years and an analysis of the citations from the analysed subject matter in the Scopus and Web of Science databases; (3) key publications in the databases have been identified and the journal IF has been assessed; (4) main investigators and countries of origin were identified; (5) the contents of the publication were analysed in terms of specific areas of research / research methods.

## Findings

Data for the research study of co-production in public services were collected from Web of Science and Scopus databases in the first quarter of 2018. Determining the literature of the subject was aimed at establishing a set of publications that are the source of further analysis. In the initial phase of the research, scientific publications were searched, which included in their title, abstract or key words the expression “co-production” and then “co-production in public services”. The review included publications from 2000 to 2017 and was limited to the field of economic sciences. The total number of found documents for “co-production” in the Web of Science database was 3398 and for Scopus 5233. After narrowing down the search for “co-production in public services” and the area of business and management, the number of publications decreased to 48 in the Scopus database and 47 in Web of Science.

**Table 1 Criteria and search areas of the literature database for co-production in public services** (source: own study based on records from WoS databases, Scopus. Date of searching: 2018-01-30)

Criterion of analysis (1)	Number of found publications (2)	
	Scopus	Web of Science
Criterion 1: “co-production” (in the title, abstract, key word)	5233	3 398
Criterion 2: “co-production in public services” (in the title, abstract, key word)	277	213
Criterion 3: publications in the field of social sciences	136	154
Criterion 4: publications in the field of economics and management	71	57
Criterion 5: papers in journals in the field of economics and management	48	47

In fact, by 2000, only 3 publications from the analysed topic were identified in the WoS database. There is an increased interest of researchers in co-production after 2000. Information on the number of publications from the analysed topic for economic sciences (area: business, economics, management) in the Scopus and Web of Science databases is presented in Figure 1. As can be seen in the graph, after a period of stagnation in the years 2002-2010, the number of publications was systematically growing, and in the last two years (2016-2017) their number was relatively high.

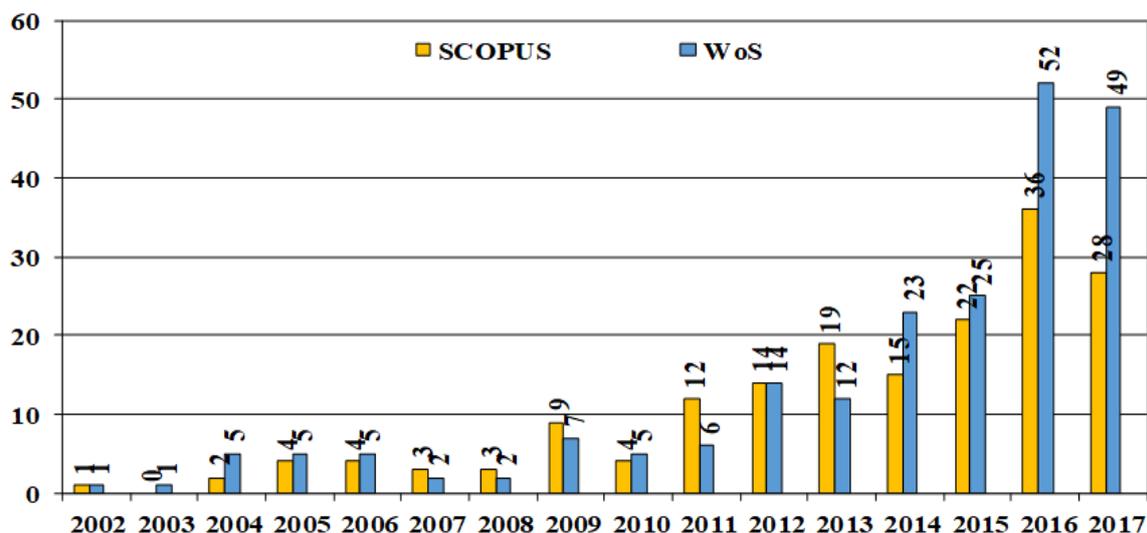


Figure 1. **Number of publications for the key word - “co-production in public services” in the title, key word or summary in the SCOPUS and WoS databases** (source: own study based on the WoS and Scopus databases. Date of search 10-01-2018)

After the first conceptualization of the co-production phenomenon (1990s), in subsequent years (beginning of 2000), researchers began to analyse the possibilities of using it in various areas of the public sector (social care, health care, city management) and tried to indicate the main motives, processes and effects of applying the concept. The current challenges in the literature are twofold. First of all, there is still no empirical and comparative research that tests the assumptions related to co-production, its possibilities in generating social capital, new relations within the cooperation network, common motives for the behaviour of co-producers. Co-production research also suffers from a low methodological diversity (there is too little quantitative comparative work) (Verchuere et al., 2012).

In a further stage of the research, bibliometric analysis was limited to the analysis of quotability, taking into account publications issued in the years 2000-2017 and limiting them only to scientific papers. The largest number of papers on the subject studied in the Scopus database were published in the journals: *Public Management Review*<sup>1</sup> (22), *Voluntas*<sup>2</sup> (10), *International Review of Administrative Science*<sup>3</sup> (7), *International Journal of Public Administration*<sup>4</sup> (6), *Government Information Quarterly*<sup>5</sup> (5). The most frequently quoted authors

<sup>1</sup> 2016 - Impact Factor: 2.293

<sup>2</sup> 2016 - Impact Factor: 1.098

<sup>3</sup> 2016 - Impact Factor: 1.350

<sup>4</sup> 2016 - Impact Factor: 1.133

<sup>5</sup> 2016 - Impact Factor: 4.090

are: V. Pestoff (Ersta Skondal University College, Sweden) (quoted 509 times); T. Brandsen (Tilburg University, the Netherlands) (304 times); T. S. P. Osborne (University of Edinburgh Business School, Scotland) (237 times), T. Bovaird (University of Birmingham, the United Kingdom) (112 times); J. Alford (University of Melbourne, Australia) (107 times), E. Loeffler (University of Birmingham, WB) (85 times)<sup>6</sup>. The most cited papers come from researchers from countries such as the United Kingdom (96 publications), the United States (35), the Netherlands (25), Australia (25), Italy (21).

In a further stage of the research, bibliometric analysis was made to analyse the content of the most cited papers, dealing with the issue of co-production in public services. Attention was paid to such aspects as: the area of research / analysis, the type of public service being the subject of the analysis, applied research methods.

Table 2 summarizes the most cited publications together with the main research topics.

Table 2 **The most-cited papers on co-production issues and exploration areas** (source: own study based on the WoS and Scopus databases. Date of search 10-01-2018)

No	Author/ Authors	The title of the publication/ journal	The number of citations in the Scopus database	The number of citations in the WoS database	Main areas of research
(1)	(2)	(3)	(4)	(5)	
1	Brandsen, T., Pestoff, V.	<i>Co-production, the third sector and the delivery of public services. An introduction</i> , Public Management Review 8(4), 2006, pp. 493- 501.	142	120	Research into the role of the third sector in co-production of public services. Demonstration of differences between co-production, co- management and co- governance in the criterion of citizen involvement.

<sup>6</sup> Compilation based on the Scopus database dated: 2018-01-30

2	Joshi, A., Moore, M.	<i>Institutionalized co-production: Unorthodox public service delivery in challenging environments</i> , 2004, <i>Journal of Development Studies</i> 40 (4), pp. 31-49.	134	108	Developing the concept and definition of institutionalized co-production.
3	Pestoff, V.	<i>Citizens and co-production of welfare services. Childcare in eight European countries</i> , <i>Public Management Review</i> , 2006, 8 (4), pp. 503-519.	120	94	Co-production studies in the area of childcare services in Europe. Comparative empirical research.
4	Osborne, S. P., Strokosch, K.	<i>It takes two to tango? Understanding the co-production of public services by integrating the services management and public administration perspectives</i> , <i>British Journal of Management</i> , 2013 24 (S3), pp. 31-47.	75	51	Research on the factors determining the process of providing innovative services using co-production, taking into account the integrated approach: service management and the perspective of public administration.
5	Dunston, R., Lee, A., Boud, D., Brodie, P., Chiarella, M.	<i>Co-production and health system reform - From re-imagining to re-making</i> , <i>Australian Journal of Public Administration</i> , 2009, 68 (1), pp. 39-52.	70	51	The paper discusses the possibilities and challenges associated with the co-production of health care services. Identifies the co-production discourse and issues critical to the successful implementation of co-production in the health sector.

6	King, S. F.	<i>Citizens as customers: Exploring the future of CRM in UK local government</i> , Government Information Quarterly, 2007, 24 (1), pp. 47-63.	70	No data	The paper describes how selected public institutions in the UK plan to use CRM to better understand the needs of citizens, involving them in the co-production of local affairs.
7	Verschuere, B., Brandsen, T., Pestoff, V.	<i>Co-production: The State of the Art in Research and the Future Agenda</i> , Voluntas 2012, 23 (4), pp. 1083-1101.	63	53	Discussion of the current state of research on co-production in public services, in particular: motives, effects and efficiency of co-production
8	Pestoff, V., Osborne, S. P., Brandsen, T.	<i>Patterns of co-production in public services. Some concluding thoughts</i> , Public Management Review, 2006, 8 (4), pp. 591-595.	52	34	The role of the third sector in involvement in co-production is examined.

The review of the content in the papers shows that co-production is a practice that can be found in many areas of the public sector (such as regional media, library services or garbage collection), but mainly in health care and education. Co-production was usually studied in single or comparative case studies. These case studies were often carried out using interviews and document analysis. Quantitative methods have been used much less frequently. In this connection, we can see that the qualitative approach prevails when examining co-production practices. This means, among others that the context of co-creation is examined and factors in this context have been the subject of special attention.

### Conclusions

The results of analyses carried out in this paper show that the issue of co-production in public services as an innovative concept of providing public services is still poorly recognized and without a solid empirical basis. In particular, national studies do not yet have significant achievements in this field, taking into account the recognisability and citation of publications in important scientific periodicals.

While the causes of co-production development are well recognized in the literature on the subject: an attempt to improve the quality of public services by using the knowledge of users and their networks; the need to provide public services that are better targeted and respond better to users; the possibility of using co-production as a way to reduce costs; the opportunity to create synergies between the government and civil society with a positive impact on social capital, however, it is not enough space to study the effectiveness and efficiency of co-production, and the social effects of co-production. In addition to the limitations of traditional models of service provision, due to citizens' needs and to favourable political and institutional conditions, this way of providing public services will be inspired, in many countries, the creation of more democratic decisions on the future of e.g. cities.

We cannot yet clearly assert an argument that co-production 'is the best of all possible alternatives' to improve the provision of public services through users' participation in the design, implementation and evaluation of public policies. More empirical evidence is needed to confirm that. Moreover, it is important to proceed with this analysis but this time focussing on the theory of services proposed by Osborne, thus cementing theoretical knowledge in this field. This knowledge should also be expanded to other industries and other social, political and economic realities (Silvestre et al., 2016).

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# DETERMINANTS OF DIFFERENTIATION FOR SELECTED COUNTY LABOUR MARKETS IN PODLASKIE VOIVODSHIP – THE APPLICATION OF THE SCENARIO METHOD

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**Abstract.** *The main aim of the paper is to present the possibilities of scenario method use for the identification of the factors determining a different situation in selected county labour markets in Podlaskie Voivodship, Poland. The novelty posited by the authors of the paper consisted in the application of the qualitative method based on the intuitive logic school of scenario construction for the county labour markets analysis. The following pairs of poviats were subjected to the case study: Hajnowski and Bielski, Grajewski and Wysokomazowiecki, Suwalski and Sejneński. The selection of the experts of the presented case study followed the rules of researcher triangulation. The expert team consisted of representatives of labour market institutions, local government units and enterprises, which allowed for a multifaceted view on the analysed issues. The scenario method was preceded by the STEEPVL analysis. The main problem issue undertaken during the case study analysis was the identification of factors affecting the development of selected poviats and the assessment of these factors in terms of validity and uncertainty. The STEEPVL analysis and the scenario method were implemented for poviats, which in pairs of poviats occupy lower positions in the ranking of poviats in the region. The research methods applied by the authors of the paper were literature review, a case study, STEEPVL analysis and the scenario method.*

**Keywords:** *country labour market, Podlaskie Voivodship, scenario method, STEEPVL analysis.*

## Introduction

The research presented in this paper is a part of the project entitled “Reasons for differentiation of county labour markets in Podlaskie voivodeship” commissioned by the Voivodship Labour Office in Białystok, in which the authors took part as coordinators of qualitative investigation (Glińska et al., 2017). The study was carried out in the period: July-August 2017 by researchers from the Faculty of Engineering Management of Białystok University of Technology. The main goal of the project was to determine the reasons for the diversification of poviat labour markets in the Podlasie region, Poland. The methodology of the research comprised five main stages and was based on the methodological

triangulation principle which aims at the application of both quantitative and qualitative methods for the examining of phenomena in order to maintain research validity (Kononiuk & Nazarko, 2014).

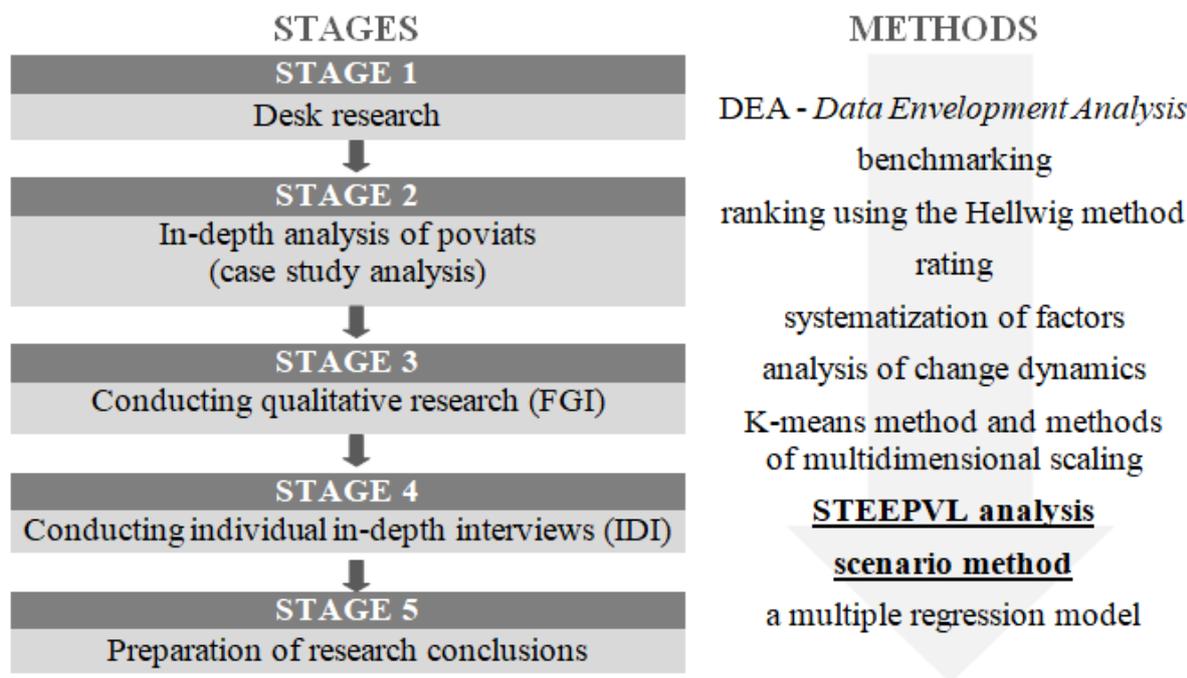


Figure 1. **Methodology and supporting methods used in the project “Reasons for differentiation of county labour markets in Podlaskie voivodeship”** (source: own study based on Glińska et al., 2017)

The research stages consisted of desk research analysis, in-depth case study analysis of selected pairs of poviats (Bielski and Hajnowski, Wysokomazowiecki and Grajewski, Sejnencki and Suwalski), as well as the qualitative research cycle (FGI, IDI) with representatives of employers, business environment institutions and local government. The desk research analysis was focused on the examination of legal regulations, programmes and development strategies of the poviats in terms of activities supporting the labour market and development of entrepreneurship, as well as the indication of good practices in this area. Case study analyses were based on an in-depth analysis of poviats with similar potential, and at the same time having a diversified situation on the labour market in terms of unemployment and the number and quality of jobs, as well as demonstrating factors affecting the success of some poviats and barriers to the development of others. In the next phase of the research process, qualitative research was carried out. It comprised two phases, namely: FGI –Focus Group Interview and IDI – Individual In-depth Interview with representatives of labour market institutions, local government units and employers' organizations. 41 experts participated in the study. Each from poviats was represented by groups

similar in size i.e. six, seven or eight people. A percentage of each group representing the poviats in the whole examined group is presented in Figure 2.

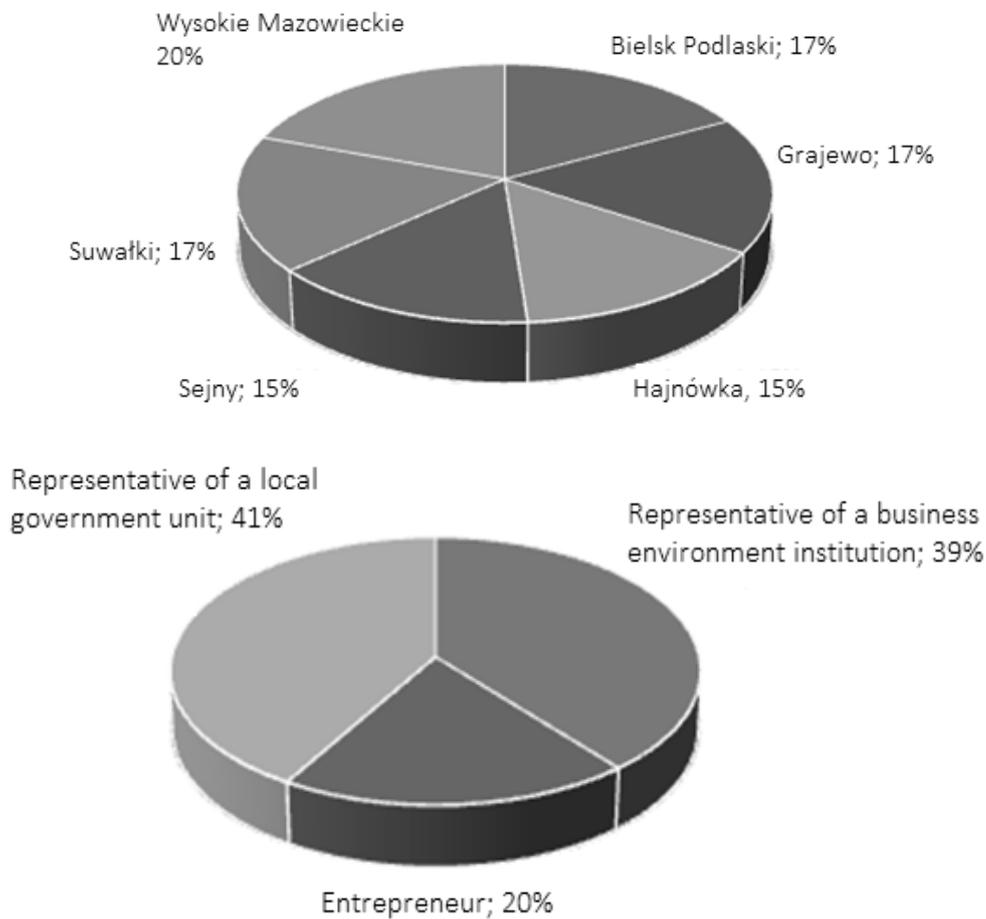


Figure 2. Structure of the surveyed respondents in the project “Reasons for differentiation of county labour markets in Podlaskie (source: Glińska et al., 2017)

As a part of qualitative research conducted in respect of entrepreneurs, there were carried out:

- 5 group interviews (with the representatives of counties: Bielsk Podlaski, Grajewo, Hajnówka, Sejny, Suwałki);
- 6 individual interviews (with the representatives of counties: Bielsk Podlaski, Grajewo, Sejny, Wysokie Mazowieckie).

However, with reference to Local Government Units, there were carried out:

- 1 group interview (with the representatives of counties: Grajewo, Hajnówka, Wysokie Mazowieckie, Suwałki);
- 8 individual interviews (with the representatives of counties: Grajewo, Bielsk Podlaski, Sejny).

This paper focuses mainly on the results of group interviews which enabled scenarios to be built for selected powiat labour markets on the basis of the opinion of entrepreneurs and business environment units, through the implementation of STEEPVL analysis and the scenario method. The results of individual interviews enabled the authors to identify the main reasons for differentiation of county labour markets.

### **Scenario method and STEEPVL analysis – a brief overview**

The scenario method consists in constructing a vision of the future based on the involvement of experts, taking into account the exact knowledge and understanding of the factors shaping the studied phenomena. (Nazarko, 2013a; Kononiuk & Nazarko, 2014).

In most of the key literature items in the scope of the scenario method, the focus was on adapting this method to the needs of strategic management in enterprises (O’Keefe & Wright, 2010; Gierszewska & Romanowska, 2009; Perechuda & Sobińska, 2008; Lindgren & Banhold, 2003; van der Heijden et al., 2002; Ringland, 1998; van der Heijden, 1996; Schwartz, 1991), ignoring its significance in foresight research understood as the consensus of potential stakeholders regarding desirable developmental vision of the powiat. The concept presented in the paper corresponds to the current trends in qualitative research and is part of the intuitive logic school of scenario building. According to G. Wright and G. Bowman, the school of intuitive logic favours the understanding of the processes that shape the future, and also influences the ways of thinking of team members implementing the scenario method (Bowman et al., 2013). In the work of G. Bowman et al. the conclusions from the scenario structure based on the school of intuitive logic with the adaptation of ready-made scenarios for the needs of regional policy were presented. According to Bowman et al. the scenario structure based on the intuitive logic school favoured a creative debate among the participants of the process, while the adaptation of ready-made scenarios – because of the lack of a sense of participation in scenario building – favoured undermining their credibility by stakeholders, making the whole process of creating them less effective (Bowman et al., 2013).

The scenario method in the presented project was preceded by the STEEPVL analysis, which is a checklist of factors: social, technological, economic, ecological, political, values and legal factors that affect the development of a given research area. The multidimensionality of the STEEPVL analysis allows to capture the potential driving forces of scenarios that could be neglected in the case of traditional PEST analysis. In addition to defining driving forces that create development scenarios, STEEPVL analysis is used, among others, to identify unprecedented events breaking trends (the so-called “wild cards” and to enrich

the complexity of the SWOT analysis (Nazarko & Kędzior, 2010; Kononiuk, 2010; Nazarko, 2013b; Nazarko & Kuźmicz, 2017).

### **Methodology of STEEPVL analysis in the project**

The main problem issue undertaken during the case study analysis was the identification of factors affecting the development of selected poviats and the assessment of these factors in terms of importance and uncertainty.

The task of the experts was to determine:

1. What social factors influence the development of the poviat?
2. What technological factors influence the development of the poviat?
3. What economic factors influence the development of the poviat?
4. What ecological factors influence the development of the poviat?
5. What political factors influence the development of the poviat?
6. What values influence the development of the poviat?
7. What legal factors influence the development of the poviat?

In the first step, the STEEPVL analysis was carried out for poviats, which in pairs of poviats occupy lower positions in the ranking of poviats prepared in the intermediate stages of the study, i.e. for Sejnencki, Hajnowski and Grajewski poviats.

The group of experts were representatives of the Suwałki and Sejny poviats, representatives of the Hajnówka and Bielsk Podlaski poviats as well as representatives of Grajewo poviat, respectively.

The STEEPVL analysis was carried out on the basis of brainstorming session results carried out by the experts representing pairs of poviats, or a single poviat, which took place in the case of the Grajewski poviat. The STEEPVL analysis was moderated by the authors of this paper.

A total of nine experts, including two representatives of the Poviat Labor Office in Sejny, a representative of the Poviat Labor Office in Suwałki, a representative of the Suwałki Special Economic Zone, four representatives of training institutions and business support institutions (such as "ARES" SA in Suwałki, the Youth Education and Work Centre in Suwałki and the Suwałki Teacher Training Centre in Suwałki) and one business representative representing Inter Cars S. A., a Suwałki company, were included in the group developing the STEEPVL analysis for the Sejny poviat.

The group developing the STEEPVL analysis for the Bielsk Podlaski poviat formed a total of seven experts from the Hajnówka and Bielsk Podlaski poviats, including one representative of the Poviat Labor Office in Bielsk Podlaski, one representative of the Poviat Labor Office in Hajnówka, one representative of business environment institutions from the Association for Dissemination of Knowledge and Innovation and four business representatives representing such

enterprises as: the Factory of Handles BISON-BIAL S. A., Przedsiębiorstwo Drogowo-Mostowe MAKSUD Sp. z.o.o, Pronar Sp. z.o.o and the Furniture Factory “FORTE” branch in Hajnówka.

Due to the lack of representatives of the Wysokomazowiecki powiat, the least numerous group of experts were representatives of the Grajewski powiat. In the process of identifying STEEPVL analysis factors affecting powiat labour markets, three experts were involved, including one representative of the Powiat Labour Office in Grajewo and two representatives of business environment institutions representing the Supraregional Training and Examination Consortium.

It should be emphasized that the boundaries between the factors are fuzzy, hence it is possible to classify factors into more than one category. Sometimes it is also difficult to clearly classify a factor into a particular category.

As a result of the research procedure, a total of 35 factors influencing the development of the local labour market in the Sejny powiat, 30 factors influencing the development of the local labour market in the Grajewski powiat and 41 factors affecting the development of the local labour market in the Hajnowski powiat were identified.

The selection of experts for the study fulfilled the principle of the triangulation of researchers consisting in the selection of experts representing various professional milieus in order to ensure higher quality of the research (Kononiuk & Nazarko, 2014).

### Methodology of scenario analysis in the project

The methodology of scenario analysis was based on the intuitive logic school of scenario building which assumes that scenarios are prepared on the basis of experts’ experience and intuition. The correspondence between STEEPVL analysis and the scenario method is presented in Figure 3.

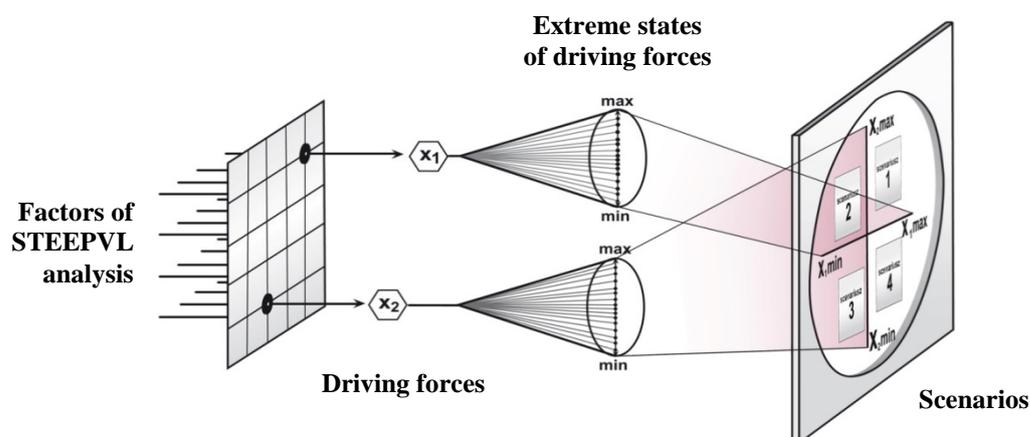


Figure 3. Correspondence between STEEPVL analysis and the scenario method (source: Kononiuk & Nazarko, 2014)

Out of the identified factors of STEEPVL analysis, the experts taking part in the study, selected – on the basis of rankings of importance and uncertainty – two driving forces whose extreme states form four qualitatively different scenarios.

Hence, in the next stage of the research process, experts participating in the study were asked to prepare a ranking of factors in terms of importance and uncertainty (adopting a five-grade scale of assessments). The STEEPVL factors posited by the experts and the results of expert assessments, for one out of the three analysed poviats, (Hajnówka powiat) are presented in Table 1.

Table 1 **STEEPVL analysis for the Hajnówka powiat** (source: Glińska et al., 2017)

<b>Factors</b>	<b>Name of the factor</b>	<b>Scale of importance</b>	<b>Scale of uncertainty</b>
Social	Ageing society (soc 1)	2	2
	The region’s attractiveness for specialists due to Białowieża Primeval Forest (soc 2)	2	2
	Emigration among young people (soc 3)	5	4
	Social inactivity (soc 4)	2	3
	Professional development (soc 5)	4	4
	Quality of education (soc 6)	4	2
Technological	Transport and logistics accessibility (tech 1)	5	5
	Research and development infrastructure (tech 2)	4	4
	Energetic infrastructure (tech 3)	5	3
Economic	Non-refundable financial contribution (econ 1)	3	1
	Relations with the neighbouring countries (econ 2)	3	3
	Attractiveness of the tourist industry (econ 3)	3	3
	Identification of a workplace with the place of origin (econ 4)	2	2
	Exchange of information on the local professionals market with the Scientific and Research Centre at BUT Forestry Faculty (econ 5)	2	1
	Accessibility to large-area investment areas (econ 6)	4	3
	Number of forest- and agriculture-based processing enterprises (econ 7)	3	3
	Number of EU programmes dedicated to large enterprises (econ 8)	3	3
	Network of industrial cluster cooperation (econ 9)	5	5

	Inhabitants; income levels (low) (econ 10)	5	3
	Salary levels (econ 11)	5	3
	Narrow specialisation of the Scientific and Research Centre at BUT Forestry Faculty (econ 12)	5	3
	Concentration of tourism development within Białowieża (econ 13)	4	4
	Rich offer of overseas jobs (financially competitive) (econ 14)	3	2
	The Suwałki Special Economic Zone in Hajnówka (econ 15)	3	2
	Number of international investments (lack) (econ 16)	5	3
	Number of entrepreneurship incubators (econ 17)	4	4
	Access to EU projects e.g. „Settlement voucher” (econ 18)	1	1
Ecological	Air quality (ecol 1)	3	3
	The region’s natural capacity (Białowieża Primeval Forest) – attraction and conflict (ecol 2)	2	2
Political	Legal situation of Białowieża Primeval Forest (uncertainty) (pol 1)	4	4
	Borderland traffic (lack) (pol 2)	4	3
	Development strategy of precious natural areas (pol 3)	2	1
	Politicising the conflict with regard to Białowieża Primeval Forest (pol 4)	2	1
Values	Openness towards new experiences (v 1)	4	3
	Tendency to preserving traditions (v 2)	2	2
	Enterprises’ organisational culture (v 3)	5	2
Legal	Legal stability (no – legal instability) (l 1)	3	2

The experts taking part in the study brainstormed six social factors, three technological factors, eighteen economic factors, two ecological factors, four political factors, three factors related to values and one legal factor.

From the experts' ranking of factors in terms of importance and uncertainty, two key factors shaping the local labour market in the Hajnowski powiat were identified: transport and logistics accessibility (tech 1) and network of industrial cluster cooperation (econ 9) (Figure 4).

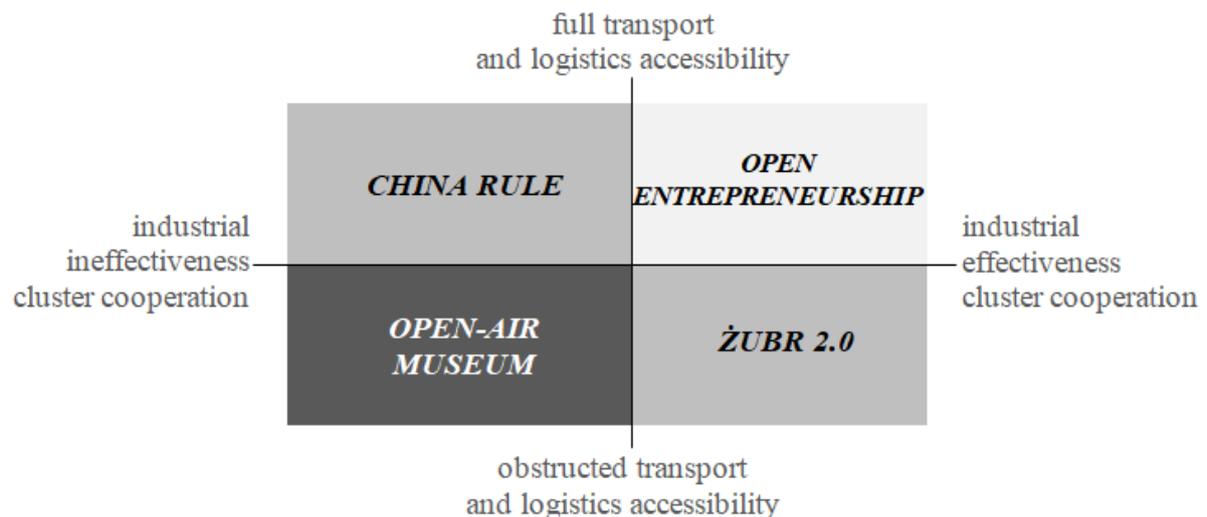


Figure 4. **Four scenarios of development for Hajnowski Poviát**  
(source: Glińska et al., 2017)

The system of extreme values of two key factors allowed the experts to create four development scenarios of the Hajnowski poviát: „Open Entrepreneurship” scenario, „Chine rule” scenario, „Open-air museum” scenario and „Żubr 2.0” scenario. In the experts’ opinion, the most desired scenario is „Open entrepreneurship”. This scenario assumes effective industry cluster cooperation and full communication and logistics accessibility of the region. It has a positive impact on the research and development infrastructure of the region, creates favourable conditions for the development of enterprises, the creation of new entities, including business incubators, contributes to the increase in the income of residents in the region.

In the “China rule” scenario, the full communication and logistics accessibility of the region due to the lack of cluster cooperation is not enough for the dynamic development of the region. The development of the poviát labour market can be noticeable only in the aspect of the increase in the number of construction enterprises, and most material goods are still imported from China, omitting the values of regional products.

The least favourable arrangement of factors is noticeable in the case of the “Open-air museum” scenario characterized by the difficult communication and logistics accessibility of the region and the lack of cluster cooperation, this scenario presents the *status quo* of the Hajnówka poviát.

The “Żubr 2.0” scenario is characterized by a confrontation of difficult communication and logistics accessibility of the region with effective cluster cooperation; presents the attitude of regional isolationism.

Similar analyses were carried out for the Sejnencki and Grajewski poviats. The detailed description of the scenarios may be found in the monograph (Glińska et al., 2017).

Apart from the scenarios developed for the poviats that occupy lower positions in the ranking, the qualitative research (FDI and IDI) interviews enabled the authors to formulate the following reasons for the differentiations of the county labour markets in the following pairs of poviats: Bielsk Podlaski and Hajnówka, Wysokie Mazowieckie and Grajewo, Suwalki and Sejny. The example of the comparison of the poviats is presented for Bielsk Podlaski and Hajnówka county.

Bielsk Podlaski county versus Hajnówka county:

1. On both local labour markets there operate enterprises that provide services and products not only to local and national but also international recipients. In Bielsk Podlaski County it is a large group representing various industry sectors, and in Hajnówka County this is one leading entrepreneur.
2. In Bielsk Podlaski County there also exist numerous emerging enterprises that ensure attractive workplaces.
3. A vital feature of Bielsk Podlaski County is its spirit of entrepreneurship and the efficient County Labour Office.
4. A significant feature of Hajnówka County is Białowieża Primeval Forest and the related controversies.
5. Both counties face the issue of maladjustment of the educational offer to the needs of the labour market.

The (FDI and IDI) interviews with the representatives of employers, business environment institutions and local government enabled identification of the factors influencing the labour market differentiation that are not so obvious or easily detectable on the basis of available statistics.

## **Conclusions**

The theoretical contribution of the paper to the fields of Management consists in the application of the qualitative method based on the intuitive logic school of scenario construction for the county labour markets analysis.

The practical implications of the methodological considerations presented in the paper in a form of a case study demonstrated that scenario analysis may be a useful tool for the analysis of the factors influencing the situation of the local labour markets. The scenarios elaborated by the experts reflected the range of potential future conditions and challenges for the examined regions. A characteristic feature of all the elaborated factors was the fact that the economic group was the most extensive in all of the analysed poviats. In the opinion of

experts taking part in the study, the scenario approach is novel and stimulating in this way because it stretches thinking, confronts the difficulty, ambiguity and promotes “out of the box” thinking. As the scenarios were not too numerous or detailed, they depicted capabilities and interests relevant to the potential beneficiaries. The fact that the scenarios were developed in pairs and for the poviats that occupy lower positions in the rankings reflecting the situation on the labour market contributes to the mutual learning of good practices between the poviats.

### Acknowledgements

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# ЗАВИСИМОСТЬ ЭФФЕКТИВНОСТИ ДЕЯТЕЛЬНОСТИ МЕНЕДЖЕРОВ ОБЩЕОБРАЗОВАТЕЛЬНЫХ ОРГАНИЗАЦИЙ ОТ ЭТАПОВ КАРЬЕРЫ

## *Dependence of the Effectiveness of Managers of General Educational Organizations on Career Stages*

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**Abstract.** *The article examines the problem concerning the effectiveness of managers of general education organizations. There is no universal methodology for the assessment of effectiveness of activity of managers of general education organizations and no determined factors affecting any effectiveness indicator. The aim of this study is to analyse the effectiveness of managers of a general education organization at different stages of their careers. The main methods of this research are the system analysis, the questionnaire survey and the factor analysis. The author analyses the dependence of the effectiveness indicators of managers of general education organizations on the career stages. The effectiveness evaluation was carried out according to the author's methodology and was based on the data of general education organizations in the Smolensk region.*

*Managers of general education organizations at the establishment stage of a career haven't sufficiently formed public relations and developed educational activities. Managers at the advancement stage do not pay enough attention to building the career of employees of the educational organization. Transfer of experience to youth, their adaptation in the team, support in research work, assistance in building a career are not sufficiently typical for school managers at the maintenance stage of careers. Managers at the withdrawal stage of a career have a low level of information culture, lack motivation to use new technologies and progressive ideas.*

**Keywords:** *effectiveness of activities, manager, general educational organization, career stages.*

### **Введение** **Introduction**

В последнее время изменяются установки по управлению человеческими ресурсами в организациях различных видов. Происходит концептуальное и практическое становление «обучающихся организаций», главным отличием которых от организаций традиционного типа становится создание условий, способствующих непрерывному развитию работников.

Вопрос развития педагогических кадров – один из самых важных на этапе перехода к информационному обществу, так как именно сфера образования является генератором новой информации и высшей её формы – знания. Безусловно, образовательные организации не способны содействовать интенсивному развитию потенциала страны (образовательного, социального, инновационного, экономического), если они не приобрели статус «обучающейся организации».

В общеобразовательной организации развитием персонала занимаются директора, завучи, методисты. Они осуществляют подбор и расстановку педагогических кадров, руководят процессом адаптации сотрудников, их развития и обучения в соответствии с целями организации с учётом интересов самих сотрудников. Результативность этой деятельности влияет на эффективность становления «обучающейся организации», её инновационность и рост кадрового потенциала. А зависит эта результативность от множества факторов, в том числе от профессионализма, опыта деятельности и заинтересованности самих образовательных менеджеров в результате.

Ранее нами была разработана система ключевых показателей эффективности деятельности менеджеров общеобразовательных организаций (Кошевенко С. В. & Сильченкова С. В., 2015, 2016). Актуальность данного исследования определяется тем, что для оценки эффективности деятельности менеджеров общеобразовательных организаций не существует универсальной методики, не исследованы факторы, влияющие на неё, в том числе не выявлено влияние этапов их карьеры на результаты деятельности.

Предмет исследования – индикаторы эффективности деятельности менеджеров общеобразовательных организаций (МОО). Цель исследования – анализ эффективности деятельности менеджеров общеобразовательной организации на разных этапах их карьеры.

Основными методами данного исследования являются системный анализ, опрос методом анкетирования и факторный анализ.

### **Материалы и методы** *Materials and Methods*

Методологическую основу исследования составляют труды представителей учёного сообщества в области:

- образовательного менеджмента (Бойдел Т., Бургойн Дж., Гютл Б., Иванов Е. В., Ортей Ф., Певзнер М. Н., Педлер М., Петряков П. А., Федотова Г. А., Фоскет Н., Шерайзина Р. М., Ширин А. Г. и др.).

Ряд учёных указывают на необходимость формирования у менеджера в сфере образования готовности «к инновационной деятельности, обеспечивающей развитие ... на основе концепции менеджмента знаний, рефлексии личного и профессионального развития...» (Иванов и др., 2010);

- управления человеческими ресурсами (И. А. Епешкин, А. Я. Кибанов, Л. И. Лукичева и др.). И. А. Епешкин делит показатели эффективности работы с человеческими ресурсами на три группы: финансовые, управленческие показатели и показатели лояльности и удовлетворённости персонала (Епешкин, 2013);
- управления образовательными системами (Артюхов М. В., Капустин Н. П., Третьяков П. И., Шамова Т. И.). Так ряд авторов в качестве блоков анализа деятельности менеджеров школ выделяют: информационно-аналитические, планово-прогностические, контрольно-диагностические и коррекционные умения, а также эффективность организационно-исполнительской деятельности (Шамова и др., 2002).

Исходя из анализа работ перечисленных выше авторов и опираясь на анализ практической деятельности менеджеров общеобразовательных организаций г. Смоленска и Смоленской области, нами была разработана система ключевых показателей эффективности деятельности менеджеров общеобразовательных организаций. Были выделены девять блоков, для каждого из которых определены ключевые показатели эффективности деятельности (индикаторы) и критерии их оценки (рисунок 1). В предыдущих работах авторов Кошевенко С. В. и Сильченковой С. В. можно более подробно ознакомиться с данной методикой и разработанными диагностическими материалами.

В 2016 году при поддержке Департамента Смоленской области по образованию, науке и делам молодёжи был проведён мониторинг руководителей и заместителей руководителя общеобразовательных организаций Смоленской области по проблеме эффективности их деятельности. В нём приняли участие 116 респондентов из 64 городских школ и школ районных центров и 158 респондентов из 118 сельских школ Смоленской области (всего 274 человека). Такой объём выборки является достаточным для монографического исследования. Надёжность и достоверность используемого теста подтверждает величина коэффициента альфа Кронбаха (0,88).

<b>Блоки и показатели эффективности деятельности менеджеров школ</b>			
<b>Блок 1. Подбор и адаптация новых сотрудников</b>			
укомплектованность позиций в штате	адаптированность нового сотрудника к условиям работы в образовательной организации	удовлетворенность новых сотрудников сопровождением и условиями работы	
<b>Блок 2. Проектирование индивидуальных образовательных маршрутов педагогов</b>			
количество педагогов, для которых спроектирован индивидуальный образовательный маршрут		соответствие спроектированного образовательного маршрута целям самого педагога и целям образовательной организации	
<b>Блок 3. Организация обучения персонала (внутри и вне организации)</b>			
количество педагогов, своевременно прошедших повышение квалификации и переквалификацию	соответствие обучения преподаваемым дисциплинам и потребностям педагогов	удовлетворённость педагогов проводимым внутриорганизационным обучением	готовность сотрудников использовать новые знания и технологии
<b>Блок 4. Проектирование индивидуальных траекторий карьерного роста педагогов</b>			
график (годовой план) должностных продвижений	замещенные должности внутренним продвижением сотрудников	количество педагогов, защитившихся на I и высшую квалификационную категорию, при активной информационно-педагогической поддержке ОМ	
<b>Блок 5. Построение системы взаимодействия с педагогическим коллективом</b>			
реализованные функциональные задачи		удовлетворённость коллектива и руководителя работой ОМ	
<b>Блок 6. Создание и координация работы проектных групп и координация индивидуальной исследовательской работы педагога</b>			
количество заявок педагогических работников на участие в грантах, конкурсах профессионального мастерства		количество победителей и лауреатов конкурсов разного уровня, выигранных грантов	
<b>Блок 7. Ведение базы данных сотрудников</b>			
полнота заполнения БД сотрудников		скорость составления информационно-аналитических справок, отчётов	
<b>Блок 8. Связи с общественностью</b>			
участие в мероприятиях разного уровня, проводимых на базе школы	взаимодействие с внешними организациями, социальное партнёрство	взаимодействие со СМИ	
<b>Блок 9. Просветительская деятельность менеджера</b>			
выступления на семинарах, конференциях, курсах повышения квалификации по вопросам ОМ	трансляция опыта посредством участия в смотрах-конкурсах профессионального мастерства	участие в экспериментальной (исследовательской) деятельности	публикационная активность

**Рисунок 1. Ключевые показатели эффективности деятельности менеджеров общеобразовательных организаций** (источник: составлено авторами статьи)  
*Figure 1. Key effectiveness indicators for managers of general education organizations*  
*(source: compiled by the authors of the article)*

Для достижения поставленной цели нами использовались такие методы исследования как изучение научной литературы по проблеме исследования, системный анализ, опрос методом анкетирования, анализ статистических показателей, графический и табличный методы и факторный анализ.

## Результаты исследования *Results of the research*

Рассмотрение полученных результатов следует начать с изучения средних показателей эффективности деятельности МОО Смоленской области (рисунок 2).

Средний балл по анкете – 2,63 балла, что соответствует среднему показателю эффективности деятельности МОО по региону.

Низкие баллы по блокам просветительская деятельность (1,31), создание и координация работы проектных групп и координация индивидуальной исследовательской работы педагога (0,88), говорят о недостаточной эффективности работы МОО по данным направлениям.

Далее рассмотрим особенности изменения показателей эффективности деятельности в зависимости от этапа карьеры менеджера образовательной организации.



Рисунок 2. Средние показатели эффективности деятельности МОО Смоленской области по блокам (источник: составлено автором статьи)

*Figure 2. Effectiveness averages for managers of general education organizations in the Smolensk region by indicator category (source: compiled by the authors of the article)*

В таблице 1 приведены характеристики этапов карьеры сотрудников, которые являются универсальными для любой области деятельности и профессии (Кибанов и др., 2013).

Таблица 1. **Характеристика этапов карьеры** (Кибанов и др., 2013)  
*Table 1 Characteristics of career stages (Kibanov et al., 2013)*

Этап карьеры	Возрастной период	Краткая характеристика	Особенности мотивации (по Маслоу)
Предварительный	До 25 лет	Подготовка к трудовой деятельности, выбор области деятельности	Безопасность, социальное признание
Становление	До 30 лет	Освоение профессии, приобретение навыков, формирование квалифицированного специалиста или руководителя	Социальное признание, независимость
Продвижение	До 45 лет	Профессиональное развитие: рост квалификации, приобретение опыта, продвижение по службе	Социальное признание, самореализация
Сохранение	До 60 лет	Закрепление достигнутых результатов. Пик совершенствования квалификации, ее повышение в результате активной деятельности, обучения молодежи. Творчество	Повышение оплаты труда. Достижение вершин независимости и самовыражения. Уважение
Завершение	До 65 лет	Подготовка к переходу на пенсию, поиск и обучение собственной смене	Удержание социального признания
Пенсионный	После 65 лет	Занятие другими видами деятельности	Поиск самовыражения в новой сфере деятельности

Для достижения цели исследования вся выборка разделена на несколько групп по возрасту, соответствующему каждому этапу карьеры. Так как в выборке не выявлено респондентов с возрастом до 25 лет, количество групп равно пяти. Количество менеджеров общеобразовательных организаций в возрасте от 26 до 30 лет в регионе составляет всего 2 человека, их средний стаж работы в должности – 3 года. В возрасте от 31 до 45 лет, соответствующем этапу продвижения в карьере, опрошено 78 человек, их средний стаж работы в должности – 6 лет. Возрастная группа, соответствующая этапу сохранения карьеры (от 46 до 60 лет), составляет 161 человек, средний стаж – 13 лет. В группе МОО, находящихся на этапе завершения карьеры (возраст от 61 до 65 лет), оказалось 23 человека, в среднем они исполняли обязанности руководителя образовательной организации 25 лет. Респондентов в возрасте старше 65 лет, их 10 человек, средний стаж работы в должности – 29 лет, максимальный возраст респондента составляет 70 лет.

В целом данная группировка отражает практически все этапы продвижения карьеры МОО: в молодом возрасте (до 30 лет) специалисты учатся, накапливают первый опыт трудовой деятельности и не могут в полной мере выполнять обязанности менеджера, в пенсионном возрасте (старше 65 лет) для выполнения обязанностей менеджера работники должны идти в ногу со временем, что не всегда удается, поэтому таких респондентов меньшинство. Средние баллы эффективности деятельности МОО для каждой группы опрошенных отражены в таблице 2.

Таблица 2. Средний балл эффективности деятельности МОО по блокам в зависимости от этапов их карьеры (источник: составлено автором статьи)  
 Table 2 Average scores for the effectiveness of MGEO by indicator category, depending on the stages of their career (source: compiled by the authors of the article)

Функциональная задача менеджера общеобразовательной организации	Этап карьеры				
	Становление (до 30 лет)	Продвижение (до 45 лет)	Сохранение (до 60 лет)	Завершение (до 65 лет)	Пенсионный (старше 65 лет)
Подбор и адаптация новых сотрудников	3,42	3,97	3,88	3,75	3,98
Проектирование индивидуальных образовательных маршрутов педагогов	3,67	3,17	2,88	3,03	2,77
Организация обучения персонала	3,00	3,57	3,03	3,22	2,92
Проектирование индивидуальных траекторий карьерного роста педагогов	3,17	2,58	2,24	2,12	2,00
Построение системы взаимодействия с педагогическим коллективом	3,50	3,49	3,02	3,01	2,95
Создание и координация работы проектных групп и координация индивидуальной исследовательской работы педагога	0,92	1,52	0,80	0,91	0,80
Ведение базы данных педагогов	3,33	3,39	3,12	3,05	2,33
Связи с общественностью	1,67	2,83	2,43	2,31	2,40
Просветительская деятельность МОО	0,38	1,67	1,12	1,56	1,12
<b>Общий средний балл</b>	<b>2,56</b>	<b>2,91</b>	<b>2,50</b>	<b>2,70</b>	<b>2,36</b>

На этапе становления карьеры (до 30 лет) средний балл показателя эффективности деятельности МОО равен 2,56 балла. Наибольший средний балл соответствует этапу продвижения карьеры (возраст от 31 до 45 лет) – значение 2,91. Наблюдается некоторое снижение показателя на этапе сохранения карьерных позиций (до 60 лет) – 2,50. На этапе завершения

карьеры (до 65 лет) данный показатель равен 2,70 балла. На пенсионном этапе (старше 65 лет) показатель равен 2,36 балла.

При рассмотрении блоков эффективности деятельности МОО видны максимальные значения показателей также для этапа продвижения. Это предсказуемо, так как на этой ступени для специалистов свойственны максимальная отдача, активность в профессиональной деятельности, рост квалификации, приобретение опыта, продвижение по службе; они стремятся к признанию в трудовом коллективе, самореализации.

Объяснить повышение общего показателя эффективности профессиональной деятельности МОО в возрасте от 61 до 65 лет (этап завершения) по сравнению с этапом сохранения можно ростом активности работников, они как бы доказывают себе и более молодым коллегам, что у них достаточно опыта и им многое по силам и в этом возрасте.

Хотя первую и последнюю группы респондентов нельзя считать статистически значимыми, но характерно, что минимальный балл демонстрируют опрошенные более старшего возраста (старше 65 лет), чем молодые и неопытные коллеги в возрасте до 30 лет, которые более мотивированы на достижение высоких профессиональных результатов.

Рассмотрим, какие проблемы можно выявить для каждого этапа становления карьеры менеджеров общеобразовательных организаций.

Для группы менеджеров общеобразовательных организаций на этапе становления карьеры можно заметить самый низкий показатель эффективности по сравнению с другими группами респондентов по блокам «Связи с общественностью» и «Просветительская деятельность». Недостаточный опыт руководителя, большие временные затраты на осуществление его текущей административной, хозяйственной и педагогической деятельности не позволяют ему активно организовывать конференции, семинары, мастер-классы и выступать на них, а так же осуществлять активную публикационную деятельность. Тем не менее, молодой возраст дает преимущество для применения прогрессивных знаний и передового опыта и низкие показатели для позиций «Участие МОО в смотрах-конкурсах профессионального мастерства» и «Участие МОО в экспериментальной работе» являются индикатором недостаточно возможной эффективности их деятельности. Что касается взаимодействия со средствами массовой информации, то сами руководители школ не проявляют особой заинтересованности в этом, а СМИ интересуют только очень активные и талантливые молодые руководители, которые могут транслировать передовой опыт своего образовательного учреждения.

На этапе продвижения недостаточно высокими являются показатели по блокам «Проектирование индивидуальных образовательных маршрутов педагогов» и «Проектирование индивидуальных траекторий карьерного

роста педагогов». Они ниже, чем у группы МОО на этапе становления карьеры. Это говорит о том, что менеджеры в возрасте от 31 до 45 лет недостаточно уделяют внимания построению карьеры сотрудников образовательной организации и их образованию.

Для группы на этапе сохранения карьеры показатели практически по всем блокам эффективности деятельности имеют средние баллы ниже, чем аналогичные показатели на этапах становления и продвижения карьеры. При достижении вершин независимости и самовыражения, признания и уважения в коллективе многие МОО снижают активность и считают, что им уже не нужно ничего доказывать и добиваться высоких результатов. В итоге такие важные позиции как передача опыта, адаптация новых сотрудников в коллективе, сопровождение педагогов в исследовательской работе, помощь в построении карьеры не достаточно характерны для менеджеров в возрасте до 60 лет, что негативно сказывается и на показателях эффективности работы молодых специалистов. Это отражено в средних баллах по блокам «Проектирование индивидуальных образовательных маршрутов педагогов», «Проектирование индивидуальных траекторий карьерного роста педагогов» и «Построение системы взаимодействия с педагогическим коллективом»), и «Создание и координация работы проектных групп и координация индивидуальной исследовательской работы педагога», показатели по которым у группы МОО на этапе сохранения карьеры ниже, чем на двух предыдущих этапах.

Для пенсионной ступени карьеры МОО некоторые показатели их деятельности выше, чем для менеджеров, находящихся на других ступенях развития карьеры, что объясняется большим опытом профессиональной деятельности. Проблемными моментами являются ведение базы данных сотрудников и создание и координация работы проектных групп и координация индивидуальной исследовательской работы педагога. Низкие баллы по данным блокам являются отражением недостаточного уровня информационной культуры возрастных руководителей, отсутствием мотивации в освоении новых технологий и прогрессивных идей.

Тем не менее, каждый этап развития карьеры позволяет проявить себя в определенных областях. Молодые руководители больше внимания уделяют построению карьеры сотрудников, так как это актуально и для них. Более опытные МОО продуктивно проявляют себя в подборе кадров для своего учебного заведения. С позиции своего опыта и интуиции они лучше оценивают компетентность соискателей и помогают в их адаптации.

## **Выводы** **Conclusions**

Таким образом, анализ эффективности деятельности менеджеров общеобразовательных организаций Смоленской области на разных этапах развития карьеры позволил выявить некоторые проблемы в их деятельности, что значительно снижает её эффективность.

У менеджеров общеобразовательных организаций, находящихся на этапе становления карьеры, недостаточно сформированы связи с общественностью и развита просветительская деятельность. На этапе продвижения менеджеры недостаточно уделяют внимания построению карьеры сотрудников образовательной организации. Передача опыта молодежи, их адаптация в коллективе, сопровождение в исследовательской работе, помощь в построении карьеры не достаточно характерны для менеджеров школ на этапе сохранения карьеры, что негативно сказывается и на показателях эффективности работы молодых специалистов. А для руководителей, находящихся на пенсионном этапе развития карьеры характерен низкий уровень информационной культуры, отсутствие мотивации в освоении новых технологий и прогрессивных идей.

Данный анализ позволил определить «точки роста» эффективности деятельности менеджеров общеобразовательных организаций на каждом из этапов их карьеры. Выстраивая программы повышения квалификации для директоров и завучей общеобразовательных организаций необходимо учитывать этап карьеры, на котором находится менеджер, с учётом этого формировать учебные группы и подбирать содержание и формы обучения.

Работа над данной проблемой требует детализации и уточнения на основе анализа данных других регионов, так как не все группы менеджеров общеобразовательных организаций Смоленской области в зависимости от этапа их карьеры представлены равнозначно.

## **Summary**

There is no universal methodology for the assessment of effectiveness of activity of managers of general education organizations and no determined factors affecting any effectiveness indicator. A system of key effectiveness indicators for managers of general education organizations was invented before. The aim of this study is to analyse the effectiveness of managers of a general education organization at different stages of their careers.

In the course of the study, based on the data of 274 respondents (managers of general education organizations in the Smolensk region), the following results were revealed. The average score of effectiveness was 2.63 points out of 5. It corresponds to the average effectiveness indicator value. At the establishment stage of a career (up to 30 years of age) the average score for the index of effectiveness of managers of general education organizations was

2.56 points. The highest average score corresponds to the advancement stage of a career (age from 31 to 45 years) - 2.91. There was a slight decrease in the indicator value at the maintenance stage of career positions (up to 60 years of age) - 2.50. At the withdrawal stage of a career (up to 65 years of age) this indicator value was equal to 2.70 points. At the pension stage (over 65 years of age) the value was 2.36 points.

Managers of general education organizations at the establishment stage of a career haven't sufficiently formed public relations and developed educational activities. Managers at the advancement stage do not pay enough attention to building the career of employees of the educational organization. Transfer of experience to youth, their adaptation in the team, support in research work, assistance in building a career are not sufficiently typical for school managers at the maintenance stage of careers. Managers at the withdrawal stage of a career have a low level of information culture, lack motivation to use new technologies and progressive ideas.

This analysis has made it possible to determine the "growth point". It is necessary to take the career stage into account for building up the programmes of professional development for directors and head teachers of schools, for forming training groups and selecting the content and forms of training.

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# INFLUENCE OF CONDITIONS OF ECONOMIC SYSTEMS ON INNOVATION PROCESSES IN MODERN INTERNATIONAL ECONOMIC ENVIRONMENT

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**Abstract.** *The purpose of the paper is to analyse the relationship between the state of economic systems and the innovative activity of industrial enterprises in accordance with the peculiarities of the development of national economies in the global economic environment. The general scientific research methods are used in the research study: information analysis and synthesis, logical construction, monographic, data grouping, and graphical display methods. The character of the influence of a stable economic system (on the example of Latvia) and an unstable economic system (on the example of Ukraine) on innovative development is established. The main factors stimulating innovations in different national conditions in the context of modern international trends of innovative development are revealed. The main directions of the impact on innovation processes and the principles of innovation development policy are defined.*

**Keywords:** *crisis phenomena, economic systems, global innovation index, innovation, policy of innovation development, stable development.*

## Introduction

Innovations are a necessary condition for the development of most economic systems at various levels (namely, enterprises, industries, national economies) in the modern international economic environment. It is also advisable to consider

the innovative activity of the entities of international business as one of the main means of adapting to the constant changes that occur in the economic, social and civilizational space at the micro, macro and mega levels. This is ensured by a special process of managing the economy, based on the constant search for new opportunities to improve the technical, technological, organizational and other factors of the production process.

Crisis phenomena that affect the results of economic activity of many companies, individual countries and the world economy as a whole negatively affect the internal and external environment of business entities. They significantly inhibit innovative processes, which in turn act as a catalyst for all activities. As a result, the innovation activity of industrial enterprises is reduced, the pace of scientific and technical progress is slowing down, the demand for innovative products is reduced, and the possibilities for applying advanced technologies are reduced. All this leads to a decrease in the competitive advantages of products and the competitive positions of individual enterprises in national and international markets, and also contributes to a decrease in the competitiveness of economies of whole countries.

At the same time, taking into account the dynamics of innovation activity in the countries of the world, one can also say the opposite: it is the crisis of innovations that causes stagnation processes in national and world economic systems.

Determining the nature of the mutual influence of the state of economic systems and innovation processes is part of the scientific interests of many scientists.

Aljanabi (2017) studied the relationship between entrepreneurial orientation, absorptive capacity, and technological innovation capabilities among industrial small and medium-sized enterprises (SMEs) operating in an unstable environment. It was concluded that entrepreneurial orientation and absorptive capacity have significant effects on technological innovation capabilities. However, during the analysis of the mediating effects of incremental and radical innovation within the context of entrepreneurial firms in Turkey, an emerging economy (Kocak et al., 2017), it was concluded that proactive market orientation and technology orientation lead to radical innovation, while responsive market orientation strongly affects incremental innovation.

Researchers (Do et al., 2014) have studied how SMEs manage their innovation and identify critical factors determining the potential innovation outcomes. Forsman and Rantanen (2011), exploring innovation development in enterprises with fewer than 50 employees and small manufacturing and service enterprises, concluded that there exists a broad diversity of innovation patterns among small enterprises. The differences and similarities of innovation capacity and innovation development could be identified across the companies of different

size categories within the manufacturing and service sectors. Saunila (2017) focuses on the challenges and characteristics of innovation performance measurement in SMEs.

Spanish researchers (Serrano-Bedia et al., 2012) have analysed the existence of complementarity between innovation activities (internal innovation, external innovation and cooperative R&D), as well as their impact on firms' innovation performance.

Denins and Lipman (Deniņš, Lipmans, 2011) have studied the management of innovations in Latvian companies and their impact on the competitiveness of the business. The survey conducted by the authors shows that Latvian entrepreneurs lack a systematic approach to innovation management, and there is a lack of resources for consistent implementation of innovation policy.

However, a number of publications are limited to analysis of the interaction between innovation activity and the state of economic systems of the same level, namely, enterprises.

Global aspects of the innovative development of economic systems remain unresolved, namely, the features of innovative development of systems in a stable and volatile economy.

Despite the significant results achieved by scientists in the study of the state of economic systems and their impact on innovation, it should be noted that innovative processes, as well as the crisis phenomena of the development of economic systems, require constant monitoring, study of dynamics and interconnection already taking into account modern internal and external conditions of functioning of the national and world economy.

The purpose of the paper is to analyse the relationship between the state of economic systems and the innovative activity of industrial enterprises in accordance with the peculiarities of the development of national economies in the global economic environment. Studying the influence of stability and instability of economic systems on innovative development will help to identify the main factors that stimulate innovation in various external national and international conditions, which helps determine the key directions of the impact on innovation processes.

The general scientific research methods are used in the study: information analysis and synthesis, logical construction, monographic, data grouping, and graphical display methods.

## **Main research findings**

### **Latvia**

The globalization has an impact on the growth and competitiveness of enterprises, in particular SMEs, which are increasingly dependent on enterprise

investments in innovation. The definition of innovation adopted in Latvia states that “innovation is a process in which new ideas, developments and technologies in the scientific, technical, social, cultural and other fields are realized in a competitive product or service that is in demand on the market” (Zinātniskās darbības likums, 2005; Par Nacionālo inovāciju programmu 2003.-2006.gadam).

In Latvia, the Ministry of Economics is the leading institution of public administration in the field of economic policy. Its tasks and competencies include the development and implementation of the policy of innovation development. The main national priorities, activities and measures taken to promote industrial development, financial accessibility, promotion of innovation and export, and improvement of the business environment are included in the programme “Guidelines for the National Industrial Policy for 2014-2020” (Nacionālās industriālās politikas ..., 2013). Innovation and build-up of innovative potential within the framework of the Latvian National Industrial Policy are one of the cornerstones for increasing the competitiveness of Latvia's industries and increasing productivity and export volumes. The main directions outline four equally important elements for the development of the Latvian innovation system - the potential of knowledge, the innovative proposal, the demand for innovation, the transmission system. At the same time, the objectives and directions of the innovation policy are also set out in the “Guidelines for Science, Technology and Innovation Development for 2014-2020” (Zinātnes un tehnoloģijas attīstības ..., 2013).

In the Global Innovation Index, 127 countries of the world were assessed on 81 indicators for various factors affecting innovation, including the political environment, education, infrastructure and enterprise development. The global innovation index of the current year shows the situation in the previous year. In the annual global innovation index in the period from 2011 to 2017, Latvia showed the highest result in 2011, when the country ranked 30th in the index published in 2012 (see Figure 1). In subsequent years, the result of Latvia is 33rd or 34th place. Among the Baltic countries - assessing the indicators of Latvia, Lithuania and Estonia - Latvia in the period under review shows average indicators. In the last Global Innovation Index of 2017, Latvia ranks 33rd. This is better than Lithuania, ranking 40th, but worse than Estonia, which is recognized as the 25th most innovative country in the world.

In the Global Innovation Index of 2017 for the seven categories of indicators, Latvia's best results were in the category of creative activity, in which Latvia ranks 14th in the world. In the category of institutions (institutions), Latvia is the 28th best in the world, in the market development category it occupies 38th place, in the category of business development - 39th place, in the category of infrastructure - 42nd place, in the category of knowledge and technology - 48th

place, and in the category of human capital and research, Latvia is recognized as the 52nd strongest in the world.

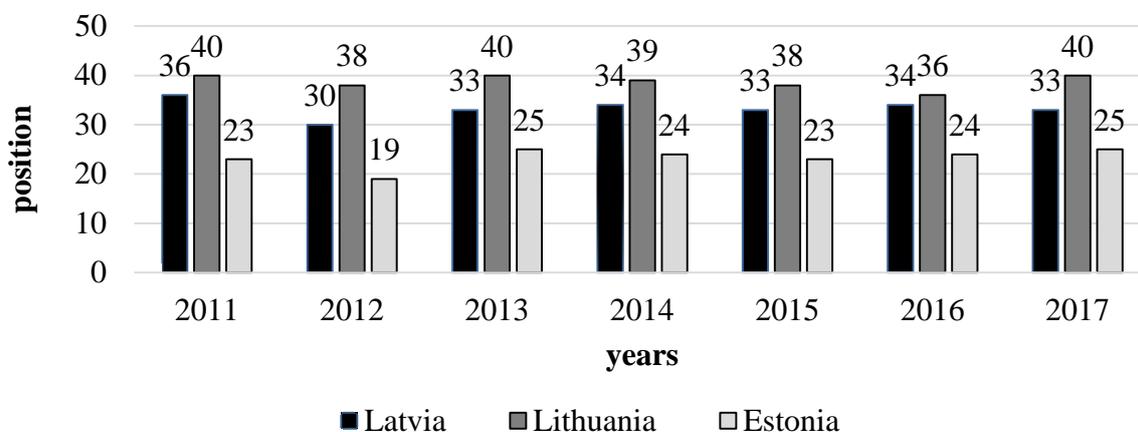


Figure 1. Changes in the positions of Latvia, Lithuania and Estonia in the Global Innovation Index in 2011-2017 (The Global Innovation Index, 2017)

However, the European Innovation Scoreboard, developed by the European Commission (EC), includes 10 measurements, taking into account 27 indicators affecting innovation, in such areas as human resources, an attractive research system, an environment conducive to innovation, finance and support, investment in business, the ability to innovate enterprises, the cooperation of science and entrepreneurship, intellectual assets, the impact of innovation on employment, and the impact of innovation on sales.

Taking into account the average results of innovation, the EU Member States are divided into four groups according to the performance. Latvia belongs to the group of medium innovators, as a country with innovative indicators from 50% to 90% of the EU-28 average (European Commission, 2017).

Assessing the indicators of the development of innovations of the countries of the European Union (EU) in 2015, the EU gave a high assessment of Latvia's achievements, as a result of which Latvia for the first time in the Report on the Innovation Union published annually by the EU took a place in the group of "medium innovators".

EU experts appreciated measures taken by Latvia to create a favourable business environment for innovation, as well as to develop human resources and employment in knowledge-intensive and fast-growing companies. In the rating of the Innovation Union of 2017, Latvia took 24th place among 28 countries, having risen by one place in comparison with the results of 2016.

The estimation of Latvia in the latest innovation ratings is proof of stable and sustainable development of the country. This is a confirmation of the fact that the movement is taken in the right direction - to the purposeful development of

innovation policy, which will contribute to the increase in productivity and growth in the output of products with high value added, which is indispensable for more rapid growth of the Latvian economy. Satisfaction from the recognition received for the done work in the sphere of improving the business environment, human resources development and employment contributes to the further development of innovations in Latvia (Ekonomikas ministrija, 2017a).

Despite positive trends in the field of innovation, assessing the Latvian innovation system from the point of view of business or demand, the following shortcomings are underlined: limited opportunities for enterprises to invest in research, development, technology; insufficiently developed technology transfer infrastructure; weak cooperation between entrepreneurs and the research sector; insufficiently developed corporate culture of network development and cluster cooperation; lack of motivation, as business strategies of enterprises are not oriented to innovation, etc. (Ekonomikas ministrija, 2017b).

The Ministry of Economics of Latvia has set a goal ((Ekonomikas ministrija, 2017b): in the Global Innovation Index, Latvia should take 25th place out of 127 countries, and in the European Innovation Scoreboard to take 20th place among 28 EU countries.

Achievability of the goals set by Latvia in the field of innovation will be visible in the future, but an analysis of the current situation shows that Latvia has all the prerequisites for achieving them.

## **Ukraine**

Crisis phenomena have become a daily occurrence for the modern enterprises of Ukraine, functioning in the conditions of an unstable economy for a long period. However, for some economic entities, economic cycles acted as a catalyst for further economic growth, and for others - a factor in the aggravation of functioning, which led to a deterioration in business conditions, losses or bankruptcy. It should be noted that innovation-active enterprises demonstrated not only a high development potential, but also high adaptability to external negative business conditions. The crisis phenomena of instability were reflected in the rating of innovative development of Ukraine.

In the annual Global Innovation Index in 2017, Ukraine rose by 6 positions, taking 50th place (see Figure 2).

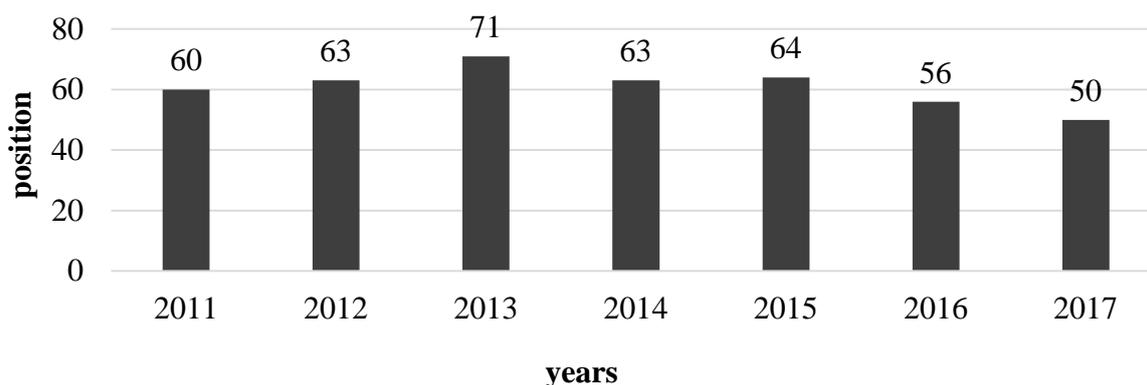


Figure 2 **Position of Ukraine in the Global Innovation Index in 2011-2017**  
(The Global Innovation Index, 2017)

For ten years, during which the calculation of the index published by Cornell University, the INSEAD business school and the World Intellectual Property Organization was carried out, this is the highest level for Ukraine. In total, the rating included 127 countries. The seventh time in a row, the leader of the rating was Switzerland. It was followed by Sweden, the Netherlands, the United States, Great Britain, and Denmark.

Ukraine in 2017 is located between Qatar and Thailand, which occupy 49th and 51st place, respectively. The Ukrainian economy, according to the rating, is in the group of countries with lower than average income.

The jump by six positions in the overall rating provided Ukraine with improvements in key sub-indices: political stability and lack of violence / terrorism (124th position), rule of law (110th position), ease of business creation (18th position), simplicity of tax payment (66th position), etc.

At the same time, such indicators as government effectiveness (96th position) and simplicity of insolvency resolution (120th position) negatively influenced the innovation index of Ukraine in 2017.

It should be noted that, in the ranking of the 50 most innovative countries of the world published by Bloomberg, Ukraine in 2017 ranked 42nd, dropping for one year by one position. Among the indicators that positively influenced the place of Ukraine in the rating, experts noted the high level of education of the population, the susceptibility to new technologies and the availability of scientific potential. However, the country's innovative development is hampered by low labour productivity and a small number of technology companies (Bloomberg Global Business Forum, 2017).

Ukrainian industry possesses a significant innovative potential capable of providing structural transformation of the national economy and a high level of scientific and technological development of the country as a whole. At the same time, in Ukraine, until now, the reserves of production capacities that were not used during the crisis period and the favourable external economic conditions

served as the dominant sources of industrial growth. Preservation of the existing model of development of Ukraine's industrial sector with a focus on low-technology production and exports may lead to a decrease in the competitive positions of the national economy and further increase the technological gap from the economically developed countries of the world.

In fact, this is observed in the innovation sector in recent years. The state of the innovative sphere of Ukraine was devastatingly affected by the global financial and economic crisis of 2008-2009. During this period, the indicators of innovation activity had a predominantly downward trend. At the same time, for the indicators of innovative activity of industrial enterprises in Ukraine in the post-crisis period and the period of economy stagnation, the positive dynamics was characteristic. An exception was the change in the values of key indicators of the innovation process: the volume of financing innovative activity, the share of innovative products in the total volume of industrial products sold, and the export of innovative products produced by industrial enterprises, which deteriorated sharply during the period of economic stagnation (2011-2012) (State Statistics Service of Ukraine, 2017).

Thus, the functioning of industrial enterprises in Ukraine in an unstable national economy is accompanied by a decrease in the activity of the innovation process. After all, Ukraine continues to develop without significant use of its innovative potential, and the development of innovative products is carried out primarily through the use of scientific and technological achievements of previous years (Kulishov, 2013). This type of innovative development has rather narrow boundaries and does not provide opportunities to maintain the competitiveness of Ukrainian enterprises in the domestic and international markets for a long period. At the same time, the crisis phenomena of an unstable economic system adversely affected innovation activity, led to a reduction in the financing of innovative research and development, a reduction in the share of exports of innovative products in the total volume of sales of industrial products. As a result, it significantly reduced the rating of Ukraine and enterprises of the industrial sector of the national economy in the global innovation environment.

## **Conclusions**

The world community realizes that the innovative economy has become a key component of post-industrial progress, a strategic resource, a generally recognized development trend in the long term.

Taking into account the realities of the 21st century, the EU countries, and Latvia in particular, are implementing strategies for accelerating the development of the innovation economy both to overcome the global crisis and to support the

financial system of Europe, taking into account the problems of economic stability.

Summarizing the experience of developing a stable Latvian economy through the implementation of an active innovation policy, it is proposed to use the main directions of the impact on innovative processes that have found application in Latvia, to overcome the crisis phenomena and to ensure the effective development of the unstable economy of Ukraine on an innovative basis.

In this regard, at the stage of formation of a competitive market environment, it is recommended to implement innovative policy in Ukraine on the principles that would form a certain strategy and tactics aimed at achieving certain goals of the country's socioeconomic development in an unstable economy. In our opinion, the innovation policy of the national economic system should be based on such important principles: systemic, integrated, manageable, purposeful, continuous, timeliness, optimality, continuity, consistency, irreversibility, justified risk, maximum consideration of the interests of the subjects of the innovation process.

The conducted research studies showed that the general characteristic feature of the functioning of stable and unstable economic systems at different levels is the inadequacy of attracting investment funds in the development of innovations. Therefore, the policy of innovation development should be oriented towards the international system model of innovation, ensuring the socio-economic consolidation of territories, the introduction of information and communication technologies and the modernization of industry at the mega- and macroeconomic level. At the same time, the development of international franchising business is a promising direction for the development of innovations at the microlevel, which does not require significant capital investment and allows the introduction of modern achievements of international business organizations.

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# TAUTSAIMNIECĪBAS NOZARU DARBĪBAS EFEKTIVITĀTI IETEKMĒJOŠO FAKTORU NOVĒRTĒJUMS

## *Assessment of Factors Influencing the Efficiency of Sectoral Activities in the National Economy*

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**Abstract.** *To work effectively for commercial companies in different sectors of the economy, it is of interest to business owners, investors, management, employees, the state and society as a whole. The efficiency of commercial companies is crucial for the process of financial and economic decision-making. In Latvia, there have been neither in-depth research studies on the efficiency of financial activity, nor studies on the efficiency of certain sectors of the economy. The aim of the research is to summarize and analyse data on factors influencing the operational efficiency of commercial companies working in the national economy sectors: number of employees in the sectors, number of enterprises, value of exports and imports, personnel costs and number of employees in enterprises of a given sector, gross investments in material matters, land, machinery, equipment, non-financial investments in intangible assets and fixed assets, turnover, indicators of financial performance of enterprises, which provide aggregated information on liquidity, profitability and solvency of enterprises. The data processing used IBM SPSS Statistics v21 method. The result of the research study is to group the factors that have a significant impact on the efficiency of the economic sector.*

**Keywords:** *commercial companies, efficiency, factors, financial indicators, results, sector.*

### **Ievads**

#### **Introduction**

Strādāt efektīvi komercsabiedrībām dažādās tautsaimniecības nozarēs, tas interesē gan uzņēmumu īpašniekus, investorus, vadību, darbiniekus, valsti un sabiedrību kopumā. Komercsabiedrību darbības efektivitātei ir būtiska nozīme finansiālo un saimniecisko lēmumu pieņemšanas procesā. Latvijā nav veikti padziļināti finansiālās darbības efektivitātes pētījumi par tautsaimniecības nozaru darbības efektivitāti. Efektivitātes analīzei vēlams izvēlēties sekojošus rezultātīvos rādītājus, kuri ir mērāmi; nozīmīgi, jēgpilni; reāli izpildāmi; ticami, reālistiski; objektīvi; ar metodoloģisku pamatojumu; viegli saprotami;

salīdzināmi starp valstīm; salīdzināmi laikā; laikus pieejami. Tas ir īpaši nozīmīgi laikā, kad visā pasaulē strauji pieaug ražošanas izmaksas, palielinās konkurence un nozarēs strādājošo uzņēmumu darbību negatīvi ietekmē dažādi ārējie faktori – globālās biznesa vides pārmaiņas, nodokļu politika u.c.

Katras komercsabiedrības darbības mērķis ir uzņēmuma vērtības palielināšana un katrs uzņēmējs, uzsākot savu biznesu cer saņemt pēc iespējas lielāku peļņu. Biznesa dzinējspēks ir konkurence un tai pieaugot, ikvienam vadītājam ir jāspēj pieņemt būtiskus biznesa lēmumus, jāprot pielietot uzņēmuma finansēšanas metodes, kas palielina uzņēmuma vērtību.

Pētījuma mērķis: apkopot un analizēt datus par tautsaimniecības nozarēs strādājošo komercsabiedrību darbības efektivitāti ietekmējošiem faktoriem: nozarēs strādājošo darbinieku skaits, uzņēmumu skaits, eksporta un importa vērtība, personāla izmaksas un darbinieku skaits konkrētās nozares uzņēmumos, bruto ieguldījumi materiālās lietās, zemesgabalos, mašīnās, iekārtās, nefinanšu investīcijas nemateriālajos līdzekļos un pamatlīdzekļos, apgrozījums, komersantu finanšu analīzes rādītāji. Pētījuma hipotēze: pastāv statistiski nozīmīga korelācija starp neto apgrozījumu un ieguldījumiem mašīnās un iekārtās, starp algu un saražotās produkcijas vērtību, starp uzņēmumos nostrādāto stundu skaitu un peļņu, starp ieguldījumiem mašīnās un iekārtās un saražotās produkcijas vērtību, starp eksporta vērtību un nodarbināto skaitu nozarē.

Pētījumā izmantotās metodes: kvalitatīvās un kvantitatīvās metodes, tai skaitā monogrāfiskā zinātniskās literatūras un pētījumu rezultātu analīze, grafiskā analīze, grupēšana, salīdzināšana, statistiskās analīzes metode - Pīrsona korelācijas metode. Datu apstrādē izmantots ibm spss statistics v21 datu apstrādes rīks.

Pētījuma rezultātā sagrupēt faktorus, kuri nozīmīgi, vidēji vai vāji ietekmē un ir savstarpēji saistīti tautsaimniecības nozaru darbības efektivitātes novērtējumā.

### **Efektivitātes pētījumi valsts un privātajā sektorā** *Research on efficiency in the public and private sectors*

Efektivitāti ietekmējošo faktoru novērtēšana (analīze) ietver rādītāju savstarpējās mijiedarbības izvērtējumu. Pēc analīzes līmeņa efektivitāti iedala: komercsabiedrības efektivitāte, atsevišķas struktūrvienības vai darbinieku efektivitāte, savukārt, efektivitāte kādai konkrētai tautsaimniecības nozarei, valsts tautsaimniecībai kopumā un vēl plašākiem mērogiem parasti nenosaka, kas izskaidrojams ar novērtēšanas sarežģītību.

Privātajā sektorā efektivitātes rādītājus vieglāk noteikt nekā publiskajā sektorā (Mihaiu, et al, 2010), tomēr lielāku interesi no zinātnieku puses, pamatojoties uz publicētajiem pētījumiem, izraisa tieši sabiedriskā sektora

efektivitātes analīze. Jāuzsver, ka praktiski netiek pētīta mazo uzņēmumu darbības efektivitāte, ko apstiprina A. Nīlija (Neely) mazo un vidējo uzņēmumu aptaujas respondenta komentārs: maziem un vidējiem uzņēmumiem bieži vien vislabākais pamatojums ir „sajust”, pat tad, ja skaitļi nesakrīt. Mērīšana ir greznība. Praktiski būtiska uzmanība valsts pārvaldes darbības efektivitātes izvērtēšanas jautājumiem tika pievērsta ASV 20. gs. 70.-80. gados, Eiropā 21. gs. sākumā, kad valstīs, palielinoties valdību budžeta deficītam, pastiprinājās sabiedrības neapmierinātība ar pieaugošiem izdevumiem. Izteikta uzmanība valsts sektora darbībai tika pievērsta situācijā, kad 2007. g. ASV sākusies, kopš 2008. g. pārņemot arī Eiropas valstis, ekonomiskā krīze negatīvi ietekmēja valdību finanšu kapacitāti: samazinājās nodokļu ieņēmumi budžetos, pieauga budžetu deficīti, kas kritiski palielināja valdību kopējos parādus. Līdz ar to aktualizējās jaunas publiskās vadības (New Public Management) principu ieviešanas nepieciešamība valsts sektora darbībā. (Kavale & Žubule, 2016).

Konkrētu nozaru darbības efektivitāte Latvijā šodrīd jau tiek vērtēta, piemēram, Valsts kanceleja sadarbībā ar Finanšu ministriju un Pārresoru koordinācijas centru ir izstrādājusi Nozarēs veikto ieguldījumu efektivitātes analīzes metodiku, kuras mērķis ir sniegt metodoloģiskus norādījumus nozarēs veikto ieguldījumu efektivitātes analīzei ministrijās un to padotības iestādēs. Šajā dokumentā ir izmantoti starptautiski pieejamie paraugi un ieteikumi, kā veikt padziļinātu publisko ieguldījumu efektivitātes analīzi dažādās nozarēs, jo Ministru kabinets nodrošina pastāvīgu un sistemātisku valsts budžeta izdevumu pārskatīšanu, lai efektīvāk un ekonomiskāk īstenotu valsts politiku, kā arī regulāri optimizētu budžeta izdevumus un izvērtētu to atbilstību attīstības plānošanas dokumentos noteiktajām prioritātēm un mērķiem.

Valsts kontroles revīzijas ziņojumā par ES fondu, tostarp Eiropas Reģionālās attīstības fonda (ERAF) un Eiropas Lauksaimniecības fonda lauku attīstībai (ELFLA), atbalstītajiem projektiem būtiskākie ieteikumi un norādījumi sekmīgākai plānoto atbalsta mērķu sasniegšanai sniegti Ekonomikas ministrijai un Zemkopības ministrijai, kas attiecīgi atbildīgas par uzņēmējdarbības un lauksaimniecības programmu efektivitāti. Nozīmīga loma ES fondu izvirzīto mērķu sasniegšanā ir atbildīgajām ministrijām, kuras Finanšu ministrija ir vairākkārt aicinājusi īpašu uzmanību pievērst nozares politikas plānošanas kvalitātei, kas ir pamats efektīviem ES fondu finansējuma ieguldījumiem. Arī 2014. – 2020. gada ES fondu plānošanas periodā nozaru ministriju atbildība ir sagatavot nozares specifisko atbalsta mērķu Ministru Kabineta noteikumus maksimāli efektīvai un lietderīgai finanšu resursu, tostarp budžeta līdzfinansējuma, investēšanai atbilstoši attiecīgās nozares specifikai.

Latvijas zinātnieku efektivitātes pētījumi aptver zemes izmantošanas efektivitātes novērtējumu, administratīvi teritoriālās reformas ietekmi uz pašvaldības budžeta strukturālo efektivitāti, atjaunojamās enerģijas ražošanas

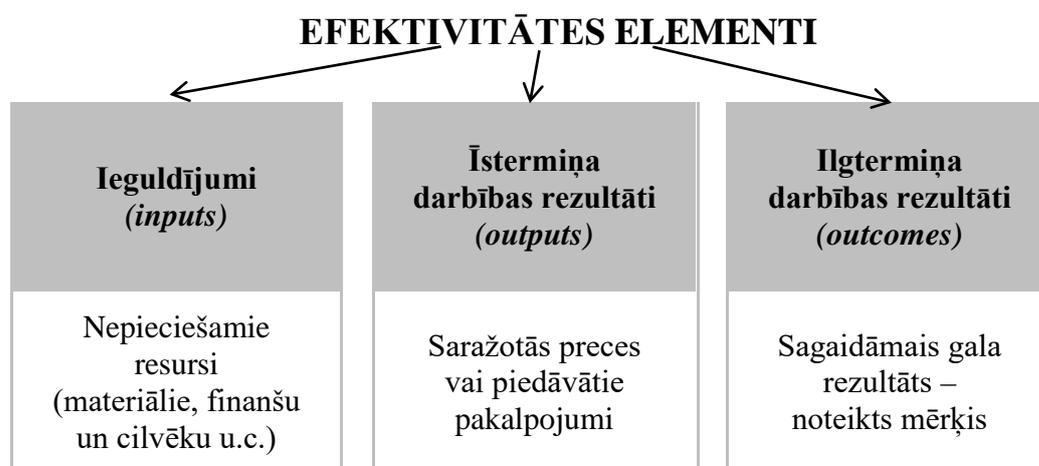
atbalsta efektivitāti Latvijā, lēmumu pieņemšanas process mājsaimniecību kreditēšanā un tā efektivitātes paaugstināšanas metodoloģija, Latvijas augstākās izglītības sistēmas efektivitātes izpēte, Datorsistēmu testēšanas automatizācijas metodes, rīki un efektivitāte, ražošanas procesu efektivitāte un uzņēmumu konkurētspējas pētījumi Latvijas lauku saimniecībās, aliansē ar bankām ietilpstošo pensiju līdzekļu pārvaldītāju darbības efektivitātes novērtējums, zinātnes jomā Latvijā ir spēkā Zinātnisko institūciju darba efektivitātes vērtēšanas kritēriji, tiek izvērtēta strukturālo reformu lietderība un to nozīme valsts pārvaldes efektivitātes celšanā. Meklēti efektīvi datu apmaiņas risinājumi kā nodrošinājums veiksmīgai banku nozares līdzdalībai ēnu ekonomikas apkarošanas plāna realizācijā un nelegāli iegūtu līdzekļu legalizācijas un terorisma finansēšanas novēršanas sistēmas efektīvā darbībā.

Lietderības Revīzijas priekšrocības publiskajā (valsts) sektorā:

- Nodrošina valdībai iespēju demonstrēt sabiedrībai, vai tā ir izpildījusi savas saistības attiecībā uz resursu pieejamību.
- Palīdz uzturēt valdības programmu īstenotāju atbildību par ekonomisku, lietderīgu un efektīvu programmu izpildi,

Lietderības Revīzijas priekšrocības publiskajā (valsts) sektorā un privātajā sektorā pārsvarā ir līdzīgas, lai gan privātajā sektorā galvenā uzmanība tiek vērsta uz darbības lietderības un efektivitātes uzlabošanu, lai maksimāli palielinātu peļņu un akcionāriem radītu vērtību. Pēc publikācijas autoru domām šobrīd pietrūkst tieši pētījumu par privātā sektora efektivitātes novērtējumu.

Lietderības revīzija balstās uz trīs pīlāriem ko sauc par 3 E - Economy (ekonomika), Efficiency (lietderība vai produktivitāte) un Effectiveness (efektivitāte). Efektivitāte pamatojas uz trīs būtiskiem raksturojošiem elementiem (1.att.).



1. att. Efektivitātes jēdzienu raksturojošie elementi (Kotāne, 2014)

Fig. 1. Elements describing efficiency concept (Kotane, 2014)

Ekonomiskajā literatūrā uzņēmuma efektivitāte mūsdienās ļoti bieži tiek aplūkota no produktivitātes perspektīvas. Produktivitāte ir bijusi galvenais uzņēmumu attīstības noteicējs. F. Teilors (Taylor) ir izveidojis labvēlīgu augsni produktivitātes teoriju straujai attīstībai. Ekonomists Daniels (Daniel, 1992) pētījumā arī norāda, ka industrializācijas jēdziens pavēra plašas iespējas un mainīja attīstības kursu, pateicoties pētniekam F. Teiloram. Mūsdienās vairums ekonomikas teoriju piedāvā neskaitāmi daudz veidu, kā efektīvi (lietderīgi) izmantot uzņēmuma resursus. (Šatrevičs, 2016).

Uzņēmumam ir ļoti svarīgi jau pašā sākumā radīt efektīvu ražošanas sistēmu, un panākumu gūšanu nosaka uzņēmuma attīstība, ražošanas procesa optimizācija un atbalstoša organizatoriskā struktūra. Ekonomisti apstiprina, ka jebkura uzņēmuma darbības pamats un tajā iekļautais mērķis ir ilgtermiņa spēja (ilgtspējīga spēja) sasniegt vai uzturēt ekonomikas efektivitātes palielināšanos, izmantojot resursu pārvaldību. Tas veido pamatu uzņēmuma galvenā mērķa sasniegšanai – augstai rentabilitātei vai ieguldījumu produktivitātei. Mūsdienu industrializācija piedāvā fundamentālus paņēmienus, ar kuru palīdzību un, izmantojot resursu centralizāciju, darba organizāciju, uzņēmuma struktūras optimizāciju, tehnoloģiskās inovācijas un mūsdienu ražošanas procesa mehanizācijas metodes, celt ražīgumu. (Šatrevičs, 2016).

## **Metodika**

### ***Methods***

Šajā publikācijā autores analizēja datus pēc uzņēmuma darbības veida (NACE 2.red.), piem., lauksaimniecību, mežsaimniecību, zivsaimniecību, ieguves rūpniecību, apstrādes rūpniecību, ūdens, elektroenerģijas un gāzes apgādes, būvniecības, mazumtirdzniecības, vairumtirdzniecības, transporta, uzglabāšanas, izmitināšanas un ēdināšanas pakalpojumu, informācijas un komunikācijas pakalpojumu sektoriem, izmantojot LR Centrālās statistikas pārvaldes datu bāzes.

Latvijā nepietiekamā līmenī notiek datu apkopošana par uzņēmumu intelektuālā kapitāla apjomu un tajā ieguldītajām investīcijām. Lai varētu spriest par intelektuālā kapitāla apjomu un dinamiku uzņēmumos Latvijā, LR Centrālās statistikas pārvaldei būtu regulāri jāapkopo un jāpublicē dati, kas raksturo uzņēmuma intelektuālo kapitālu, piemēram, personāla apmācības izmaksas, tehnoloģiju izstrādes/iegādes izmaksas, patentu un licenču izmaksas u.c. (Lentjušenkova, 2017).

Visas saimnieciskās un finansiālās parādības vienmēr ir savā starpā saistītas, tādēļ viens no būtiskiem uzņēmumu īpašnieku un vadītāju uzdevumiem ir ekonomisko sakarību pētīšana. Datu apstrādē izmantota datu korelācijas statistikas metode.

Par korelācijas metodi jeb korelācijas analīzi sauc matemātisku paņēmieni kopumu, ar kura palīdzību pēta mainīgu lielumu kvantitatīvās sakarības. Korelācijas: 1) pāru korelācija raksturo sakarību ciešumu starp divām pazīmēm: raksturo sakarību: faktoriālo un rezultātīvo. Pāru korelācija ir atkarīga no citu pazīmju jeb fona ietekmes rakstura un intensitātes. Veicot korelācijas analīzi, noskaidro, starp kuriem pāriem pastāv sakarības. Ciešāka ir tā sakarība, kurai korelācijas koeficients pēc moduļa ir lielāks.  $0,7 < r < 0,9$  – cieša sakarība;  $0,5 < r < 0,69$  – vidēja sakarība;  $0,2 < r < 0,49$  – vāja un nenožīmīga sakarība. Korelācijas analīzes mērķis ir noteikt sakarību ciešumu starp faktoriālo un rezultātīvo pazīmi. Pāru korelācija raksturo sakarību ciešumu starp divām pazīmēm: faktoriālo un rezultātīvo. Pāru korelācija ir atkarīga no citu pazīmju jeb fona ietekmes rakstura un intensitātes. Veicot korelācijas analīzi, noskaidrots, starp kuriem pāriem pastāv sakarības (Čerņajeva, 2016).

### **Pētījuma rezultāti** ***Research results***

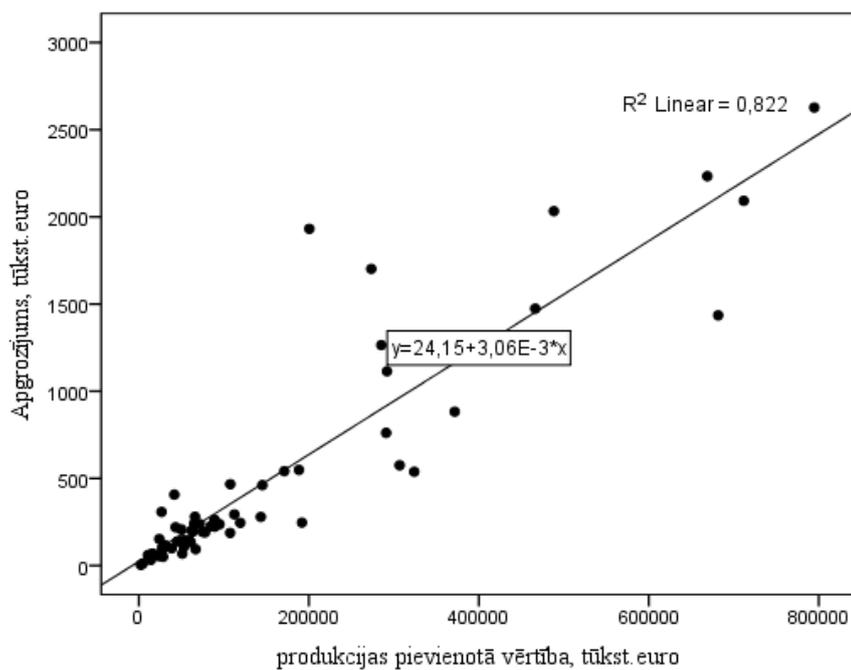
Analizējot neto apgrozījuma korelāciju ar dažādiem kvantitatīviem rādītājiem, autore noskaidroja, augstākās un nozīmīgākās (ciešākās) korelācijas ir starp: eksportu ( $r=0,904$ ), importu ( $r=0,957$ ), saražotās produkcijas vērtību ( $r=0,754$ ) produkcijas pievienoto vērtību ( $r=0,822$ ), samaksāto atalgojumu ( $r=0,789$ ) un nostrādātajām stundām ( $r=0,789$ ), bruto ieguldījumiem mašīnās un iekārtās ( $r=0,861$ ).

Vidēja korelācija (sakarība) ir starp: peļņu ( $r=0,586$ ) un nodarbināto darbinieku skaitu ( $r=0,628$ ). Vāja un nenožīmīga korelācija pastāv: uzņēmumu skaits, kurš darbojas nozarē ( $r=0,418$ ) un visu aktīvu apriņķi, reizēs ( $r=0,289$ ).

Analizējot peļņas korelāciju ar dažādiem kvantitatīviem rādītājiem, autore noskaidroja, augstākās un nozīmīgākās (ciešākās) korelācijas ir starp: produkcijas pievienoto vērtību ( $r=0,791$ ), samaksāto atalgojumu ( $r=0,789$ ), bruto ieguldījumiem mašīnās un iekārtās ( $r=0,821$ ), nozarēs saražotās produkcijas pievienoto vērtību ( $r=0,746$ ).

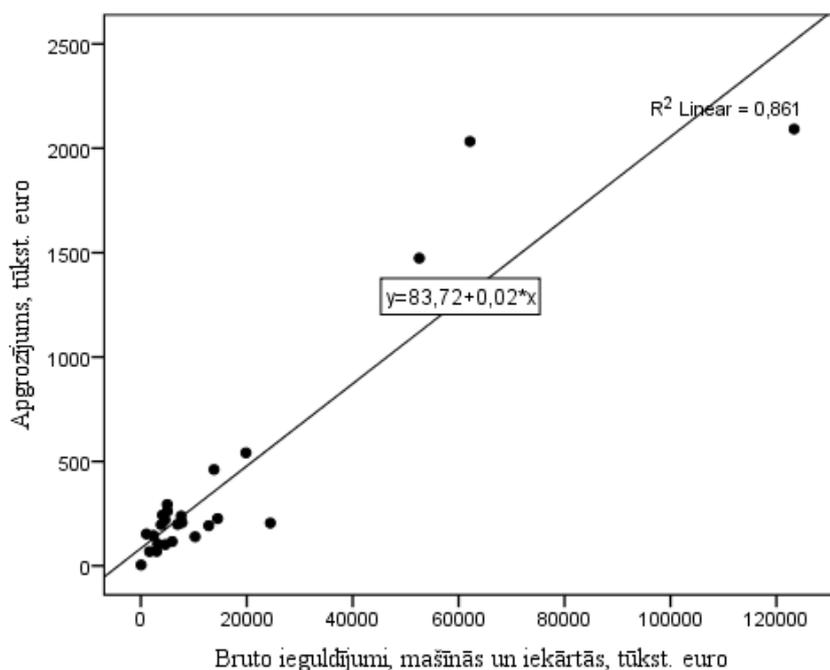
Vidēja korelācija (sakarība) ir starp: apgrozījumu ( $r=0,586$ ); komerciālo rentabilitāti ( $r=0,655$ ); eksportu ( $r=0,492$ ), importu ( $r=0,509$ ), darbinieku skaitu ( $r=0,527$ ), nostrādātajām stundām ( $r=0,501$ ) un saražotās produkcijas vērtību ( $r=0,660$ ). Vāja un nenožīmīga korelācija pastāv: uzņēmumu skaits, kurš darbojas nozarē ( $r=0,309$ ), bruto ieguldījumiem materiālās lietās ( $r=0,347$ ) un bruto ieguldījumiem zemes gabalos ( $r=0,467$ ).

Analizējot eksporta korelāciju ar dažādiem kvantitatīviem rādītājiem, autore noskaidroja, augstākās un nozīmīgākās (ciešākās) korelācijas ir starp: apgrozījumu ( $r=0,904$ ); importu ( $r=0,947$ ) un nostrādātajām stundām ( $r=0,781$ ).



2. att. **Apgrozījuma korelācija ar saražotās produkcijas pievienoto vērtību**  
(autoru veidots attēls)

*Fig. 2. Turnover correlation with the added value of production*  
(image created by the authors)



3. att. **Apgrozījuma korelācija ar bruto ieguldījumiem mašīnās un iekārtās**  
(autoru veidots attēls)

*Fig.3. Turnover correlation with gross investment in machinery and equipment*  
(image created by the authors)

Vidēja korelācija (sakarība) ir starp: peļņu ( $r=0,492$ ), bruto ieguldījumiem zemes gabalos ( $r=0,620$ ), saražotās produkcijas vērtību ( $r=0,616$ ) un saņemto atalgojumu ( $r=0,551$ ). Vāja un nenozīmīga korelācija pastāv: nodarbināto skaits nozarē ( $r=0,364$ ) un visu aktīvu apriti, reizēs ( $r=0,288$ ).

Analizējot importa korelāciju ar dažādiem kvantitatīviem rādītājiem, autore noskaidroja, augstākās un nozīmīgākās (ciešākās) korelācijas ir starp: bruto ieguldījumiem zemes gabalos ( $r=0,715$ ), nostrādātajām stundām ( $r=0,823$ ), bruto ieguldījumiem mašīnās un iekārtās ( $r=0,806$ ), eksportu ( $r=0,947$ ) un apgrozījumu ( $r=0,957$ ).

Vidēja korelācija (sakarība) ir starp: peļņu ( $r=0,509$ ), atalgojumu ( $r=0,603$ ), saražotās produkcijas pievienotā vērtība ( $r=0,615$ ), saražotās produkcijas vērtība ( $r=0,582$ ). Vāja un nenozīmīga korelācija pastāv: uzņēmumu skaits, kurš darbojas nozarē ( $r=0,308$ ), nodarbināto skaits nozarē ( $r=0,437$ ) un visu aktīvu apriti, reizēs ( $r=0,308$ ).

Analizējot nozarēs saražotās produkcijas pievienoto vērtību, euro korelāciju ar dažādiem kvantitatīviem rādītājiem, autore noskaidroja, augstākās un nozīmīgākās (ciešākās) korelācijas ir starp: neto apgrozījumu ( $r=0,791$ ), peļņu ( $r=0,746$ ), saražotās produkcijas vērtību ( $r=0,929$ ), nodarbināto skaitu ( $r=0,940$ ), nostrādātajām stundām ( $r=0,940$ ), bruto ieguldījumiem mašīnās iekārtās ( $r=0,983$ ), bruto kapitālieguldījumiem materiālās lietās ( $r=0,770$ ), nodarbināto skaitu nozarē ( $r=0,911$ ) un nostrādātajām stundām ( $r=0,822$ ).

Vidēja korelācija (sakarība) ir starp: - bruto ieguldījumiem zemes gabalos ( $r=0,675$ ); eksportu ( $r=0,589$ ), importu ( $r=0,615$ ), uzņēmumu skaitu ( $r=0,574$ ).

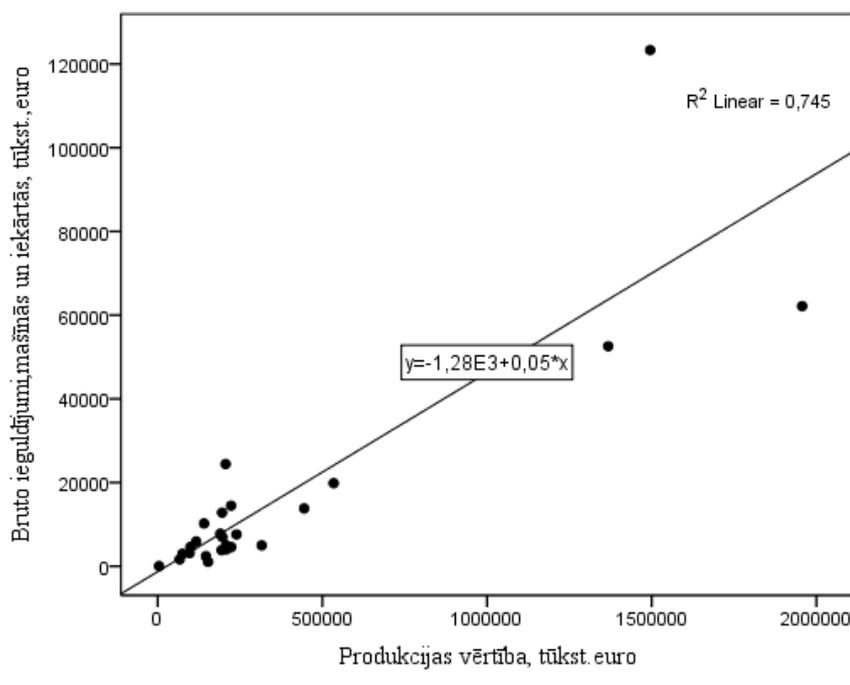
Analizējot algu korelāciju ar dažādiem kvantitatīviem rādītājiem, autore noskaidroja, augstākās un nozīmīgākās (ciešākās) korelācijas ir starp: peļņu ( $r=0,714$ ), apgrozījumu ( $r=0,789$ ), produkcijas pievienoto vērtību ( $r=0,940$ ), nodarbināto skaitu ( $r=0,935$ ), uzņēmumu skaitu nozarēs ( $r=0,749$ ), bruto ieguldījumiem zemes gabalos ( $r=0,753$ ), bruto ieguldījumiem mašīnās un iekārtās ( $r=0,857$ ), saražotās produkcijas vērtību ( $r=0,882$ ).

Vidēja korelācija (sakarība) ir starp: bruto kapitālieguldījumiem materiālās lietās ( $r=0,542$ ); eksportu ( $r=0,550$ ), importu ( $r=0,603$ ). Vāja un nenozīmīga korelācija pastāv starp: visu aktīvu apriti, reizēs ( $r=0,278$ ).

Analizējot nozarēs nostrādāto stundu skaitu korelāciju ar dažādiem kvantitatīviem rādītājiem, autore noskaidroja, augstākās un nozīmīgākās (ciešākās) korelācijas ir starp: apgrozījumu ( $r=0,813$ ), eksportu ( $r=0,781$ ), importu ( $r=0,823$ ), uzņēmumu skaitu nozarēs ( $r=0,845$ ), saražotās produkcijas vērtību ( $r=0,927$ ), saražotās produkcijas pievienoto vērtību ( $r=0,822$ ), darbinieku skaitu ( $r=0,996$ ), algu ( $r=0,955$ ) un bruto ieguldījumi mašīnās un iekārtās ( $r=0,963$ ).

Vidēja korelācija (sakarība) ir starp: peļņu ( $r=0,501$ ); bruto kapitālieguldījumiem materiālās lietās ( $r=0,547$ ); bruto ieguldījumiem zemes gabalos ( $r=0,693$ ).

Analizējot bruto ieguldījumu mašīnās iekārtās korelāciju ar dažādiem kvantitatīviem rādītājiem, autore noskaidroja, augstākās un nozīmīgākās (ciešākās) korelācijas ir starp: produkcijas pievienoto vērtību ( $r=0,821$ ), saražotās produkcijas vērtību ( $r=0,745$ ), peļņu ( $r=0,821$ ), neto apgrozījumu ( $r=0,928$ ), importu ( $r=0,806$ ), nostrādātajām stundām ( $r=0,857$ ), bruto kapitālieguldījumiem materiālās lietās ( $r=0,966$ ).



4. att. **Bruto ieguldījumu iekārtās un mašīnās korelācija ar saražotās produkcijas vērtību** (autoru veidots attēls)

*Fig. 4. Gross investment in machinery and equipment correlation with the value of production (image created by the authors)*

Vidēja korelācija (sakarība) ir starp: bruto kapitālieguldījumiem zemes gabalos ( $r=0,582$ ); darbinieku skaitu ( $r=0,661$ ) un nostrādātajām stundām ( $r=0,693$ ). Vāja un nenozīmīga korelācija pastāv starp: uzņēmumu skaitu nozarēs ( $r=0,410$ ).

### Secinājumi Conclusions

Autore šajā pētījumā konstatēja, ka visaugstākā un ciešākā korelācija ir starp sekojošiem tautsaimniecības nozaru darbību raksturojošiem rādītājiem:

peļņu, apgrozījumu, eksportu, nozarē saražotās produkcijas pievienoto vērtību, atalgojumu un nostrādātās stundas nozarē, bruto ieguldījumi mašīnās un iekārtās.

Cieša korelācija ir starp neto apgrozījumu un ieguldījumiem mašīnās un iekārtās ( $r=0,861$ ), algu un saražotās produkcijas vērtību ( $r=0,882$ ), nozares uzņēmumos nostrādāto stundu skaitu un peļņu pastāv vidēja korelācija ( $r=0,501$ ), starp ieguldījumiem mašīnās un iekārtās un saražotās produkcijas vērtību cieša korelācija ( $r=0,745$ ), vāja korelācija pastāv starp eksporta vērtību un nodarbināto skaitu nozarē ( $r=0,364$ ).

Tautsaimniecības nozaru darbības efektivitāti ietekmējošo faktoru mainīgums norāda uz efektivitātes jēdziena nozīmību tautsaimniecības nozaru pētījumos, lai pamatotu un īstenotu efektīvu resursu izmantošanu.

Tautsaimniecības nozaru turpmākajā efektivitātes novērtēšanā integrējama matemātisko, ekspertu novērtējumu un uzņēmēju aptaujas metožu lietošana, kas ļautu aprēķinos izmantot objektīvos un subjektīvos mērījumus kopā.

Ja efektivitātes rādītāju sistēma nepastāv, jebkurā nozarē strādājošs komercsabiedrības īpašnieki lēmumu pieņemšanā tradicionāli pamatojas uz subjektīvo viedokli.

Nākošajos pētījumos ir vērts salīdzināt un analizēt Latvijas un pārējo ES dalībvalstu svarīgākos ekonomisko rādītājus vai analizēt efektivitāti ietekmējošos faktorus katrai nozarei atsevišķi.

### **Summary**

To work effectively for commercial companies in different sectors of the economy, it is of interest to business owners, investors, management, employees, the state and society as a whole. The efficiency of commercial companies is crucial for the process of financial and economic decision-making. In Latvia, there have been neither in-depth studies on the efficiency of financial activity, nor studies on the efficiency of certain sectors of the economy. The aim of the research is to summarize and analyse data on factors influencing the operational efficiency of commercial companies working in the national economy sectors: number of employees in the sectors, number of enterprises, value of exports and imports, personnel costs and number of employees in enterprises of a given sector, gross investments in material matters, land, machinery, equipment, non-financial investments in intangible assets and fixed assets, turnover, indicators of financial performance of enterprises, which provide aggregated information on liquidity, profitability and solvency of enterprises. The data processing used IBM SPSS Statistics v21 method. The result of the research study is to group the factors that have a significant impact on the efficiency of the economic sector. The research findings reveal that increasing the efficiency of the sectors of the national economy is necessary in order to increase the competitiveness of the sectors. Companies that are able to achieve the required level of efficiency (productivity) gain a competitive advantage. High competitiveness cannot be achieved by an enterprise operating in isolation; it requires cooperation with surrounding companies, state institutions and other organizations whose activities can positively influence the company's efficiency and the sector in which it operates. The future evaluation of the efficiency of the sectors of the economy involves the use of mathematical, expert assessments

and business survey methods that would allow the calculation to use objective and subjective measurements together.

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## COMPLEX ANALYSIS OF COMPANY BANKRUPTCY FORECASTING: THEORETICAL INSIGHT

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**Abstract.** *In modern conditions for dynamic and competitive businesses, more and more companies face financial problems and eventually go bankrupt. A noteworthy trend: not only new companies that have not yet managed to establish themselves in the market go bankrupt but also large companies operating for years and maintaining good traditions. Bankruptcies of companies cause many problems not only for the companies themselves but also for the state and many members of society. Thus, it is crucial to evaluate the financial state of a company and its activity results as accurately and early as possible when forecasting the possibility of a bankruptcy. The paper recommends a complex analysis methodology for forecasting company bankruptcies. It consists of the following elements: 1) study of the external and internal environments; 2) evaluation of changes of absolute financial indicators; 3) calculation and evaluation of financial ratios; 4) application of bankruptcy prediction models; 5) research of bankruptcy causes and 6) application of operational and prospective measures to avoid bankruptcy. By carrying out a thorough analysis of each of these elements, it is possible to obtain detailed and objective information about the company's financial status, activity results and cash flows as early as possible and anticipate the possibilities of the company's business continuity.*

**Keywords:** *absolute and relative financial indicators, bankruptcy, bankruptcy causes, bankruptcy prediction models, measures to avoid bankruptcies.*

### Introduction

One of the most important conditions determining successful activity of a company is solvency, i.e. ability to settle long-term and short-term liabilities with available payment instruments (cash, securities, accounts receivable, stocks). All the subjects related to the company (investors, customers, suppliers, banks, financial institutions, shareholders) have an interest to maintain business contacts only with a successful and financially stable, i.e. solvent company. However, in modern dynamic and competitive businesses conditions, more and more companies face insolvency problems and thus go bankrupt. Bankruptcies of

companies become a constant phenomenon of global crisis resulting in many negative consequences not only for the company but also for the state and many members of society: the company that is going bankrupt usually does not settle with creditors, the employees are left unemployed, and the process often demands taxpayers' money.

Not only new companies go bankrupt but also large companies operating for years and having good traditions as well as international acceptance. The largest bankruptcies in the history of the U.S.A., that took place in 2008-2009, when such companies as Lehman Brothers (bank), Washington Mutual (bank), General Motors (car manufacturer), Chrysler (car manufacturer), Thornburg Mortgage (bank) and others went bankrupt. Their assets worth hundreds of billions of dollars exacerbated the crisis not only in the U.S.A. but also in many other countries.

Lithuania started to record bankruptcies of companies in 1993. 20,933 companies and 16 banks went bankrupt in Lithuania from 1993 to 2017. It is a rather high number for the small Republic of Lithuania with less than 3 million of inhabitants. The last decade has seen an especially large increase in bankruptcies: more than 1700 companies go bankrupt every year. An especially negative feature of the Lithuanian economy is noteworthy – companies of almost all industries go bankrupt. Wholesale and retail trade, motor vehicle and motorcycle repair companies and construction companies go bankrupt the most, which account for 30 % and 15 %, respectively, of the total companies that went bankrupt.

Thus, in order to avoid bankruptcies of companies and their consequences, it is necessary to determine, evaluate and solve the financial problems of a company before it becomes clear that the company is insolvent and the insolvency procedures have to be started. Therefore it is important that every company would have its methodology for activity stability and continuity analysis, which would help not only to determine the bankruptcy possibility beforehand as well as other possible dangers and various risks but to take strategic actions to improve the company's performance.

Various aspects of companies' bankruptcies – bankruptcy signs, factors, causes, consequences, prediction models, variation of numbers of companies that went bankrupt, bankruptcy procedures – have been studied by many authors. The works that have been written in the last decade are noteworthy: Agarwal & Taffler (2008), Aziz & Dar (2006), Bivainis & Garškaitė (2010), Budrikienė & Paliulytė (2012), Burkšaitienė & Mažintienė (2011), Charitonovas (2004), Cybinski (2001), Genriha, Petere, & Voronova (2011); Genriha & Voronova (2010); Grigaravičius (2003); Haber (2005), Jones & Hensher (2004), Juchno & Tvaronavičienė (2004), Mackevičius (2010), Mackevičius & Šneidere (2004), Prasad & Puri (2005), Pompe & Bilderbeek (2005), Purvinis, Šukys, & Virbickaitė (2005), Sakalas, & Virbickaitė (2003), Stoškus, Beržinskienė, & Virbickaitė (2007), Stundžienė & Boguslauskas (2006), Šneidere (2005, 2007,

2009), Tvaronavičienė (2001), Савицкая (2005), Ковалев (2013), Фомин (2003) and others. However, these and other authors analyse company bankruptcy issues in only certain aspects without paying much attention to a complex analysis of bankruptcy forecasting.

The aim of the paper is to prepare a complex analysis methodology for forecasting company bankruptcies, which could be applied to more accurately evaluate the possibility of bankruptcy and further activity continuity.

The research methods: analysis of scientific literature by various authors, methods of information comparison, systematization, elaboration and generalization.

### A recommended complex analysis methodology for forecasting company bankruptcies

Company bankruptcy forecasting is a very difficult process because it is necessary to evaluate various business operations and economic events as objectively as possible, to disclose the factors that have the greatest influence on the financial situation and the results of the company’s activity. It is possible to achieve this only by performing a complex analysis of bankruptcy forecasting.

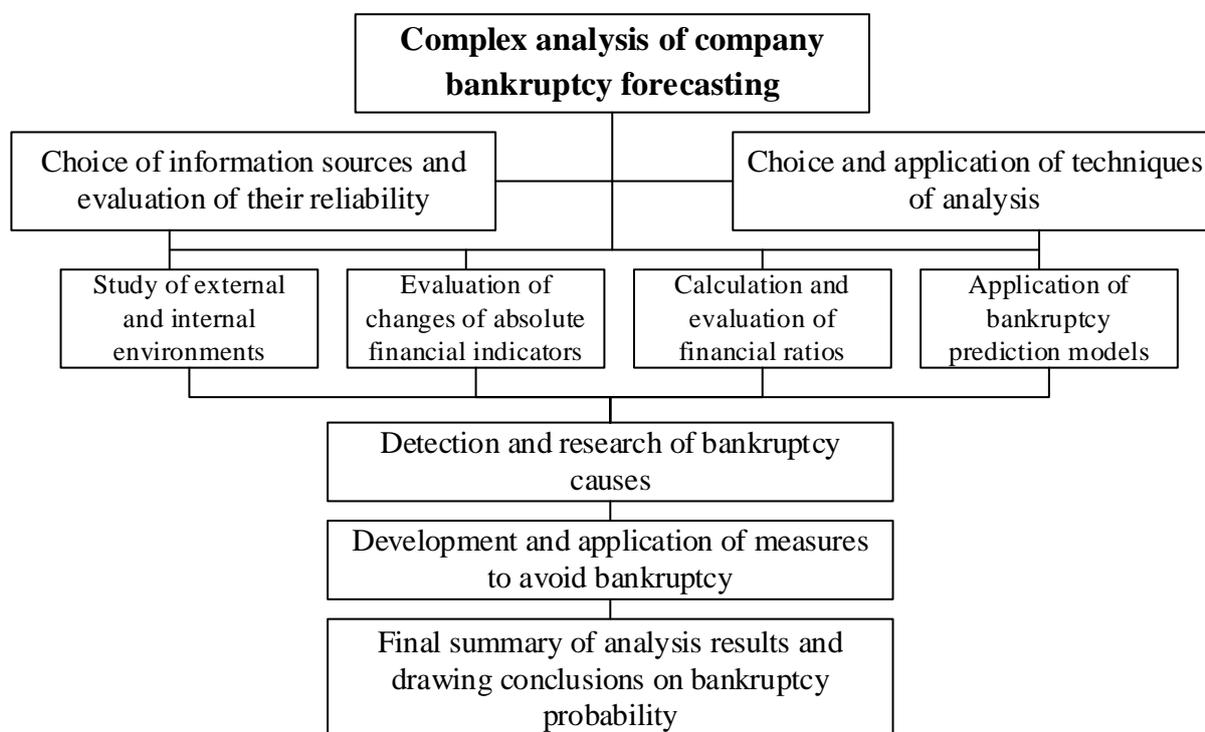


Figure 1. A complex analysis methodology for forecasting company bankruptcies (source: compiled by the authors based on Mackevičius, 2010: 127)

This methodology consists of six main elements:

- 1) study of the external and internal environments;
- 2) evaluation of changes of absolute financial indicators;
- 3) calculation and evaluation of financial ratios;
- 4) application of bankruptcy prediction models;
- 5) research of bankruptcy causes;
- 6) application of measures to avoid bankruptcy (see Figure 1).

It is appropriate to start the complex analysis of company bankruptcy forecasting by choosing technical methods and information sources. When carrying out a complex analysis of company bankruptcy, the main sources of information are companies' financial statements (a balance sheet, a profit and loss statement, a cash flow statement, a statement of changes in equity, explanatory notes, and an annual report). These statements describe the operating (productive, commercial), investing and financing activities during a certain period of time. They show the financial results, assets, equity, liabilities and provide other important information about a company. Various forms of statistical reports, prepared by Statistics Lithuania under the Government of the Republic of Lithuania, play a huge role in the complex analysis of company bankruptcy: 1) a report of the company's most important financial indicators; 2) an annual report of the company's industrial activities; 3) a report of a company's activities. It is appropriate to also include tax reports showing taxable financial indicators rather than the real ones. The financial and management accounting source documents and registers provide a lot of valuable information for carrying out a complex analysis of company bankruptcy prediction. Financial and management accounting information is especially important when looking for causes of certain financial indicator changes; it can help to predict the future revenues and expenses, evaluate the price of shares in the stock exchange and raise some capital. Non-accountant internal (meeting information, staff survey results, technical documents, contracts, claims etc.) and external (statistical publications, manuals, media information, and information provided by commercial banks, insurance companies, taxes inspectorates etc.) information sources can be applied when carrying out a complex analysis of bankruptcy.

Various research methods can be used to perform a complex analysis on company bankruptcies prediction. The methods can be divided into three categories: 1) common economic; 2) mathematical and 3) heuristic. The application of common economic methods (comparison, classification, average quantities, generalisation, indices etc.) helps to evaluate the financial situation of a company, clarify the causes of changes, and anticipate future prospects fairly objectively. Mathematical methods (linear programming, correlation analysis, regression analysis etc.) identify financial resource usage trends, quantitatively evaluate the effect of negative changes, and predict the effect of internal and

external factors. Heuristic methods (analogy, association, synectics, expert evaluation, group discussion, brainstorm etc.) set strategic aims of a company's financial status, rationalize cash flows, optimize management decisions on financial activity issues (Mackevičius, Giriūnas, & Valkauskas).

After choosing appropriate information sources and research methods, the study of the elements of the complex analysis of company bankruptcy forecasting is then consistently carried out.

## **2. The application of the elements of the complex analysis methodology for forecasting company bankruptcies**

*The study of a company's environmental factors.* Environmental factors have a great influence on a company's financial status and activity results. They can be divided into two groups: external and internal. External factors can either encourage or aggravate establishment of new businesses, create favourable conditions for the expansion of an already established business not only inside the country but abroad as well and vice versa, hinder the business expansion or even halt it. Economic (the national monetary, fiscal, tax system, investment, foreign trade policy, the pricing system, inflation, loan and interest rate policy, competition, changes in exports and imports, development of banks and the capital market, economic infrastructure etc.) and political-legal (the quality of legislation, national regulation policy, help for small and medium-sized businesses, the stability of the economic and political system) factors can have a particularly strong influence on the activities of a certain company. Social and cultural (national social policy, the unemployment rate, the social security system, emigration and immigration etc.) and technological (promotion and support for the usage of advanced technologies and innovations, occupational safety, provision of conditions for the development of new products and services) factors can also have a strong impact. A negative influence of ecological factors (earthquakes, floods, fires etc.) regarding companies' activities has increased in recent years due to global warming. But generally, since Lithuania became an EU member, external environmental factors (especially economic and political-legal) have had a positive effect when dealing with a lot of company activity issues, especially in increasing efficiency and competitiveness.

Nevertheless, it is necessary to mention that along with external factors there are a lot of internal ones that determine the probability of bankruptcy. They are different in various companies and mostly depend on the size of a company, the complexity of production and provided services, the scale of operations carried out and other features of activities. However, when predicting a probability of bankruptcy, the focus should be drawn to a company's organisational management structure, managers' business philosophy, leadership style,

personnel management policy, the state of the accounting and internal control system.

*The evaluation of changes in absolute financial indicators.* More than a hundred absolute financial indicators are presented in the financial statements of a company. When predicting a probability of a company's bankruptcy, all the balance sheet, profit and loss statement, cash flow statement and changes in equity statement absolute indicators and explanatory notes must be revised. Such balance sheet items as tangible assets, intangible assets, financial assets, current assets, equity, long-term and short-term liabilities should especially be taken into account. Almost all experts of accounting and audit are unfavourable towards the decrease of tangible fixed assets, especially if they are sold in order to increase financial resources. The stability of a company's activity can be questioned if a part of active (plant and machinery, equipment, vehicles) tangible fixed assets had decreased during the financial year.

Special attention must be paid to the item of accounts receivable within one year. Its increase can mean that the company's customers are insolvent, that the payment policy is poor and other things. A decrease of the accounts receivable within one year should not be unambiguously considered as positive as well. Sometimes the customers pay their debts more quickly in order to avoid any future business with the company.

The items of long-term and short-term liabilities must be thoroughly analysed. If the amount of these items had increased during a financial year, it means that a company has serious financial problems showing that it is not capable of fulfilling its liabilities in time with its payment instruments.

When analysing the absolute indicators of profit and loss statements, special attention must be paid to the indicators of sales revenue and cost of sales. If sales revenue has fallen, it is most likely that the demand for the company's products has decreased or the sale process was organized poorly, there was no proper advertising. If the cost of sales or other expenses included in the profit and loss statement have increased, it can be said that the company resources are used inefficiently, the work is organized poorly, the general and administrative costs are high etc.

One can judge about the probability of bankruptcy based on the absolute indicators of a cash flow statement. The cash flows of the operating activity are especially noteworthy. The decrease of cash flows of this activity indicates the shortage of cash to carry out and develop the operating (productive, commercial, service) activity. Decline of cash flows from the financing activity indicates that the company is unable to use external financing sources or even that the relationships with third parties have worsened.

When analysing the absolute indicators of financial statements, it is not enough to state their values and changes, but also find out the reasons why one or another indicator has considerably increased or decreased.

*Calculation and evaluation of financial ratios.* The application of financial ratios is one of the simplest and perhaps most accurate methods of calculating the probability of companies' bankruptcies. However, some questions arise when applying this method: which financial ratios should be applied, which of them are the most important, how they should be evaluated and so on. Various authors' opinions differ on this matter. Authors from different countries suggest different groups of ratios and the number of ratios included in them. The names and even the calculation formulas of the same ratios often differ. The differences usually occur because of different forms of financial statements in various countries.

To predict the bankruptcy as accurately as possible, it is appropriate to calculate and evaluate 7-10 ratios. The main ones are the solvency and profit ratios (see Table 1).

**Table 1 Financial ratios indicating the bankruptcy probability**  
(source: authors' construction based on Įmonių finansinės būklės..., 2004)

Ratios	Calculation formula	Evaluation level	
		Unsatisfactory	Bad
1. Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	<1.2	<1.0
2. Quick ratio	$\frac{\text{Cash} + \text{Cash equivalents} + \text{Net receivables}}{\text{Current liabilities}}$	<1.0	<0.5
3. Debt ratio	$\frac{\text{Total liabilities}}{\text{Total assets}}$	>0.7	>1.0
4. Profit margin (%)	$\frac{\text{Net profit}}{\text{Sales}}$	<5	negative
5. Return on assets (%)	$\frac{\text{Net profit}}{\text{Total assets}}$	<8	negative
6. Return on equity (%)	$\frac{\text{Net profit}}{\text{Owners equity}}$	<1	negative
7. Net working capital	$\text{Current assets} - \text{Current liabilities}$	Low or downward trend	negative
8. Net working capital turnover	$\frac{\text{Sales}}{\text{Net working capital}}$	Low or downward trend	negative

It is not enough to calculate all the ratios shown in Table 1 or additional ones, depending on the specifics of a company's activities; their value has to be evaluated as objectively as possible so they would not fall to an unsatisfactory or low level. The evaluation levels seen in Table 1 are based on the recommendations of Statistics Lithuania (*Įmonių finansinės būklės...*, 2004). These values of ratios are indicative, ratios of different industries may differ depending on the specifics of companies' activities. The analysts of companies can prepare their own company's indicative values of ratios based on these indicative values of ratios after examining the dynamics of ratios in the past few years.

*Application of bankruptcy prediction models.* In the most general sense, the bankruptcy prediction models may be described as the process of merging various relative financial ratios into one group and calculating them, thus attributing a certain value to them. A lot of bankruptcy prediction models can be found in economic literature. All of them can be divided into two main groups: 1) classic statistical and 2) artificial intelligence. Linear discriminant analysis (Altman, Springate, Taffler and Tisshaw, Lis, Fulmer, Dovydova, Belikov, etc.) and logistic regression (Zavgren, Chedder, Grigaravičius, etc.) models are attributed to the classic statistical models. Decision tree and neural network models are attributed to the artificial intelligence models.

The models most commonly tested in practice as well as examined and evaluated by scientists are the classic statistical models. Critical values of models suggested by various authors for determining a probability of bankruptcy play an important role in predicting bankruptcy (see Table 2).

**Table 2 Critical values of the most important classic statistical models for bankruptcy prediction** (source: authors' construction based on Šneidere, 2005; Савицкая, 2005; Mackevičius, 2007)

<b>Models*</b>	<b>Critical value</b>
1. Altman 1 (for companies listed in stock exchange markets)	$Z < 1.8$
2. Altman 2 (for companies whose shares are not quoted in stock exchange markets)	$Z < 1.23$
3. Altman 3 (for service and individual companies)	$Z < 1.10$
4. Fulmer	$H > 0$
5. Lis	$Z < 0.037$
6. Springate	$Z < 0.862$
7. Taffler and Tisshaw	$Z < 0.2$

*Note: the known formulae of calculations for the models are not presented in the table*

Lithuanian authors mainly focused on the Altman model for predicting bankruptcies by companies listed in the stock exchange. Some authors (Tvaronavičienė, 2001; Stundžienė & Boguslauskas, 2006) determined that the Altman model is improper for predicting Lithuanian company bankruptcies, others (Mackevičius, Giriūnas, & Valkauskas, 2014; Garškaitė, 2008) proved that this model allows to approximately predict bankruptcy and nearly shows the real situation of the companies.

Relying only on the bankruptcy prediction models when seeking to determine a company's continuity of activities and bankruptcy probability is inappropriate and irrational. The problem is that the models were performed using different financial statements applied in different countries, in different periods of time, and for companies from different industries. Calculation of financial ratios shown in the financial statements is based on different accounting principles in different countries. That is why the same model can be appropriate in one country (and even for a particular industry) and have a completely opposite result in another country or industry. Different authors use different financial ratios in their models, although they usually do not present any particular arguments why a certain absolute or relative financial ratio was included. It is worth noting that the presented models do not estimate the influence of inflation or, more specifically, the different influence of the accounting of the inflation process as well as the specifics of capital structure in different industries. That is why we can agree with statements by some scientists that it is appropriate to create modified Altman bankruptcy prediction models, showing the specifics of each country or industry.

*Study of bankruptcy causes.* The causes of bankruptcy relate to the complex and constantly changing external and internal environments of a company. It can be said that every company goes bankrupt in a different way, the causes of bankruptcy are not the same. The causes differ depending on the size as well as the industry of a company. Some causes of bankruptcy are of seasonal nature. It is worth noting that very rarely a company goes bankrupt because of only one factor. All causes of bankruptcy can be divided into two groups: internal and external. They are often interdependent and conditioned by one another. Internal causes are the causes that depend on company managers' competence, insight, initiative, managerial skill, and ability to make decisions. External causes are not influenced by the company managers because they are beyond their control. However, the managers must try to identify them, foresee the dangers and, respectively, make some certain managerial decisions as quickly as possible. In scientific literature, various authors only mention certain internal and external causes that influence bankruptcy but do not produce a specific list. It is only worth noting that the influence of external causes of the critical situation of a company has a synergistic effect: the external conditions usually accelerate the internal causes. As we have mentioned, there are a lot of internal and external causes,

although it is not clear which of them are the most important. Mackevičius, Giriūnas, & Valkauskas (2013) carried out a study on bankruptcy causes and established that there were ten most important external and internal causes (see Table 3).

Table 3 **The most important external and internal causes of company bankruptcies**  
(source: Mackevičius, Giriūnas, & Valkauskas, 2013)

No.	External causes	Internal causes
1.	Membership in international and regional organizations	Lack of aggression in finding new markets
2.	High rates of inflation or deflation	Large operating losses
3.	Unstable political situation in the country	Working capital deficiency
4.	Unstable national economic policy	Unqualified leadership
5.	Changes in foreign economic policy	Reckless credit taking
6.	Unstable legal system	Mismanagement of cash flow
7.	Amendments to laws and corruption	Mismanagement of the company
8.	Development of the bank capital market	Company's failure to adapt to changes in the market
9.	Procedure for obtaining a credit	Reduction in sales volumes and in the number of orders
10.	Changes in exports and imports	Low professional competence of the staff

But one thing is for sure: it is necessary to pay more attention to the analysis of bankruptcy causes and it is possible to formulate respective policies and strategies to avoid bankruptcy when specific causes are known.

*Most important measures to avoid bankruptcy.* In scientific literature and in practice, the measures to avoid bankruptcy are very different. It can relate to the specifics of a company's activities and the different approaches of managers to bankruptcy as a phenomenon of the market economy. It must be noted that some recommended measures can be very effective for one company while ineffective for another. However, it is important to be aware of as many measures as possible which can be applied to avoid bankruptcies or decrease their number.

After performing a scientific literature analysis of measures to avoid company bankruptcies, it is suggested to distinguish operational and prospective measures. Operational measures are the ones that are applied when a company reaches a critical situation and the signs that determine a possibility of bankruptcy show up. Prospective measures are the ones that are constantly applied in order to guarantee consistent continuity of the company's activity and to prevent bankruptcy taking into account any signs that may indicate it.

It is noteworthy that managers do not pay enough attention to the measures for forecasting and avoiding bankruptcy. However, if certain measures are actually applied in companies' practices, they tend to vary a lot and some of them are absolutely inefficient. Thus, the question is which measures to avoid bankruptcy are the most important and most appropriate for different companies.

The study on companies of the Republic of Lithuania has shown that the most important operational measures to avoid bankruptcy are: 1) search of ways to reduce costs, 2) improvement of the internal control system and 3) changes in the organisational structure of a company (Mackevičius & Giriūnas, 2014: p. 132). Therefore, the companies facing the threat of bankruptcy must first find ways to reduce costs, improve internal control or reorganize their organisational management structures (merge certain departments, remove a department or establish a new one for solving operative problems etc.). Special attention must be paid to strengthening the internal control system because some of the employees might be dishonest. Acting alone or in agreement with others, they can take advantage of the situation and attempt to make a profit (organise unexpected transactions, damage and then write off valuable assets etc.)

The most important prospective measures for avoiding bankruptcy are these: 1) constant analysis of the competitive market, 2) planning of the company's activities and 3) employees' qualification training. So, the managers have to be constantly interested in the financial ratios of companies that engage in similar activities and look for ways to gain advantage against competitors, even though the company is profitable. It is necessary to take into consideration the influence of internal and external environmental factors, the economic and politic situation of the country and not bring into being random figures when planning the company's activities. The training of employees always contributes to better financial results and is more beneficial than the costs of this measure.

One important fact must not go unnoticed: some measures are of dualistic nature, i.e. are useful in achieving both operational and prospective goals. For example, the search of ways to reduce costs is not only important for the company when it faces the threat of bankruptcy but during all the years of its existence. The same can be said about the internal control system: it must always function to ensure good financial results and the continuity of the company's activities (Mackevičius & Giriūnas, 2014: p. 132). A long-term measure such as training of employees is important not only regarding the company's long-term plans but in solving operational activity problems as well. In the most difficult situations, only highly-qualified specialists can make the right decisions.

A complex analysis of company bankruptcy forecasting – if carried out properly and based on the recommended methodology – helps to gather a vast information fund. By using its data, one can objectively evaluate and determine: a) the company's financial situation and activity results; b) the most risky areas

and the ones that do no benefit or insufficient benefit the company; c) factors influencing changes of various ratios and the company's efficiency in general; d) the company's potential and advantages in the competitive market as well as in crisis situations; e) internal and external reserves to improve the company's activity, etc. This methodology may be successfully applied in all companies, regardless of their size, legal forms and type of industry. Besides, by using this methodology, it is possible to evaluate not only the efficiency of current decisions but the correctness and soundness of previous decisions and predict the future prospects of the company more accurately.

## **Conclusions**

In modern conditions for a dynamic and competitive market economy, company bankruptcies become an inevitable phenomenon and a consequence of the global financial crisis. Not only new companies go bankrupt but also large companies operating for years and having good activity traditions as well as international acceptance. It is unlikely that the number of companies going bankrupt is going to decrease in the future.

In Lithuania, 20,928 companies went bankrupt from 1993 – when the bankruptcies were started to be recorded – to 1 January 2017. The last decade has seen an especially large increase in bankruptcies: more than 1,700 companies go bankrupt every year. An especially negative feature of the Lithuanian economy is noteworthy – companies of almost all industries go bankrupt. Wholesale and retail trade, motor vehicle and motorcycle repair companies and construction companies go bankrupt the most and account for 30 % and 15 %, respectively, of the total companies that went bankrupt.

In order to avoid bankruptcies of companies and their consequences, it is necessary to determine and solve the problems of a company before it becomes clear that the company is insolvent and the insolvency procedures have to be started. Therefore it is important that every company would have its methodology for bankruptcy forecasting which would help to determine possible insolvency beforehand and take strategic actions to improve the company's performance.

To determine the bankruptcy probability beforehand, a representative methodology for complex company bankruptcy forecasting is recommended. It consists of six main elements: 1) study of the company's external and internal environments; 2) evaluation of absolute financial indicator changes; 3) calculation and evaluation of financial ratios; 4) application of bankruptcy prediction models; 5) research of bankruptcy causes; 6) application of measures to avoid bankruptcy. A well prepared complex analysis for forecasting a company's bankruptcy helps to determine the company's possibilities in crisis situations, explain the most complex activity fields, expose the technical and organizational drawbacks of

activity as well as their causes, determine the particular measures to eliminate them and ascertain the reserves to improve the activity; all this is based on the recommended methodology. After evaluating some qualities of the companies' activity, this methodology might be successfully applied in all companies regardless of their size, legal form and industry.

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# APPLICATION OF THE RASCH METHOD OF EVALUATING LATENT VARIABLES IN MANAGEMENT AND ADMINISTRATION

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**Abstract.** *In the paper approaches of application of the theory of latent variables for the decision of some problems of management and management are offered. The peculiarity of this work is that mathematical solutions for solving problems are based on Rasch's model for estimating latent variables.*

*The aim of this paper is to describe a general approach to estimating latent variables using Rasch's method, based on the method of least squares, and apply this approach to some management tasks. The tasks of applying the Rasch model to the method of organizing team, to evaluating alternatives in decision-making and to the formation of a portfolio of securities were solved.*

*In the field of labour management, three models for organizing group tasks are considered: the formation of work teams, the case of individual performance of a group task, and the case of joint performance of group task jobs. In the field of decision theory, the model for choosing the best alternative is considered, including taking into account the weights of the criteria. We also considered the approach of obtaining estimates of alternatives using the hierarchy analysis method, in which the attractiveness vector of alternatives is computed on the basis of Rasch's model of estimation of latent variables. In the field of financial management, a method of forming a portfolio of securities in the approach of the theory of latent variables is proposed. It is shown that, in comparison with traditional methods, the approach based on Rasch's model has advantages: linearity of the obtained estimates, their independence and high accuracy.*

**Keywords:** *decision-making, latent variables, the organization of labour, a portfolio of securities, Rasch's model.*

## Introduction

Mathematical methods of measuring latent variables is the direction in mathematical modelling that is quite new and not completely investigated. The ability to objectively and adequately measure latent variables will allow to operate at a mathematical level with such qualitative categories as efficiency, level,

degree, quality, and others. This determines the urgency of using the theory of latent variables in many areas of science, including in management tasks.

The most complete and objective model for estimating latent variables is the Rasch model (Linacre, 2004; Engelhard, 2013) at the present time. Initially, it was used in education to assess the quality of the knowledge received and the indicator variables were to be measured on a dichotomous or political scale. However, at the present time, there have been modifications of the Rasch model is based on the method of least squares, which made it possible to use indicator variables measured by continuous scales. This allowed us to significantly expand the scope of the Rasch model.

The aim of this paper is to describe a general approach to estimating latent variables using Rasch's method, based on the method of least squares (Barkalov et al., 2014; Moiseev, 2015), and apply this approach to some management tasks.

The following problems are considered in the article.

1. Application of the Rasch's model in the problems of labor management. We are considering a set of works (a project) that a group of performers must perform. Three models of organizing group tasks are considered:
  - a) the formation of work collectives - when the group of performers is divided into teams with different degrees of responsibility and within each the roles of participants are determined;
  - b) the case of individual performance of a group task - when each performer is assigned only one job;
  - c) the case of joint performance of group tasks - when several performers can do one job at a time.
2. Application of the model in the theory of decision-making. The approaches to decision-making under conditions of certainty are given. The cases of choosing the best alternative without taking into account the weights of the criteria and taking into account the weights are considered.
3. Application of the model in expert evaluation. An approach is described for obtaining estimates of the attractiveness of alternatives using the hierarchy analysis method, based on the Rasch's model of estimation of latent variables.
4. Application of the model in financial management. The approach of forming a portfolio of securities based on the Rasch's method is proposed.

Here are the main points of Rasch's model.

### Theoretical foundations of Rasch's model

The classical Rasch model is based on the logistic function, which makes it possible to find the probability that there will be a positive evaluation by the  $i$ -th subject of the  $j$ -th object, if these objects and subjects are evaluated by latent variables  $\beta$  and  $\theta$  (Maslak, 2005):

$$p_{ij} = \frac{e^{\theta_i - \beta_j}}{1 + e^{\theta_i - \beta_j}}. \quad (1)$$

These estimates are measured in some dimensionless quantities, the scale of which is linear. The estimation of latent variables is made on the basis of known values of indicator (measured) variables  $x_{ij}$ .

However, the model is not devoid of shortcomings and limitations. The main drawback of the classical Rasch model is the limited use of the original data. From the point of view of mathematics, this limitation is due to the fact that the computational basis of the model is the maximum likelihood method.

The authors developed a new approach to the calculation of estimates of latent variables, according to which the computational part is based on the least squares method (LSM): the parameters  $\theta_i$  and  $\beta_j$  for the latent variables estimation model are chosen so that the sum of the squares of deviations of the indicator variables  $x_{ij}$  from the estimated probabilities  $p_{ij}$  were the smallest.

The task is reduced to minimizing the residual amount (Moiseev, 2015):

$$\sum_{i=1}^m \sum_{j=1}^n (x_{ij} - p_{ij})^2 = \sum_{i=1}^m \sum_{j=1}^n \left( x_{ij} - \frac{e^{\theta_i - \beta_j}}{1 + e^{\theta_i - \beta_j}} \right)^2 \rightarrow \min. \quad (2)$$

In the case of normalizing the estimates to nonnegative values, the objective function (2) is supplemented by a constraint system:

$$\theta_i \geq 0; \beta_j \geq 0; i = 1, 2, \dots, m; j = 1, 2, \dots, n \quad (3)$$

The main advantage of this model is that it can use a continuous set  $x_{ij}$  as the empirical data, having the sense of the degree of evaluation by the  $i$ -th subject of the  $j$ -th object whose elements can vary continuously from 0 to 1.

Another important advantage is that the proposed approach significantly expands the instrumental possibilities of solving the problem. The proposed model is a classical problem of non-linear optimization, the numerical solution of

which can be realized with the help of available application programs, for example in MS Excel using the Solver add-on.

### **Application of the model to the problems of labour management**

We are considering a set of works (a project) that a group of performers must perform. At the first stage, there is an analysis of the ability of performers to perform a particular job, and then, according to some methodology, the assignment of performers to work takes place. Usually, the project contains several works, each work can be performed by either one or several performers. Let's consider three models for organizing group tasks.

**Model for the formation of work teams.** Let the number of works in the project  $m$ , and the number of performers in the group  $n$ . At the first stage, a survey or test is performed, allowing you to preliminarily evaluate whether each performer can perform each task. As a result, we obtain the matrix:  $x_{ij} = 1$  if the  $i$ -th performer can carry the  $j$ -th task, and  $x_{ij} = 0$  if the  $i$ -th performer can not carry out the  $j$ -th tasks.

This matrix is processed by Rasch's method of estimating latent variables. As a result, we obtain estimates of the parameters  $\theta_i$  – the level of the abilities of the  $i$ -th performer, and  $\beta_j$  – the difficulty of the  $j$ -th job. On the basis of the estimates obtained, one can find the probability  $p_{ij}$  of correct execution of the  $i$ -th test by the  $j$ -th work, which is determined by the logistic function (1).

These assessments can already be used to identify strong and weak performers and complex and easy works. The probabilities (1) show the assessments of the ability of performers to perform specific jobs, but not the entire task as a whole, except for this there is no estimate of such a final indicator as the probability of the task by the whole group.

Consider the continuation of the methodology for assigning works to performers, eliminating these shortcomings.

At the heart of this model, which makes it possible to divide a group of participants into subgroups with different responsibilities and roles, is a model based on the theory of pair matrix games. According to it, the group of performers plays the role of the first player, the winning of which is maximized. As the payment matrix of the game is a matrix of probabilities  $p_{ij}$  (1). One of the common methods for solving game problems is to reduce the model to the problem of linear programming. We introduce some variables  $x_i, i=1,2,\dots,n$ , for which the objective function and constraints are as follows:

$$\begin{aligned} \sum_{i=1}^n x_i &\rightarrow \min; \\ \sum_{i=1}^n p_{ij} x_i &\geq 1, \quad j = 1, 2, \dots, m; \\ x_i &\geq 0, \quad i = 1, 2, \dots, n. \end{aligned} \tag{4}$$

From the solution (4) we find the optimal values of the variables  $x_i^*$ , on the basis of which we determine the price of the game:  $v = \frac{1}{\sum_{i=1}^n x_i^*}$  and the probabilities of strategies in the mixed:  $P_i = vx_i^*$ .

Probability data can be interpreted as the optimal shares of performers' participation in a general task or, in other words, as the degree of confidence in the participant, its reliability. The price of the game  $v$  makes sense for the whole group to complete the whole task.

This approach allows us to break up a group of performers into subgroups. From the solution of the game problem, the first, most responsible group, to which the active strategies of the game problem correspond, is singled out. Then, from the remaining participants, the problem of game theory is again created, the solution of which allows us to single out the next active group, but with less responsibility, etc.

***The model of individual assignment of performers to work, namely, the individual performance of the work of the group task, each work is performed by only one performer and vice versa, each performer performs only one work.***

Consider the case when there are  $n$  performers who need to perform  $n$  jobs. At the same time one artist is assigned to one work and one participant can perform only one work. It is necessary to distribute the performers so that the total probability of the entire project is maximized.

From the statement of the problem it is obvious that we have a typical assignment problem. At the first stage, estimates are obtained for Rasch's model, similar to the previous problem. As a matrix of wins with a maximum value, we will use the probability matrix (1), but it must be square. Denote by  $y_{ij}$  the assignment matrix, which is defined as:

Then, the mathematical model of the problem will have the form:

$$\sum_{i=1}^n \sum_{j=1}^n p_{ij} y_{ij} \rightarrow \max;$$

$$\sum_{i=1}^n y_{ij} = 1, j = 1, 2, \dots, n; \quad \sum_{j=1}^n y_{ij} = 1, i = 1, 2, \dots, n; \quad (5)$$

$$y_{ij} \geq 0, \quad y_{ij} - \text{integer}, \quad i = 1, 2, \dots, n, \quad j = 1, 2, \dots, n.$$

The solution of this problem will give an optimal distribution of performers for the work of the group task. As an estimate of the likelihood of the entire project, you can use the average of the probabilities of doing all the work.

**Model of joint performance of group task jobs.** Let's consider now a situation where each participant can perform each of the works in a certain proportion and every work is done by all performers, also in a certain proportion. These shares can be calculated using the approach to solving the transport problem with the maximization of the objective function. The matrix  $y_{ij}$  is introduced in the same way as the assignment task, but it will not be discrete and its values will have the meaning of the share of the subject  $i$  in the work with the number  $j$ . For the initial data, we take the probability matrix (1).

The mathematical model for solving such a problem will differ from (5) by the absence of the condition of integer variables and the number of jobs is not necessarily equal to the number of performers. If the open transport problem is solved and so are the main constraints of the model (5), the equalities will be changed to the inequalities.

### Application of the model in decision theory

Consider the original approach to decision-making under conditions of certainty, based on the theory of estimating latent variables.

Let us first consider the case of making decisions under conditions of certainty without taking into account the weights of the criteria. Let the person making the decision have  $n$  alternatives  $A_1, A_2, \dots, A_n$  and  $m$  of the criteria  $K_1, K_2, \dots, K_m$ . Let  $U_{ij}$  us denote the estimate of the  $i$ -th alternative by the  $j$ -th criterion. To bring the estimates to a single scale, a normalization procedure is performed, as a result of which all the estimates of the alternatives according to the criteria  $u_{ij}$  take values from the interval from 0 to 1. Taking these estimates as the initial data, we find the exponents  $\theta_i$  and  $\beta_j$  by formulas (2) and (3), which make sense:  $\theta_i$  - estimates of the attractiveness of alternatives,  $\beta_j$  - the meaning of the degree of satisfiability of the criteria.

We now consider the possibility of taking into account the weights of the criteria. We denote by  $w_j$  the weight of the  $j$ -th criterion. We will assume that the weight is measured on a scale from 0 to 1 and, the more weight, the greater the importance for the decision maker and the greater contribution to the attractiveness of alternatives it should give. There are three approaches to accounting for weights.

**Approach 1.** We multiply the estimates of the alternatives according to the  $u_{ij}$  criteria by their weights  $w_j$ , and to calculate the objective function (2) we use  $x_{ij} = \tilde{u}_{ij} = u_{ij}w_j$ .

**Approach 2.** When minimizing the residual amount, each term (2) will be taken into account proportionally to the corresponding weight. As a result, an optimization problem of the form:

$$S(\theta_i, \beta_j) = \sum_{i=1}^m \sum_{j=1}^n w_j \cdot (u_{ij} - P_{ij})^2 = \sum_{i=1}^m \sum_{j=1}^n w_j \cdot \left( u_{ij} - \frac{e^{\theta_i - \beta_j}}{1 + e^{\theta_i - \beta_j}} \right)^2 \rightarrow \min.$$

**Approach 3.** As mentioned above, the parameters  $\beta_j$  have the meaning of the degree of satisfiability of the criteria. If we fix these parameters and set them equal to weights, we obtain the problem of finding the attractiveness of the alternatives  $\theta_i$  taking into account the degree of satisfiability of the criteria: the higher the importance of the criterion, the greater the degree of its feasibility. The mathematical model of the optimization problem will in this case be of the form:

$$S(\theta_i) = \sum_{i=1}^m \sum_{j=1}^n \left( u_{ij} - \frac{e^{\theta_i - w_j}}{1 + e^{\theta_i - w_j}} \right)^2 \rightarrow \min.$$

The methodology used in this paper allows one to obtain estimates that, on the one hand, are in good agreement with classical assessments, but, on the other hand, they are more flexible, making it possible to make an unambiguous decision in situations where traditional approaches do not give it, and are more resistant to small changes baseline data.

### Application of the model in expert evaluation

In the theory of decision-making, analytical planning and expert evaluation, one of the most important tasks is the quantitative assessment of qualitative indicators.

To solve a similar problem, the hierarchy analysis method (Analytic Hierarchy Process – AHP), developed by T. Saaty (1988), and its modification the multiplicative AHP (Lootsma & Schuijt, 1997) are employed. These methods are based on a pairwise comparison of alternatives using a verbal scale of relative

importance. The results of the comparison are translated into some quantitative indicators of the attractiveness of alternatives in accordance with a given scale.

The authors propose an original model for estimating multicriteria alternatives, based on the described model for estimating latent variables.

Let there be  $n$  alternatives that need to be estimated on a quantitative scale by some qualitative criterion. Suppose that the expert tries to determine this estimate by means of paired comparisons. In the classical approach, they are the degrees of superiority of alternatives, and the vector of preferences for this criterion.

Consider now an approach based on a model for estimating latent variables. According to it, the probability  $P_{ij}$  of choosing the alternative  $A_i$  in comparison with the alternative  $A_j$  can be defined as:

$$P_{ij} = \frac{e^{\beta_i - \beta_j}}{1 + e^{\beta_i - \beta_j}}. \quad (6)$$

To apply (8) in practice, it is necessary to find the estimates  $\beta_i$  based on the known probabilities  $P_{ij}$  of alternative preferences, which are obtained empirically by means of expert comparison of the preferences. Let  $p'_{ij}$  be the probability that the expert will choose an alternative to  $A_i$  versus alternative  $A_j$ . Taking these probabilities as input data for the model of estimation of latent variables, we obtain the optimization problem:

$$\sum_{i=1}^n \sum_{j=1}^n (p'_{ij} - P_{ij})^2 = \sum_{i=1}^n \sum_{j=1}^n \left( p'_{ij} - \frac{e^{\beta_i - \beta_j}}{1 + e^{\beta_i - \beta_j}} \right)^2 \rightarrow \min. \quad (7)$$

If we use a positive scale of estimates, then the normalization condition can be the equality of the smallest estimate  $\beta_i$  zero:

$$\min_i \beta_i = 0. \quad (8)$$

After the estimates of the attractiveness of the alternatives are found, we can calculate their weights  $w_i$  for this criterion by normalizing  $\beta_i$ . If condition (8) is used, then the normalization to the unit scale can be carried out according to

formulas:  $w_i = \frac{\beta_i}{\max_i \beta_i}$  or  $w_i = \frac{\beta_i}{\sum_{i=1}^n \beta_i}$ .

Let us return to the question of finding empirical probabilities  $p'_{ij}$ . According to the AHP method, there is a scale of preferences, which for the probabilistic approach can be specified in accordance with Table. 1. If there is a superiority of the second alternative over the first, then its probability will be reverse:  $p'_{ij}=1- p'_{ji}$ ,  $p'_{ii}=0,5$ .

Table 1. **Scale of relative importance** (Barkalov et al., 2014)

Level of importance of the 1st alternative over the 2nd	Probability $p'_{ij}$
<i>Equal importance</i>	0,5
<i>Moderate superiority</i>	0,6
<i>Substantial superiority</i>	0,7
<i>A significant, great superiority</i>	0,8
<i>Very great superiority</i>	0,9
<i>Unambiguous preference</i>	1

The described method has advantages over traditional ones: estimates of alternatives are their unique properties, not depending on the alternative, and are measured on a linear scale.

### **Application of the model in financial management**

The approach described above can also be used in financial management, in particular, in the formation of a securities portfolio through an individual expert evaluation of the appropriateness of including a particular security in a portfolio.

At the first stage, all securities that can be included in the portfolio are selected. Let the number of such papers  $n$  be denoted by  $A_1, A_2, \dots, A_n$ . To assess the effectiveness of the inclusion of securities in the portfolio, an expert evaluation of each of them is made. Suppose that  $m$  experts  $B_1, B_2, \dots, B_m$  participate in the work. Each expert makes an assessment of the appropriateness of including a security in the portfolio, forming a matrix:  $x_{ij}$  - the degree of preference for including an  $A_i$  security in the portfolio in the opinion of the  $j$ -th expert. The valuation is measured on a scale of 0 to 1 and it can be interpreted as the probability or share with which the expert would include the security in the portfolio.

Next, we introduce latent variables:  $\theta_i$  - the degree of attractiveness of the  $i$ -th security from the point of view of its inclusion in the portfolio;  $\beta_j$  - some indicator that characterizes the rigor (loyalty) of the  $j$ -th expert. To obtain estimates, we solve the optimization problem (2) and (3).

At the final stage, based on the obtained estimates of the latent variables  $\theta_i$ , the portfolio is formed. The shares (weights)  $q_i$  of securities in the block are obtained by normalizing the estimates  $\theta_i$ :

$$q_i = \frac{\theta_i - \theta_{\min}}{\sum_{i=1}^n (\theta_i - \theta_{\min})} . \quad (9)$$

Estimates of the composition of the securities portfolio correlate well with known methods, such as models for the formation of a block of securities, such as, for example, the Markovitz model or the price-level model (Burenin, 2000), however, estimates based on Rasch's model have advantages: assessments of the attractiveness of securities are their unique properties and do not depend on a set of experts and estimates on a linear scale: in addition to valuations of securities, it is possible to obtain assessments of the quality of the work of experts  $\beta_j$ .

## **Conclusion**

A new approach to the estimation of latent variables by Rasch's model is proposed. It is based on the application of the method of least squares in the computational kernel instead of the maximum likelihood method. This will allow us to use as a source data continuous sets of values of indicator variables.

Computational experiments have shown that the model based on LSM is characterized by high statistical accuracy and it can be used to calculate estimates of the latent variable.

The properties of estimates of latent variables obtained by the method of least squares are analysed in research by Maslak, Moiseev & Osipov (2015) and Maslak, Moiseev, Osipov & Pozdnyakov (2017) supports. Estimates of the parameters of the model based on the least squares method have a smaller error in calculating the estimates than those calculated using the maximum likelihood method. At the same time, the proposed model has a much wider range of applications than the classical Rasch model. Let's consider some directions of application of the model in various areas of management and management.

At the same time, this model has a much wider range of practical applications than the classical model of Rasch.

On the basis of Rasch's model based on LSM, new approaches to solving the problems of labour organization, decision-making, expert appraisal, and the formation of a security portfolio were proposed.

In conclusion, we draw attention to the fact that the approach to using the Rasch model based on LSM in management tasks can be applied to other scientific areas.

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# MODEL FOR PLANNING AN OPERATIONAL- INNOVATIVE PROGRAMME FOR AN INDUSTRIAL ORGANIZATION

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**Abstract.** *The complex nature of modern technologies and organizational solutions in modern corporations requires adequate conceptual approaches to their planning. In this paper, the authors propose a model of an operational and innovative programme for which methodological principles are formulated and a systemic formulation of the planning task designed to optimize the process of resource use, including: investment, technological, and innovative capabilities of the corporation.*

*In the instrumental sense, the task of forming a production programme must be based on optimization models. Some researchers supplement the models for calculating production programmes by analysing subsystems and forming the profile of economic risk.*

*The purpose and essence of the proposed in this paper model of product planning in the context of continuous investment in innovation can be formulated as follows.*

*On the basis of a number of parameters of the forecast cycle of production of each product of the production programme, it is necessary to determine such terms for launching new products in production in order to perform tasks regarding the rate of growth of the value of the corporation, to provide basic economic and financial indicators of efficiency and sustainability within the resources allocated by the corporate budget. At the same time, it is necessary to determine the optimal volumes and rates of investment in innovations, observing, on the one hand, the balance between profitability and liquidity, on the other hand, the optimal start date for the sale of a new product in order to maximize the rent from possessing unique competencies.*

**Keywords:** *innovations; product life cycle; production program; simulation.*

## Introduction

One of the vital problems in managing a modern corporation is the construction of its economy according to an innovative production pattern (Danilin, 2006). The science lacks the methodological substantiation of the concept of building the innovative economy. Therefore, there is a need of formation of theoretical and methodological foundations for the organization and management of modern innovation-oriented corporations (Kleyner, 2012).

The aim study is to develop a solution to the problem of planning the optimal output of products taking into account the demand and the forecast of the year of replacement of one type of product for another.

Methods. The formation of such a solution in the form of a model is methodologically based on the concept of product life cycles and the algorithm of optimization-simulation calculations. The optimization block is designed to calculate the basic variables of the model. Also, it logically links the whole algorithm of optimization-simulation calculations to a consistent iterative chain of forecasting of the production plan, financial indicators of sustainability and the need for sources of investment. At the same time, an optimization model is constructed for each iteration step.

The model assumes the formation of the most rational options for financing R & D. Under these options (strategies), we mean logically related, consistent volumes of investment for each stage of R & D, as well as the speed of production and the launch of a new product on the market.

Methodological aspects of this problem are reflected in the works on instrumental methods of research (Al-Fawzan & Al-Hargan, 2014; Baniak & Dubina, 2012; Carayannis et al., 2015; Higgins, 2012; Rosiello et al., 2013; Shichkov, 2016), i.e., on the assessment of innovative potential, the economic and mathematical modelling of innovation planning. Still, there is no clear understanding that large industrial companies are the core of development strategies (Chesbrough et al., 2006; Gurkov, 2013; Kondratyev, 2009; Schumpeter, 2003; Untura, 2013). Not enough attention is paid to the problem of efficiency of innovations from the perspective of coordination of production and innovation processes in an industrial enterprise. Methods of corporate modelling require clarification and development to become the efficient planning tools.

A production programme is the most important element of corporate planning. At that, this task allows rather clear formalization and application of programming tools of decision-making. A production programme stipulates optimum availability of resources and calculates all the technical, economic, and financial indicators and parameters. However, production planning is much more complicated for an enterprise which competitive capacity is based on innovations and a constant launch of new products. The authors take as a premise that (1) production plans should include the planning of innovations and investments in innovations; (2) assessment of investment efficiency requires a simultaneous and coordinated forecast of cash flows from all activities; and (3) the production planning shall be a long-term prospective forecast.

The research of production structures with innovative potential that allows covering all the stages of innovation process on the basis of constant renewal of products and receiving the rent during a long period of time methodologically relies on the introduced notion of an innovation-oriented corporation. This notion

summarizes and systemizes those variants of defining the enterprises oriented on innovations, which are most popular in scientific literature.

### Solving the problem

#### Model for forming an operational and innovation programme of activity of an enterprise

We will form a system optimization model of functioning and development of the enterprise, which takes into account the plans of innovation activities, funding and evaluation of parameters of stability of growth of the economy of the enterprise (Mezhov S., 2010; Mezhov I. & Mezhov S., 2011):

Let the company produce commodities, indices, where  $j \in J$ ,  $x_{jt}$  is the volume of sales in year  $t$ ,  $t = 1, \dots, T$  in physical measurement units, the base price of the output is  $c_j$ , by years, taking into account the relative change in rent in the first years of new products -  $c_{jt}$ . The index  $j$  corresponds to the new product  $j \in J1 \subset J$  if it does not go to replace the old products. When such a substitution is envisaged, the index  $j, j \in J2 \subset J$  of the product being replaced is assigned the index  $j_h \in J3 \subset J$ , i.e. a lot of indices of new products, which are used to replace old products. For a while, both products can be produced simultaneously. There are two mechanisms for such replacement. One purely economic: with a decrease in demand for the old product in accordance with its life cycle, production costs increase (they are reflected as direct costs). In this case, as soon as the profit on this product does not cover the growth of overhead costs and the financing of the growth of working capital, in the model the products are "removed" from production. For new products, the release will be planned only when prerequisites are created: R & D is carried out, technical preparation of its production is carried out. The increase in sales of such products is determined by the demand and capacity, the nature and time of their development. Such a situation should be presented in the model. In the second case, a directive replacement mechanism is used, that is, parameters  $\alpha_\tau$ ,  $0 \leq \alpha_\tau \leq 1$ , are specified;  $\tau = 1, \dots, \tau_j$ ;  $\tau_j$  - the period of development of new products;  $\alpha_\tau = 1$  if  $\tau \geq \tau_j$ .

On the basis of data on the life cycle of products for each set of expected demand  $M(G_{jt}^*)$ , an average, standard deviation is calculated. With the help of simulation, a lot of options are set: demand for products, lower bound  $G_{jt}^n$  and upper  $G_{jt}^w$  fixed restrictions on demand:

$$G_{jt}^n \leq x_{jt} \leq G_{jt}^w, \quad j \in J, t = 1, 2, \dots, T \quad (1)$$

Consequently, there will be restrictions on the demand for products in each version of the calculation.

The sales volume in each variant of the calculation can be determined as follows. For the first variant of calculations:

$$U_t = \sum_{j \in J} c_{jt} x_{jt}; \quad (2)$$

for the second variant of calculations:

$$U_t = \sum_{j \in J1} c_{jt} x_{jt} + \sum_{j \in J2} (1 - \alpha_t) c_{jt} x_{jt} + \sum_{j \in J3} \alpha_t c_{j_u, t} x_{j_u, t}. \quad (3)$$

In this case, if  $t_j$  is the period of the beginning of product sales  $j \in J1, j \in J3$ , then until the  $t = t_j - \alpha_t = 0$ , and from the period  $t = t_j + \tau_j - \alpha_t = 1$ .

The information for calculations is prepared for the pre-planning year  $t = 0$ , in which the volume of the sold commodity is fixed as  $U_0$ . Hence the indices of the growth of sales by years relative to the base period are calculated as follows:

$$u_t = \frac{U_t}{U_0} - 1; \quad t = 1, 2, \dots, T. \quad (4)$$

All innovative changes occur on the basis of the implementation of projects (innovations)  $z, z \in Z = \{1, \dots, z^*\}$ . Projects reflect the design and implementation of new products manufactured using new technology etc. are connected with the introduction of new production capacities.

Using the production capabilities of the enterprise, changing capacities through the implementation of projects (innovations, organizational and technical measures)  $z \in Z$  can be taken into account as follows:

$$\sum_j m_{ljt} x_{jt} - \sum_z q_{lzt} y_{zt} \leq M_{lt}, \quad l \in L_1, \quad (5)$$

$$\sum_j m_{ljt} x_{jt} - \sum_z q_{lzt} y_{zt} \leq 0; \quad l \in L_2, j \in J1, j_H \in J3, t = 1, 2, \dots, T, \quad (6)$$

where  $m_{ljt}$  – is the time expenditure (in machine-hours, in other units) for the production of a unit of product  $j$  by exploiting the equipment of group  $l$ ;

$M_{lt}$  – is the effective fund for operating time of the equipment of group  $l$  in the planning period under review;

$q_{lzt}$  – is the value of the change in the operating time fund for the equipment of the group  $l$  from the period  $t$  when the innovation  $z$  is introduced;

$z_j$  – the index of the project  $z$  associated with the release of the new product  $j$ ;  
 $y_{zt}, (y_{zjt})$  – are integer variables that take the value 1 if the project  $z, z_j$  is accepted for implementation, and 0 otherwise;

$L_1$  – a set of indices of existing groups of equipment, which is the most important one and limits and determines the production capacity (capacity) of the enterprise;

$L_2$  – a set of indices of newly created groups of equipment with changes in technology improving the quality of products, organizing the release of new products, etc. At the same time, if the measure  $z_j$  is not realized, the output of  $j$  cannot be realized.

Let's denote by  $I_t$  the volume of capital investments,  $I_t = I_{1t} + I_{2t}$ , sent to the enterprise's operational and innovation programme (OIP) in year  $t$ . Part of this investment,  $I_{1t}$ , is directed to the implementation of the set list of the largest innovative projects. The effect will be taken into account through the release of additional and new products. The other part of the investment  $I_{2t}$ , is designed to implement a still unknown set of innovations. In the case of prospective planning, the principle of two budgets is used. The profitability of such investments,  $h_{2q}$ , is determined on the basis of the work of the enterprise before the beginning of planning. The parameter  $h_{2q}$ , is given as a mathematical expectation and must change under multivariate calculations. Then the cumulative effect can be determined by taking into account the fixed lag, for example, in one year:

$$H_t = h_{2q} \sum_{\tau=1}^{t-1} I_{2\tau}, \quad H_1 = 0, t = 2, \dots, T. \quad (7)$$

Direct costs associated with the release of marketable products in the base year are fixed in value form at the level  $s_j$ . Then the direct costs for the volume of the sold commodity in the year  $t$  are equal to:

$$S_{dc,t} = \sum_j s_j x_{jt}, \quad t = 1, 2, \dots, T. \quad (8)$$

Denote by  $S_{mo}$  - mixed overhead in the base year. As production increases, so does the overhead. On the basis of regression analysis, the forecast of the level of overhead costs is as follows:

$$S_{mo,t} = S_{mo} + \mu S_{mo} u_t + \sum_{\tau=1}^t A_{\tau}, \quad (9)$$

where  $\mu$  is the percentage of incremental overheads with an increase in sales by one percent ( $\mu$  and  $u$  are expressed by coefficients).

The value of  $S_{mo,t}$  is corrected by the amount of depreciation deductions from the value of newly introduced fixed assets,  $A_t = aI_{t-1}$ ,  $a$ ,  $a$  is the weighted

average depreciation rate. The increase in depreciation can be directed to investment. Cost of sales in the year  $t$ :

$$S_{cs,t} = S_{dc,t} + S_{mo,t} - H_t - H^t \quad (9)$$

where  $H^t = \sum_z h_{zt}$ ,  $h_{zt}$  – the cumulative cost savings from the implementation of innovations ( $z$ ), not related to the commissioning of capacities and the release of new products. We denote by  $w_r$  the level of the receivables relative to the value of  $U_t$ . Then the volume of revenue  $V_t$  in year  $t$  is defined as follows:

$$V_t = (1 - w_r)U_t + w_r U_{t-1} \quad (10)$$

The profit  $P_{v,t}$  from the proceeds of production and other activities is similar. The profit from the products sold in the period  $t$  will amount to:

$$P_{s,t} = Ut - S_{cs,t} \quad (11)$$

Part of this profit will remain in receivables. Consequently,

$$P_{v,t} = (1 - w_r) P_{s,t} + w_r P_{s,t-1} + P_{o,t} - P_{i,t}, \quad (12)$$

where  $P_{o,t}$  - level (approximate evaluation) of other profit (other losses),  $P_{i,t}$  - interest payment for a loan. Hence the net income is determined:  $P_{n,t} = (1 - tax) P_{v,t}$ .

Net income is directed to replenishment of working capital  $P_{wc,t}$  and investment  $P_{inv,t}$ , payment of dividends  $P_{div,t} = w_{div} P_{n,t}$ ,  $w_{div}$  - level of payment of dividends relative to net income. From here, the following condition must be satisfied:  $P_{wc,t} + P_{inv,t} = P_{n,t} - P_{div,t} = P_{un,t}$  – undistributed profit. Payment of long-term loans in the amount of  $P_{ltd,t}$  is made from funds for investment ( $P_{inv,t}$ ).

Hence  $I_{2q,t} = k_{2q} P_{inv,t}$  - the volume of investments from the profit, which is directed to other innovations.

Equity capital in year  $t$  is increased by the amount of retained earnings and by the amount of repayment of long-term loans in the amount of  $P_{ltd,t}$  from the net income that went to finance capital investments:

$$LBL_{1t} = LBL_{1,t-1} + P_{un,t} + P_{ltd,t} \quad (13)$$

Thus, the level of long-term liabilities is decreasing in the balance sheet by the amount of  $P_{ltd,t}$ , but the additional capital increases by the same amount.

The growth of working capital is determined through the level of current assets (balance sheet data)

$$A_{2t} = w_r U_{t-1} + w_{ri} S_{cs,t} \quad (14)$$

where  $w_{ri}$  - the level of stocks relative to the cost of commodity output (the standard for the past years). Then the gain:

$$\Delta A_{2t} = A_{2t} - A_{2t-1} \quad (15)$$

Denote by  $D_t$  the amount of long-term loan in year  $t$  to ensure financing of the innovation process. The loan is taken for a year, then returned. This simplifies the calculations. Then the level of the liabilities is defined as follows:

$$LBL_{2t} = LBL_{2,t-1} + D_t - P_{td,t}. \quad (16)$$

The volume of investments directed to the implementation of specific innovations (projects) in the year  $t$ :

$$I_{1t} = P_{inv,t} (1 - k_{2q}) + A_{inv,t} + D_t, \quad (17)$$

where  $A_{inv,t}$  - the volume of depreciation allocated to investments in the year  $t$ ,  $A_{inv,t} \leq \sum_{r=1}^t Ar$ . Hence the level of non-current assets at the end of the period  $t$ :  $A_{1t} = A_{1,t-1} - A_{inv,t} + I_t$

Given the equality of liabilities and assets of the company's balance sheet, an estimate of the value of short-term liabilities can be given:

$$LBL_{3t} = A_{1t} + A_{2t} - LBL_{1t} - LBL_{2t}. \quad (18)$$

The level of accounts payable:  $AP_t = LBL_{3t} - K_t$ ,

$K_t$  - level of short-term debt in the year  $t$ ; the increase in accounts payable:  $\Delta AP_t = AP_t - AP_{t-1}$ .

The total level of interest payment for the debt is:

$P_{i,t} = \eta_{st,t} K_t + \eta_t D_{t-1}$ ;  $\eta_{st,t}$ ,  $\eta_t$  - interest rates for short-term and long-term debt in year  $t$ . Since the calculations are carried out without taking into account inflation in constant prices, the parameters  $\eta_{st,t}$ ,  $\eta_t$  are set without taking inflation into account.

The growth of accounts payable serves as one of the main sources of financing working capital growth. Further, the volumes of financing the growth of working capital from profit and short-term credit are determined. The working capital gain  $\Delta Q_t$ , which is financed from net profit and a short-term loan ( $K_t$ ), is determined from the following restriction:

$$\Delta A_{2t} - \Delta AP_t - \Delta Q_t \leq 0 \quad (19)$$

that is, if the liabilities exceed the corresponding assets  $\Delta A_{2t} - \Delta AP_t \leq 0$ , then  $\Delta Q_t = 0$ . Then the values of  $P_{wc,t}$  and  $K_t$  as sources of replenishment of current assets are found from the following condition:

$$K_t - K_{t-1} + P_{wc,t} - \Delta Q_t = 0. \quad (20)$$

The main difficulty in planning the operational and innovative activity relates to the formation and justification of the investment flow, which, in this paper, is referred to as the “investment strategy”.

All technical and economic information related to the implementation of the project  $z$  is given as a set of quantitative parameters agreed with the time of the start of the innovation investment project. The periods of development of projects are fixed by the index  $\tau$ . Then the investment costs for the project  $z \in Z$  are marked as  $E_{z\lambda}$ ,  $\lambda = 1, \dots, \lambda_z^*, \lambda_z^* + \tau$ ;  $\tau = 1, 2, \dots, \tau_z$ ;  $\lambda_z^*$  – duration of the project,  $\tau_z$  – duration of development of the project  $z$ . The values of  $E_{z\lambda}$  take into account the costs of capital investments in the prices of the base year. The model should take into account the level of complexity of projects, possible deviations of such costs from planned. The engineering process is financed, mainly due to overhead costs.

The system of restrictions associated with ensuring a balance of financing the implementation of projects and cash flows in any period  $t$  will look like this:

$$\sum_Z E_{z\lambda} y_{z\nu} - I_{1t} + P_t - P_{t-1} = 0 \quad t = 1, 2, \dots, T; \quad \lambda = t - \nu + 1, \\ \nu = t_{zj} - \lambda_z^*, \dots, t_{zj} - 1, t_{zj}, t_{zj} + 1 \quad (21)$$

where  $P_t$  are the residuals of net income expressed as a cumulative total,  $t_{zj}$  is the period from which the development of new products can be started,  $t_{zj} - \lambda_z^*$  – the time from which the engineering of new products can be started.

Typically, in a real situation, investment resources are not always sufficient. However, there may be the opposite. This is why the variables  $P_t$  are introduced in the model. If they are in some years different from 0, then the remainder of the net income should be directed to the implementation of other innovations, and the effect of  $h_{2q}P_t$  should be taken into account when calculating the prime cost.

Since the implementation of the project  $z$  can be started later than the time  $v = t_{zj} - \lambda_z^*$ , then the project implementation should be multivariant and allow for the following restriction:  $\sum_v y_{zv} \leq 1, z \in Z$ .

The optimization criteria in the model can be different. When maximizing sales volumes, unprofitable products, projects with negative net discounted income (*NPV*) can be included in the plan. Given that in market conditions the criterion for maximizing company value is more preferable, the *NPV* indicator is more suitable for solving the problems of long-term planning. For this, in the model such an indicator should be calculated. For the planned periods, we calculate net cash flows:

$$\sum_Z -E_{z\lambda} y_{zv} - I_{2t} - \Delta Q_t + A_t + P_{\text{ин},t} + B(-, t) - B(+, t) = 0, \\ t = 1, 2, \dots, T; \lambda = t - v + 1, v = t_{zj} - \lambda_z^*, \dots, t_{zj} - 1, t_{zj}, t_{zj} + 1, (22)$$

where  $B(-, t)$  – negative cash flow;

$B(+, t)$  – positive cash flow.

If  $d_t = 1/(1 + \eta_t + r)^{t-1}$  denotes the discount coefficients,  $r$  - the level of risk of the innovative activity of the enterprise, then the net discounted income from the activity of the enterprise can be calculated as follows:

$$NPV = \sum_t d_t (-B(-, t) + B(+, t)). \quad (23)$$

Objective function:  $NPV \rightarrow$  maximum.

If you fix the *NPV* cumulative total by years, you can determine the payback period of the entire innovation programme, taking into account the systemic (synergistic) effect. The evaluation of one project can be carried out by calculations without this project and with it.

The optimization task allows us to evaluate the effectiveness of not only investment projects, innovations, but also any other organizational and technical measures aimed at changing technical, economic and financial indicators, achieving their desired values.

The replacement of product  $j$  by  $j^*$  is carried out by investment strategy options. Variants of strategies are determined by the volume and rate of investment, the nature of the process of investing in R&D, the speed of increasing production to the project level and the payback time of the product. The replacement strategy is the amount of investment for each year, up to the year of the beginning of mass production.

The investment strategy of the innovation project is formally defined as the sum of two functions - financing innovative capacity and financing the innovation process:

$$S = F(S_\gamma) + F(S_\eta) \quad (24)$$

where  $F(S_\gamma)$  is the investment strategy for innovation potential;

$F(S_\eta)$  - investment strategy for the stages of the innovation process.

Then the investment strategy  $S_k$  can be specified in the following form:

$$S_k = \{I_n, M_\gamma M_\eta\}, k = 1, 2 \dots K \quad (25)$$

where  $S_k$  is the investment strategy;

$I_n$  - the volume of invested capital;

$M_\gamma$  - matrix of investment of innovative potential;

$M_\eta$  - the matrix of financing the stages of the innovation process;

$k$  is the number of strategies.

There are several options for implementing the innovation process. Then each option can be specified by the investment strategy and determine the corresponding set of matrices (Table 2).

Table 2. **Financing options for the stages of the innovation process** (the table was developed by the authors)

year $t$	Number of the work performed and stages									
	Stages of R&D									
	1.		2.			3.	4.			6.
	1	2	3	4	5	6	7	8	....	$N$
$t_1$	15								....	
$t_2$	5	25							....	
$t_3$		70	7	23					....	
$t_4$				20	20	20	5		....	
$t_5$						40			....	
$t_6$							5	15	....	
$t_7$							30	70	....	
$t_8$									....	
$t_9$									....	40
.....									....	...
$T_n$									....	40

An company can begin an innovative process from any stage: from fundamental or applied research, or, for example, by purchasing a patent, from the development of a concept product. Strategically, decision makers on innovation have a dilemma - to carry out research at the earliest stage with a large volume of projected investments for the project, to form core competencies and routines in this area and to obtain additional income (rent) or to save on investment, but to lose rents, because competitors will also produce this product.

Such parameters of the innovative project as the complexity of the product and the depth of the innovation process increase the volume of investments, while the high innovative potential contributes to their reduction. Therefore, the financing of innovation processes should focus not only on the cost of work, but also on programmes for changing the quality of assets, i.e. innovative potential of the corporation.

### Conclusions

The solution of the presented task of planning the company activity for the future can be considered as optimization of planning of the company's operational and innovative activity, technical and economic and financial planning, analysis of the financial and economic state of the enterprise in dynamics with calculation of all key indicators in the model and outside it.

Such a task is of great importance both for scientific research on the development of a methodology for the sustainable development of an enterprise and for the practice of managing it. Systematic technical and economic and financial management of the company allows us to justify the prospects for its development, economically assess the options for such development, justify the magnitude of the stochastic reserve of sales, profit and other strategic indicators in order to ensure the implementation of planned key indicators.

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## MODERN SOCIO-DEMOGRAPHIC TRENDS AFFECTING THE BUSINESS SECTOR OF THE ECONOMIES OF LATVIA AND UKRAINE

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**Abstract.** *The paper analyses and describes key social and demographic trends affecting the business in current conditions. The present research aims to establish logical coherence and feedback between economic development and basic socio-demographic indicators in European countries, including the experience of Latvia and Ukraine. The challenge of the research leads to answering the question how demographic processes affect and drive the economy and how this mechanism could be used to predict essential trends of future development. The methodology of cluster analysis, statistical and regression methods were employed for modelling. Cluster analysis was applied to depict an economic cartogram and merge some European countries in particular clusters by current socio-demographic and economic criteria. As a result, this approach allowed us to compare Latvia and Ukraine as highlighting representatives of different economic clusters and distinguish important similarities and differences. Statistical data were based on the following indicators: GDP, income, employment, age structure, gender, population aging, location, migration etc. These parameters were analysed due to their dynamic change. Regression methods allowed to establish the whole system of indicators affecting the business environment in Latvia and Ukraine. For instance, the results confirmed the explicit impact of migration trends on business and social development.*

**Keywords:** *cluster analysis, demographic problems, European Union, economic development, Latvia, modelling, national economy, population, trends, Ukraine.*

### Introduction

It is a well-known fact that population is a vital driver of the economy, because initially each business is launched by some people to meet the variable needs of others. To be more specific, socio-demographic trends are interrelated

with all aspects of the society and, above all, with economic processes that affect the business sector of the economy of any country.

Currently, internal social and economic particularities become increasingly significant in different countries all over the world. Looking globally, this gap is especially dramatic between developed and developing countries of the planet. According to the Department of Economic and Social Affairs, about 1/4 of the world's population lives in the most economically developed countries, which are mostly located in the northern part of Earth, especially in Europe. In contrary, about 3/4 of the world's population is concentrated in the southern region, including two demographic superpowers - China and India. Despite substantial cultural, social and economic prospects, scientists envisage a gradual decline of the European population from 742 to 716 million by 2050. At the same time, Asia and Africa meet sharp population growth from 5.8 to 7.8 billion (United Nations, 2017). This trend may lead to a risky imbalance, since overpopulation in the “developing” countries occurs simultaneously with a population decrease in the “developed” countries and provokes complicated social, economic and political problems, such as population aging, migration, employment, gender issues etc. (O’Rand, 2016).

For this reasons, an investigation into the modern socio-demographic trends is vital for understanding the complex mechanism “population – society – economic development”.

In this paper the object of the research is the demographic, economic and social environments of Latvia and Ukraine, including its dynamic change. Despite some differences in the economic, political and social sphere, both these European countries are striving towards sustainable development. However, Latvia is an integral member of the EU, while Ukraine just provides reforms to join the European community.

Meanwhile, some problems are quite similar for Latvia and Ukraine. For instance, a decrease in the rate of population growth and the aging of the population weaken the reproduction of productive forces (Pavuk, 2014). This factor directly affects the development of the business sector of the economy and eventually defines the size of the GDP and national income.

The research aim leads to an analysis and a comparison the most highlighting social, demographic and economic trends of Latvia and Ukraine, establishing their place in the European community.

According to this aim, the research links to the following main tasks:

1. Classification of the EU Member States by essential economic and demographic criteria, using a methodology of cluster analysis. This task enable us to structure different countries and delineate their important characteristics.

2. Systematization of all indicators by groups (indicators of population growth and ageing, migration, life expectancy and medical care, economy and business, global international indexes) and their complex analysis.
3. Description of the contemporary trends of Latvia and Ukraine, using data analysis, methods of statistics and econometrics. The practicability of using mathematical modelling in socio-demographic research studies is confirmed in the papers (Shin, 2015; Coale, 2015).
4. Analysis of the feedback between demographic and economic indexes, using multifactorial modelling. Delineation factors of sustainable development.

On the one hand, solving these tasks contributes to understanding the question, how the demographic situation affects the economy, including the business sector. On the other hand, it allows to solve the inverse problem - how to refine demographic indicators by improving economic and social results.

### **Cluster analysis of EU Member States and Ukraine by economic and demographic criteria**

The performance of the cluster analysis enables us to structure all the Member States of the European Union and Ukraine (objects) into particular groups (clusters). The purpose is as follows: “similar” objects should be within each group, and the objects of different groups should be as different as possible. This allows us to analyse the objects by variable criteria, including economic, demographic, social etc.

Generally, the effective application of the cluster analysis involves the following stages (Sarstedt & Mooi, 2014):

1. Object selection for cluster analysis.
2. Arranging the set of variables to evaluate the objects. The normalization of the values of indexes (if necessary).
3. Calculation of the values of the measure of similarity between the objects.
4. Application of the cluster analysis method to create groups of similar objects (clusters).
5. Presentation of the results of cluster analysis.

The Member States of the European Union and Ukraine were chosen as clustering objects. Obviously, the variables for evaluations should cover important economic and demographic indicators.

Therefore, we selected the following indicators for clustering: net migration; death rate; birth rate; ratio of population aged under 16 and over 65 per 100 population aged 16-64 years; consumer price index; GDP per capita; total

population; added value; gross earnings. These indicators were combined on the basis of scientific research studies (McAuliffe, 2017; Maier, 2017; Lutz, 2014).

Afterwards normalization was carried out in order to bring these indicators to a single unit of measurement.

The cluster analysis is performed by using the computer program “Statistica”, which implements agglomeration methods of minimum dispersion – hierarchical (tree-like) clustering and the k-means clustering method.

At first, the hierarchical clustering method was used to determine the optimal number of clusters for the set of objects (the EU and Ukraine). Ward’s method was applied to merge objects in clusters. To be more specific, according to Ward’s rule, the objective function is the error sum of squares. Actually it is the sum of squares of distances between each object and the average object in its cluster.

Ward’s method allowed us to get quite valid results for Europe’s clustering, inasmuch as it leads to the formation of clusters of approximately equal dimensions that have the form of hyperspheres. We chose Ward’s method using such a widespread metric as the Euclidean distance, which is appropriate for multidimensional systems.

The results of clustering by the hierarchical method are shown in Figure 1.

The analysis justifies that the whole set of the EU Member States and Ukraine should be divided into 4 groups. We can also notice this inference in Figure 1.

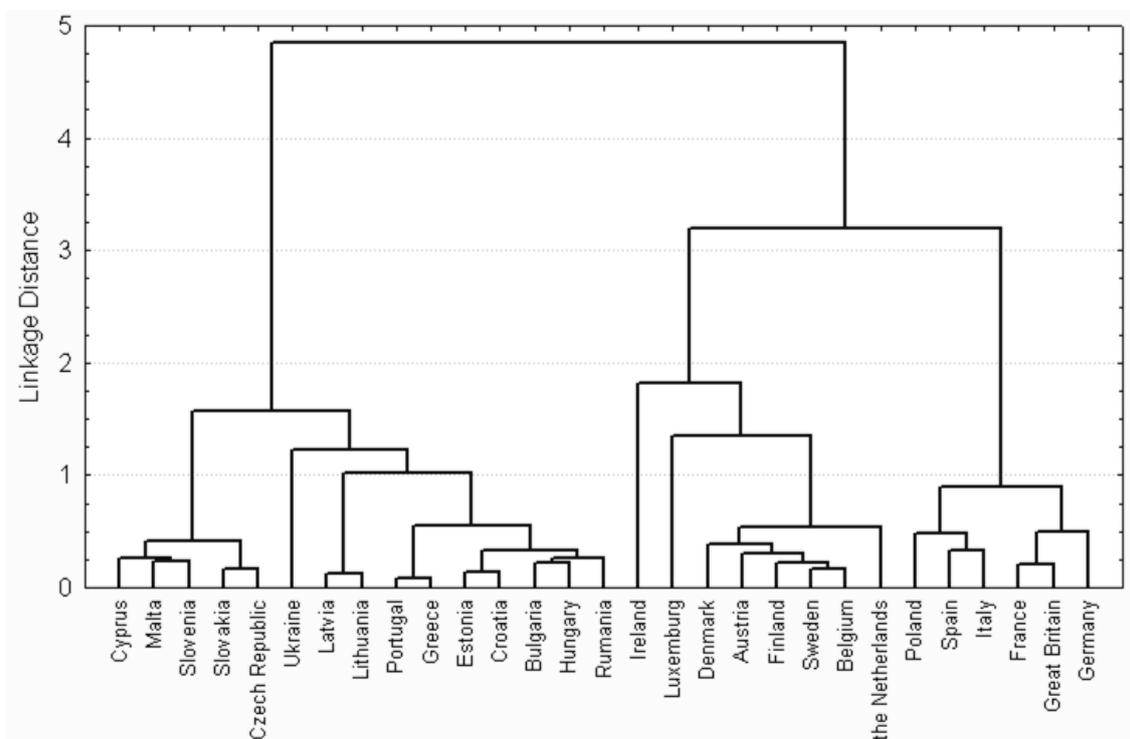


Figure 1. **Dendrogram of the EU Member States and Ukraine**  
(authors’ construction, based on Ward’s method)

The dendrogram illustrates all possible allocations of the countries and the clusters they belong to. The smaller cluster, the closer link between countries in this cluster. For instance, Latvia forms the smallest cluster with Lithuania, so these countries are quite resembled by chosen economic and demographic criteria among others. Moreover, Latvia, Ukraine, Lithuania and Portugal could be evaluated as the members of a bigger cluster.

In order to determine which of the clusters belongs to a particular country, the method of k-means was applied. The approach calculates the distance from each object to the cluster's centre and assigns objects to the nearest cluster. The centres of gravity of clusters are calculated again and again, and this algorithm is repeated until the centres of gravity stop to "migrate" in space.

Clustering by the k-means method distinguished the following:

Cluster 1 – the Czech Republic, Slovakia, Ireland, Slovenia, Cyprus, Malta;

Cluster 2 – Poland, Romania, Greece, Portugal, Hungary, Bulgaria, Croatia, Lithuania, Latvia, Estonia, Ukraine;

Cluster 3 – Germany, the United Kingdom, France, Italy, Spain, Belgium, Sweden, Austria, Denmark, Finland;

Cluster 4 – the Netherlands, Luxembourg.

The results of the partitioning of the EU and Ukraine by the k-means method are represented in Figure 2.

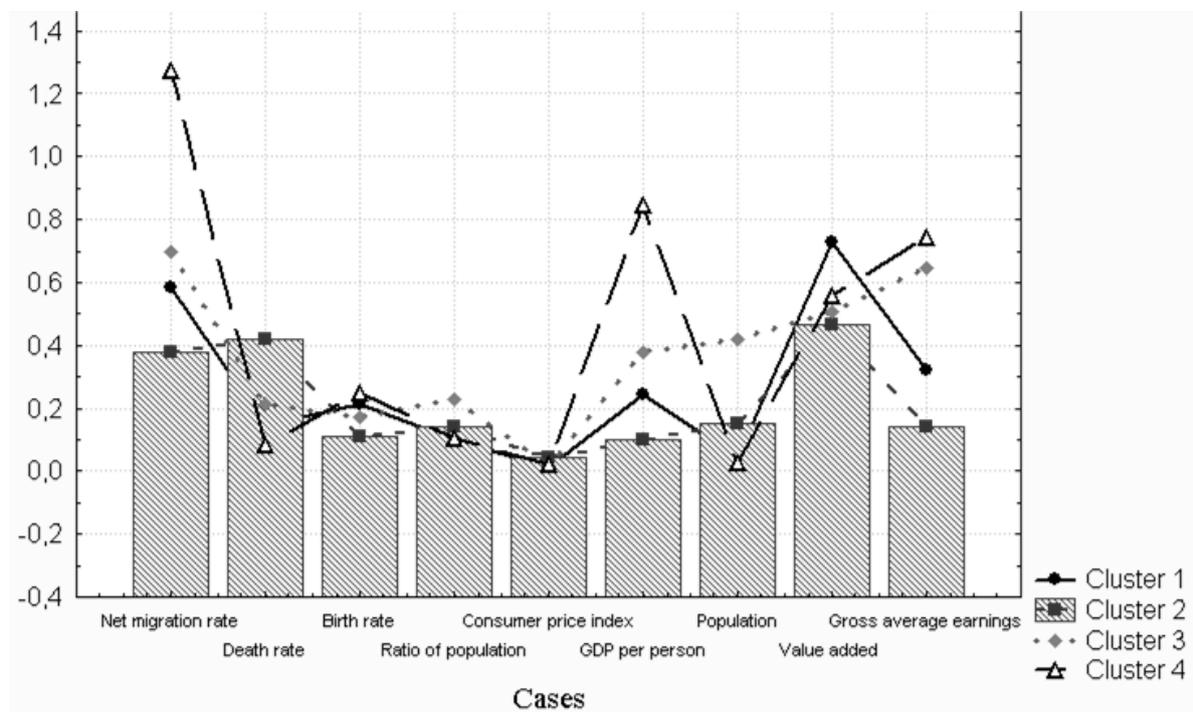


Figure 2. Clustering of the EU Member States and Ukraine (by the authors)

The diagram indicates the plot of means for each cluster.

The countries from the fourth cluster represent the best results for all the selected economic indicators (GDP per capita, earnings), despite the smallest population. At the same time, this cluster shows the highest birth rate and a low death rate.

The third cluster includes the countries with considerable populations and with high economic performance.

Distinctive features of the first cluster are the fast growth of gross added value, a low death rate, a low ratio of pensioners per economically active population in comparison with the other countries.

The second cluster is the vastest, since it consists of 11 countries, including Ukraine and Latvia. This broad cluster demonstrates quite low values of economic indicators in comparison with the other EU clusters. Average earnings, value added and GDP are lower, while the level of the consumer price index is the highest. This cluster also depicts the worst results of demographic indicators, a high death rate and a low birth rate.

Accordingly, the second cluster covers considerable part of the European community. Furthermore, eight of its members joined the EU after 2004, and that allows us to define this cluster as the youngest among the EU clusters and outline prospects for the new members. On the other hand, enlarging the EU with “less developed” countries may affect equilibrium between more and less economically developed clusters and trigger economic disturbances. Due to this reason, an investigation into modern socio-demographic trends will disclose reasonable ways to bridge the gap among the clusters.

### **Socio-demographic and economic trends in Latvia and Ukraine**

As it was shown by the cluster analysis, Latvia and Ukraine have significant similarities and considerable differences with other EU countries, which directly determines the course of many socio-economic processes in both countries.

Performing the research tasks required an extensive database with an abundance of economic, social and demographic indicators. About 30 different indicators were collected throughout the period 2000 to 2016 and logically combined into groups. The analysis of dynamics involves the application of classical statistical approaches, in particular, the methods of correlation-regression analysis and trend analysis (Coale A., 2015). This allowed us to determine the trend's direction, an annual rate of change and its significance (Table 1, 2).

**Table 1 Socio-demographic indicators of Latvia and Ukraine**  
 (by the authors, based on official statistics)

	Indicator	Ukraine			Latvia		
		In 2016	Trend direction	annual growth rate, %	In 2016	Trend	annual growth rate, %
<b>Indicators of population growth and aging</b>							
1	Population, mln.	42.59	drop	-0.88	1.97	drop	-1.18
2	Economically active population, mln	29.33	drop	-0.82	1.21	drop	-0.90
3	Pensioners, mln.	6.77	fluctuation	0.60	0.46	drop	-1.14
4	Minors (under 18), mln.	7.61	drop	-2.32	0.30	drop	-2.17
5	Ratio of pensioners per 100 people aged 18-64	23	growth	1.60	38	growth	2.50
6	Birth rate, per 1000 population	9.32	slow growth	1.20	11.16	growth	1.82
7	Death rate, per 1000 population	13.7	drop	-0.71	14.52	growth	0.47
<b>Migration</b>							
8	Immigration, thou.	14.31	fluctuation	-0.85	8.35	fluctuation	8.79
9	Emigration, thou.	6.47	drop	-9.11	20.57	fluctuation	2.22
10	Work migration, mln.	1.32	growth	33.21	data are absent		
<b>Life expectancy and medical care</b>							
11	Life expectancy, years	71.68	growth	0.36	74.80	growth	0.40
12	Total expenditure on health, USD	206.00	growth	13.42	987.00	growth	11.80
13	Marriages, thou.	229.50	fluctuation	0.12	13.6	fluctuation	-3.15

Table 1 represents the trend direction for each indicator of Ukraine and Latvia. It should be noted that some indicators don't have a clearly defined trend (correlation coefficient less than 0.5) and fluctuate over the period. For such indicators, the annual growth rate was taken roughly averaged.

Eventually the following consistent pattern was revealed (Figure 3).

The diagram confirms the common trend of gradual population decline both in Latvia and Ukraine. A decrease in the economically active population with a simultaneous increase in the number of pensioners confirm negative aging trend. However, this drop is not so dramatic, inasmuch as the gap between the death and birth rate decreased gradually. A distinct difference can be traced after 2012 – in Latvia both mortality and fertility are rising, and in Ukraine both are declining, and that eventually provokes more drawbacks for Ukrainian society.

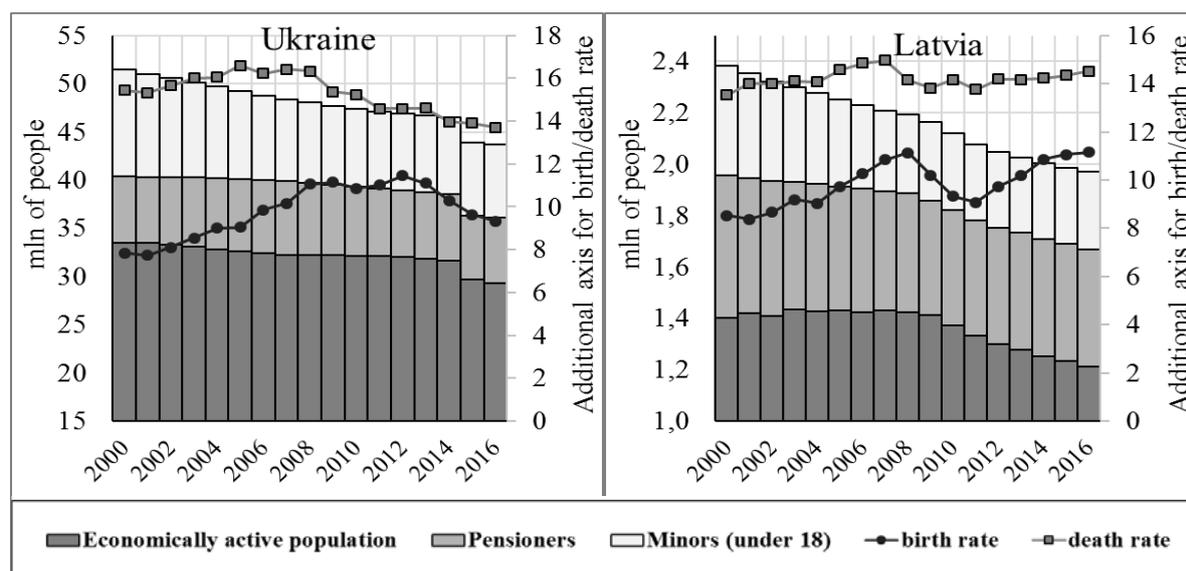


Figure 3 Population change in Latvia and Ukraine (by the authors )

Information about economic and business indicators of Latvia and Ukraine is arranged in the following table.

Table 2 Economic indicators and global international indexes (by the authors, based on official statistics)

	Indicator	Ukraine			Latvia		
		In 2016	Trend direction	annual growth rate, %	In 2016	Trend	annual growth rate, %
Economics and business							
1	GDP, thou. USD per person	2.19	growth	10.5	14.12	growth	10.73
2	Gross national income, bln. USD	93.10	growth	9.75	27.51	growth	2.91
3	Consumer price index	112.40	fluctuation	-0.13	182.0	growth	3.90
4	Business entities, thou.	1865.6	growth	6.91	114.1	growth	5.70
5	Average earnings, USD	202.9	growth	12.9	859.0	growth	9.47
6	Living wage, USD	60.43	growth	2.84	167.0	growth	2.14
7	Unemployment rate, %	9.69	slow drop	-0.61	9.64	slow drop	1.39
Global international indexes							
8	Index of economic freedom	46.8	drop	-0.06	70.4	growth	0.67
9	Ease of doing business	62.9	growth	8.28	78.6	growth	1.27
10	Global competitiveness rank	85.0	growth	2.51	49.0	growth	1.99
11	Human Development Index	0.75	growth	0.71	0.84	growth	0.89

The analysis mostly represents growth of all the economic indicators in both countries, however their level is quite moderate in comparison with developed EU Member States (4 and 3 clusters). Despite this fact, Latvian results are much higher than Ukrainian in relation to GDP, the living wage and average earnings.

Some additional conclusions could be inferred from the diagram (Figure 4).

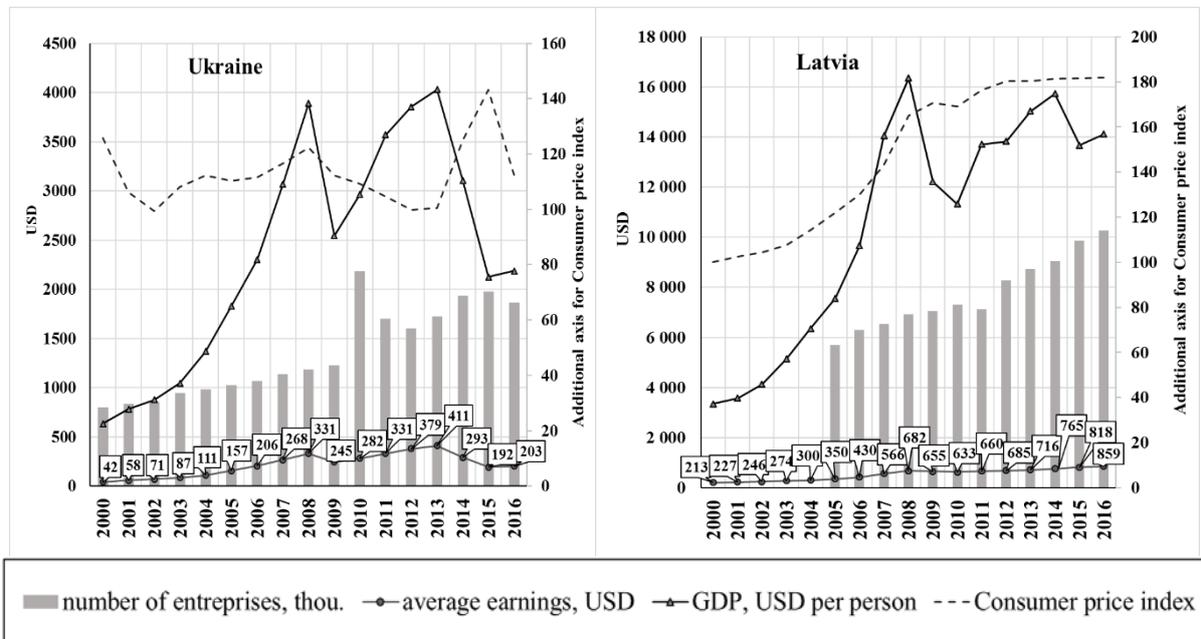


Figure 4. Dynamics of economic indicators (by the authors)

The graph depicts a positive trend of GDP, but in 2016 its level did not catch up with the peak in 2008 and 2014. The same situation is relevant for average earnings in Ukraine, which are 10 times lower than the average earnings in the EU Member States. In Latvia, all the indicators grew more steadily. The price index roughly remain stable after the peak in 2012. In contrast, the Ukrainian consumer price index fluctuates each year.

Meanwhile, the number of business entities rises significantly, but this growth does not promote employment growth. The correlation between these indicators is infinitesimal for both countries. This also may indicate that some enterprises work in the “shadow economy” and do not formalize the relations with their employees.

### Feedback between economic and demographic indicators

Generally, the analysis of correlation and determination enable us to establish positive and negative trends in the demographic, social and economic spheres, as well as the logical coherences between them. The next stage of the

research study leads to the establishment of the feedback between economic and socio-demographic indicators and the elaboration of multifactorial models. For this task, multifactorial regression analysis was applied. At the first step we establish a correlation between all the indicators (Tables 1, 2). It enables us to distinguish the most important coherences and influencing factors.

As was shown earlier, in current socio-economic conditions an important task links to tackling the negative trends of population drop by increasing the natural population growth.

The analysis enables us to outline the following indicators affecting GDP and the birth rate in Latvia and Ukraine (Figure 5).

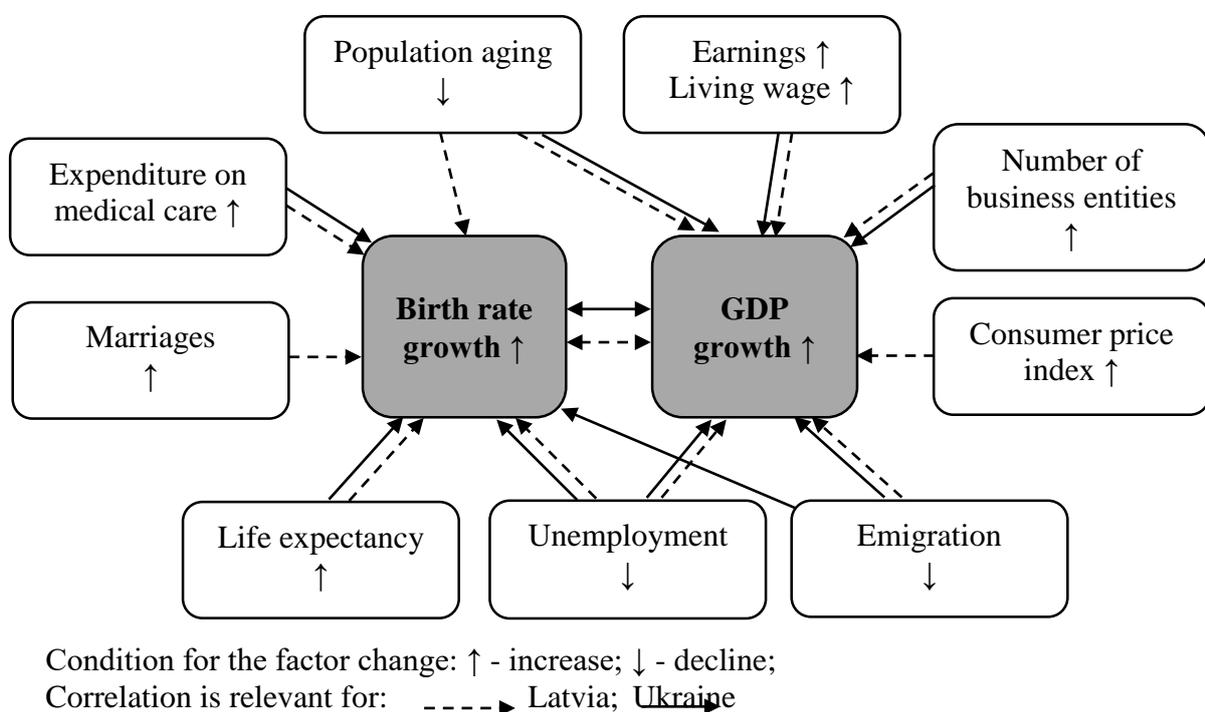


Figure 5. **Complex model for GDP and fertility growth** (by the authors)

All these factors indicated a strong correlation between GDP and the birth rate. It has been established that the growth of the birth rate and the population in Latvia and Ukraine depends on the system of indicators. Remarkably, that some indicators are considerable only for Ukraine or Latvia. For instance, the consumer price index affects GDP growth in Latvia, which is connected with purchasing power and production forces. At the same time, marriage activity increases the birth rate in Latvia, however in Ukraine there is a slight correlation between these indicators. In contrast to Latvia, the highlighting factor, affecting the birth rate in Ukraine is emigration out of the country.

The correlation-regression analysis showed that under the conditions of Latvia and Ukraine, variable factors have different influence on the GDP and the

birth rate. For this reason, the next step of research leads to multifactorial modelling to evaluate the influence of all the factors in a complex manner. The factors were integrated into the model by Student's and Fisher's test. The model's relevance was tested on the basis of an approximation error and the coefficient of multiple correlation and determination.

The multifactorial model here is an attempt to take into account the most significant factors affecting GDP and population.

Multifactor model for Latvia (compiled by the authors):

$$\begin{cases} GDP_{Lat} = 53.16 - 0.11 \cdot X1 + 0.16 \cdot X2 + 0.12 \cdot X3 - 0.61 \cdot X4 \\ BR_{Lat} = 11.78 + 0.003 \cdot X5 - 0.141 \cdot X4 - 0.004 \cdot X1 \end{cases} \quad (1)$$

Multifactor model for Ukraine (compiled by the authors):

$$\begin{cases} GDP_{Ukr} = 14.6 - 0.07 \cdot X6 + 0.014 \cdot X5 - 0.051 \cdot X4 + 0.0002 \cdot X3 - 0.18 \cdot X7 \\ BR_{Ukr} = 8.56 + 0.008 \cdot X5 - 0.014 \cdot X4 - 0.012 \cdot X8 \end{cases} \quad (2)$$

Where  $X1$  - pensioners, thou.;  $X2$  – consumer price index, units;  $X3$  – number of business entities, thou.;  $X4$  – unemployment rate, %;  $X5$  – average earnings, USD per month;  $X6$  - ratio of pensioners per 100 people aged 18-64;  $X7$  – life expectancy, years;  $X8$  – emigration, thou. people.

It should be taken into account that although some factors from the scheme (Figure 5) are not assigned to models, it does not mean that they are infinitesimal, they influence mostly indirectly.

As a result, the GDP model of Latvia shows the greatest influence of aging (pensioner ratio), the consumer price index, the number of business entities and the unemployment rate. The GDP model of Ukraine also includes average earnings. Both the unemployment rate and average earnings affect the birth rate in Ukraine and Latvia. However, the third factor in the BR model is dissimilar, since aging mostly reduce the birth rate in Latvia and emigration influences the birth rate in Ukraine.

## Conclusions

In the past decades, the economic, social and demographic environments have undergone major changes. Today the most highlighting trends in Europe link with migration, the global trade market, employment issues, population aging, drop of natural population growth etc. Accordingly, there is no shortage of debate that stable growth of the business sector of the national economy requires tackling demographic, social and economic issues and preserving human capital.

The results of the cluster analysis enabled us to delineate 4 clusters of the EU Member States and Ukraine, which merge countries with strong similarities and allow us to analyse the European map by economic, demographic and social indicators. Ten Member States of the EU form a profound third cluster with considerable populations and high economic performance. In contrast, Ukraine, Latvia and other nine countries are integral representatives of the second cluster, which covers countries with low values of economic indicators and negative demographic trends.

The research confirmed a considerable correlation and feedback between the demographic and economic indicators of Latvia and Ukraine. The populations of both countries decline steadily, with gradual population aging and intensive migration processes. However, this drop is not so dramatic, inasmuch as the gap between the death and the birth rate decreases and life expectancy rises. The analysis depicts a positive trend of GDP, the living wage, average earnings, but all these indicators are much lower than analogous in the other EU Member States.

The multifactorial analysis allowed us to elaborate a model of GDP and birth rate growth for Ukraine and Latvia. The main conditions of birth rate growth today are: increase of average earnings, higher life expectancy, more marriages, expenditures on medical care; decrease of uncontrolled emigration, unemployment, extensive population aging. The GDP model illustrates that GDP growth depends on the number of business entities, the consumer price index, emigration, employment and the living wage. At the same time, GDP induces significant feedback with demographic indicators, indirectly influencing population growth.

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# SABIEDRĪBAS LĪZDALĪBA KĀ PAMATS SABIEDRĪBAS UZTICĒŠANAI PUBLISKAJAI PĀRVALDEI: PROBLĒMAS UN IZAICINĀJUMI LATVIJĀ

## *Public Participation as a Basis for Public Trust in Public Administration: Problems and Challenges in Latvia*

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**Abstract.** Nowadays, many public administrations are facing the low level of public trust in state authorities. It is largely due to public dissatisfaction with the activities of public administration and beliefs that public administration does not serve to the public interest. Participation in decision-making processes is one of the ways to reduce public dissatisfaction and mistrust in public administration. In order to understand the importance of public participation in public administration processes, the aim of the paper is to study trends in the transformation of public administration and society at different stages of the development of the state reform in Latvia and its impact on public trust in public administration. The following methods have been used in the research study: analysis of normative documents, an expert survey with non-governmental organizations (NGOs) and government representatives, as well as analysis of statistics on the implementation of the Memorandum of Cooperation between the government and NGOs. An analysis of the normative documents adopted by the Latvian government shows that the legal framework provides for wide opportunities for NGO involvement in public administration. The statistical data and opinions of NGOs and public administration experts show that there are a variety of mechanisms for increasing NGOs participation. However, the opportunities for developed participation are not conducive to public trust in the public administration, since in most cases information about the opportunities and results of participation is not reachable to the general public. Thus, it is vitally important to create an optimal model of NGOs and public administration relations for the activation of Latvian society in order to reduce the low participation and public trust in public administration.

**Keywords:** government communication, non-governmental organizations, public administration, public participation, public trust.

### **Ievads**

#### ***Introduction***

Mūsdienās daudzas publiskās pārvaldes saskaras ar sabiedrības zemo uzticēšanās līmeni valsts varai. Pēc Eirobarometra datiem, tikai aptuveni trešdaļa

iedzīvotāju pauž uzticēšanos valsts institūcijām: savas valsts valdībai uzticas 36 % Eiropas iedzīvotāju, parlamentam – 35 %, publiskajai pārvaldei – 49 %, Eiropas Savienībai – 42 %. Latvijā sabiedrības uzticēšanās ir vēl zemāka: valdībai uzticas – 27 % Latvijas iedzīvotāju, parlamentam – 20 %, publiskajai pārvaldei – 30 %, savukārt Eiropas Savienībai – 47 % (Eurobarometr 88, 2017). Zemā uzticēšanās valsts varai lielā mērā ir saistīta ar sabiedrības neapmierinātību ar publiskās pārvaldes un pie varas esošo politisko partiju darbību un pārlicību, ka publiskā pārvalde nekalpo sabiedrības interesēm (Kudors & Pabriks, 2017). Eiropas un daudzās citās demokrātiskās valstīs pieaug populisma panākumi, kas būtiski maina un ietekmē publiskās pārvaldes sistēmu (Auers, 2017). Līdz ar to arvien nozīmīgāka loma ir publiskās pārvaldes spējai izskaidrot sabiedrībai pieņemtos lēmumus, lai gūtu lielāku atbalstu. Iedzīvotāju līdzdalība ir viens no ceļiem, kā mazināt sabiedrības neapmierinātību un neuzticēšanos publiskajai pārvaldei. “Plašākā mērā sabiedrības līdzdalība veicina informācijas apmaiņu starp visām ieinteresētajām pusēm (publisko pārvaldi, valdības un nevalstiskajām organizācijām), kas vēl vairāk uzlabo savstarpējo sapratni un attiecības starp ieinteresētajām pusēm, kā rezultātā publiskā pārvalde saņem atbalstu” (Cavric, 2011).

Lai izprastu sabiedrības līdzdalības nozīmi publiskās pārvaldes procesos, šī raksta mērķis ir izpētīt publiskās pārvaldes un sabiedrības attiecību transformācijas tendences Latvijā dažādos valsts reformu attīstības posmos un to ietekmi uz sabiedrības uzticēšanos publiskajai pārvaldei. Pētījuma ietvaros ir izmantotas šādas metodes: normatīvo dokumentu analīze, ekspertu aptauja ar nevalstisko organizāciju (NVO) un valsts pārvaldes pārstāvjiem, kā arī statistikas dati par valdības un NVO sadarbības memoranda īstenošanas gaitu. Analizējot Latvijas valdības pieņemtos normatīvos dokumentus, tiek pētītas sabiedrības līdzdalības iespējas publiskās pārvaldes lēmumu pieņemšanas procesos. Balstoties uz NVO un valsts pārvaldes ekspertu viedokļiem un statistikas datiem, tiek aplūkota nevalstisko organizāciju nozīme valsts pārvaldes lēmumu pieņemšanā, kā arī analizēti faktori, kuri ietekmē sabiedrības līdzdalības līmeni un uzticēšanos publiskajai pārvaldei. Turpmākie izpētes jautājumi šajā tēmā varētu būt uzvērsti uz optimāla NVO un valsts pārvaldes attiecību modeļa izveidi Latvijas sabiedrības aktivizēšanai, lai samazinātu zemo līdzdalību un sabiedrības uzticēšanās trūkumu valsts pārvaldei.

### **Ceļš uz sabiedrības līdzdalības veicināšanu Latvijas publiskajā pārvaldē** *Toward Public Participation in the Public Administration of Latvia*

Sabiedrības līdzdalība ir process, kas ir balstīts uz demokrātijas principiem un ļauj pilsoniskās sabiedrībai iesaistīties politikas veidošanā un lēmumu pieņemšanā par valsts attīstību un nākotni. Kā uzsver politisko procesu pētnieki,

publiskās pārvaldes darbībā svarīgs ir pilsoniskais dialogs, kas dod iespēju precizēt dažādu sabiedrības grupu viedokļus, palīdzēt pārvarēt opozīcijas grupu pretestību, izstrādāt efektīvu stratēģiju un pieņemt lēmumus, ņemot vērā visu ieinteresēto pušu nostājas (Ciurescu, 2009). „Demokrātisks režīms kā noteikts sabiedrības un taisnīgs varas izmantošanas paraugs nozīmē, ka kopienas vai sabiedrības locekļi, balstoties uz vienlīdzības principu un mijiedarbojoties, meklē veidus, kā rast taisnīgus risinājumus, saskaņojot dažādas intereses un centienus.” (Jansone & Vilka, 2005). Tādējādi demokrātiskā valstī attiecības starp publisko pārvaldi un sabiedrību, noris mijiedarbībā, tajā skaitā arī publiskajās diskusijās, kuru mērķis ir brīvi, uz sabiedrības kopīgo interešu pamata sasniegt racionālu vienošanos starp publiski konkurējošiem viedokļiem. Plašākā nozīmē sabiedrības līdzdalība ir arī ilgtspējīgas attīstības galvenais elements, ņemot vērā, ka publiskās pārvaldes darbības programmas tiks izstrādātas un lēmumi tiks pieņemti, pamatojoties uz ieinteresēto pušu prasībām un vajadzībām, kas ietver ieguvumus nākamajām paaudzēm (Marzuki, 2015). Tādējādi no sabiedrības interešu viedokļa publiskajai pārvaldei ir nepieciešams radīt nosacījumus sabiedrības līdzdalībai lēmumu izstrādē, kā arī aicināt sabiedrību iesaistīties lēmumu pieņemšanas procesā. Nevalstiskās organizācijas ir uzskatāmās par galveno publiskās pārvaldes partneris, kuru aktīva līdzdalība publiskajā pārvaldē var nodrošināt valdības programmu pielāgošanu sabiedrības vajadzībām, sabiedrības viedokļa paušanu, piedāvājot optimālus sociālo problēmu risinājumus un ietekmējot visas sabiedrības attīstību (Ciurescu, 2009).

Latvijā pēc neatkarības atjaunošanas bija nepieciešams gan izstrādāt normatīvo regulējumu sabiedrības līdzdalības veicināšanai, gan iedrošināt sabiedrību iesaistīties lēmumu pieņemšanā līdzīgi kā citās Centrālās un Austrumeiropas valstīs, kurās varas institūcijas un vienīgā dominējošā partija kontrolēja gan informācijas pieejamību, gan biedrošanās un pārvietošanās brīvību (Pabulinskas, 2003). Tātad nevalstisko organizāciju līdzdalībai publiskajā pārvaldē un lēmuma pieņemšanas procesos ir svarīga gan piekrišana politiskās varas puses, gan regulēšana ar normatīvo aktu palīdzību, kuri nosaka publiskās pārvaldes un nevalstisko organizāciju sadarbības veidus, kā arī abu pušu tiesības un pienākumus. Lai izprastu sabiedrības līdzdalības iespējas Latvijas publiskajā pārvaldē, ir nepieciešams analizēt publiskās pārvaldes un nevalstisko organizāciju attiecību formalizācijas procesus Latvijā, kas pakāpeniski sākās pēc neatkarības atjaunošanas, 1993. gadā izveidojot jaunu – valsts reformu ministra – posteni. Analīzes veikšanai tika izmantoti tiesību akti un politikas attīstības dokumenti, kurus pieņēmušas vairākas Latvijas valdības laika posmā no 1995. gadā līdz 2017. gadam sabiedrības līdzdalības veicināšanai. LR Valsts reformu ministrijas izstrādātā „Latvijas valsts reformu koncepcija”, kas Ministru kabinetā tika pieņemta 1995. gadā, bija pirmais valdības dokuments, kas bija vērsts uz sabiedrības līdzdalības veicināšanu. Tajā kā viens no valsts reformas virzieniem

tika noteikta reforma valsts varas un sabiedrības attiecībās, lai veicinātu iedzīvotāju iesaistīšanos un ieinteresētību valsts pārvaldē, kā arī nodrošinātu iespēju sabiedrībai iegūt informāciju par valsts pārvaldē notiekošo (Latvijas valsts reformu koncepcija, 1995).

Lai aktivizētu NVO līdzdalību publiskajā pārvaldē, 2001. gadā Ministru kabinets pieņēma divus nozīmīgus dokumentus: „Politikas plānošanas pamatnostādnes” un „Valdības komunikācijas politikas pamatnostādnes”, kuri noteica ietvaru sabiedrības līdzdalībai Ministru kabineta lēmumu sagatavošanā un pieņemšanā, kā arī sabiedrības informēšanā par valsts pārvaldes darbu. Valdība ir pieņēmusi arī vairākus grozījumus Ministru kabineta kārtības rullī, kuri paplašināja sabiedrības līdzdalības iespējas, piemēram, valsts sekretāru sanāksmē ar padomdevēja tiesībām var piedalīties nevalstisko organizāciju pārstāvis (Ministru kabineta kārtības rullis). Kopš 2013. gada ir ieviesta jauna dalības forma – diskusiju dokumenti, kas dod iespēju iepazīties ar likumprojektu dokumenta izstrādes agrīnajā stadijā – vismaz 14 dienas pirms to iesniegšanas valsts sekretāru sanāksmē. Šī dalības forma ievērojami paplašina un stiprina NVO līdzdalību publiskās pārvaldes lēmumu pieņemšanas procesā.

No 2002. gada līdz 2009. gadam nevalstisko organizāciju un valsts varas attiecību formalizācijas process bija uzticēts – Īpašu uzdevumu ministra sabiedrības integrācijas lietās sekretariātam, kurš ir izstrādājis divus nozīmīgus un valdībā pieņemtus dokumentus: politikas plānošanas dokumentu „Pilsoniskās sabiedrības pamatnostādnes” un valsts programmu „Pilsoniskās sabiedrības stiprināšana”. Šobrīd šie jautājumi ir Kultūras ministrijas kompetencē, kas īsteno un uzrauga “Nacionālās identitātes, pilsoniskās sabiedrības un integrācijas politikas pamatnostādņu” mērķu sasniegšanu. NVO līdzdalības procesi un sabiedrības informēšanas jautājumi ir definēti arī valdības 2014. gadā pieņemtajās “Valsts pārvaldes politikas attīstības pamatnostādņēs”.

Valdības un NVO organizāciju attiecību veidošanas procesos nozīmīga vieta ir arī „Nevalstisko organizāciju un valdības sadarbības memorandam”, kuru 2005. gadā parakstīja 57 nevalstiskās organizācijas un Ministru prezidents Aigars Kalvītis. Memoranda mērķis ir sekmēt efektīvas un sabiedrības interesēm atbilstošas valsts pārvaldes darbību, nodrošinot pilsoniskās sabiedrības iesaisti lēmumu pieņemšanas procesos. Arī Saeimā 2006. gadā ir pieņemta „Deklarācija par pilsoniskās sabiedrības attīstību Latvijā un sadarbību ar nevalstiskajām organizācijām”, kura tapusi, parlamentam sadarbojoties ar NVO organizācijām, un kuras mērķis ir uzlabot Saeimas un NVO sadarbību likumdošanā.

Tātad var secināt, ka vairākas Latvijas valdības politiskās gribas līmenī ir deklarējušas savu nostāju par nevalstisko organizāciju līdzdalību publiskajā pārvaldē un tās nodrošināšanai ir pieņemti dažāda līmeņa normatīvie akti. Latvijas valdību pieņemto tiesību aktu un politikas attīstību dokumentu analīze ļauj secināt, ka nevalstisko organizāciju līdzdalība valsts pārvaldē tiek nodrošināta ar

reglamentējošiem dokumentiem aktiem, nosakot principus nevalstisko organizāciju iesaistei lēmumu pieņemšanā, kā arī nepieciešamību un pienākumu informēt sabiedrību. Šī tendence ir raksturīga daudzām Centrālajām un Austrumeiropas valstīm, kurās publiskās pārvaldes „tiecas attīstīt atbilstošu juridisko un institucionālo ietvaru nevalstisko organizāciju sektoram (Rumānija, Polija, Ungārija, Lietuva)” (Palubinskas, 2003).

Šie normatīvie akti nosaka skaidru ietvaru, kā nevalstiskās organizācijas iesaistās publiskās pārvaldes lēmumu sagatavošanas un pieņemšanas procesos: nevalstiskajām organizācijām uz visai sabiedrībai zināmiem un saprotamiem noteikumiem tiek nodrošināta līdzvērtīga partnera loma publiskajā pārvaldē. Līdz ar to nevalstisko organizāciju sadarbība ar publisko pārvaldi noris reglamentējošajos dokumentos stingri noteiktos formālos rāmjos, sasniedzot divus mērķus – nevalstiskajām organizācijām ir garantētas tiesības piedalīties lēmumu pieņemšanā, savukārt publiskā pārvalde panāk, ka nevalstiskās organizācijas šajos procesos iesaistās konstruktīvā veidā.

### **Nevalstisko organizāciju nozīme Latvijas publiskajā pārvaldē** *Importance of NGOs in the Public Administration of Latvia*

Viens no nozīmīgākajiem valdības pieņemtajiem dokumentiem, kura mērķis ir efektīvas un sabiedrības interesēm atbilstošas publiskās pārvaldes darbību, nodrošinot pilsoniskās sabiedrības iesaisti lēmumu pieņemšanas procesos, ir „Nevalstisko organizāciju un valdības sadarbības memorands”. Pētot šī memoranda īstenošanu un NVO aktivitāti dažādās sabiedrības līdzdalības formās, autore vērtē NVO līdzdalības nozīmi publiskās pārvaldes lēmumu pieņemšanā. Memoranda gatavošana tika iniciēta no NVO puses un tā izstrādē savus priekšlikumus un viedokli izteica vairāk nekā 40 NVO pārstāvju. Līdz 2018. gada februārim šo dokumentu ir parakstījušas 424 NVO (Informācija par NVO un Ministru kabineta sadarbības memorandu, 2018). Tomēr jāatzīmē, ka kopumā LR Uzņēmumu reģistrā kopš 1991. gada ir reģistrētas 22 825 NVO (Sabiedrisko organizāciju, to apvienību, biedrību un nodibinājumu dibināšanas dinamika, 2018), tādējādi var secināt, ka iniciatīvu iesaistīties dialoga veidošanā ar valdību ir izrādījušas tikai 1,85 % no NVO, kuras ir uzskatāmas par vienu no aktīvākajām un organizētākajām pilsoniskās sabiedrības sastāvdaļām.

Lai novērtētu sabiedrības līdzdalības nozīmi publiskajā pārvaldē, autore ir analizējusi vairākus NVO līdzdalības radītājus. Tiesību aktu projektu analīze, kura aptver 6055 tiesību aktu un politikas plānošanas dokumentu projektu laikā no 2004. gada janvāra līdz 2006. gada aprīlim, liecina, ka vidēji tikai 12 % projektu ir norādīts, ka lēmumprojekta izstrādē ir notikušas konsultācijas ar NVO, pārējos gadījumos atzīmēts, ka likumprojekts šo jomu neskar, konsultācijas nav veiktas, neminot detalizētākus paskaidrojumus (Majore, 2006). Šie dati liecina,

ka iedzīvotāju interešu apzināšana un saskaņošana nav bijusi neatņemama valdības un sabiedrības attiecību veidošanas, kā arī publiskās pārvaldes lēmumu sagatavošanas un pieņemšanas procesa sastāvdaļa.

Tomēr jāatzīmē, kā pakāpeniski ir vērojama gan lielāka NVO iniciatīva, gan ministriju aktivitāte, iesaistot NVO tiesību aktu izstrādē. Jau 2010. gadā ministriju izstrādāto tiesību aktu projektu un politikas plānošanas dokumentu skaits kopumā ir bijis 1374. No tiem 239 jeb 17 % projektu un dokumentu izstrādē gaitā darba grupās bija iekļauts NVO pārstāvis, 159 jeb 12% projektu un dokumentu tika apspriesti konsultatīvajās padomēs ar NVO līdzdalību, 267 jeb 19 % projektu un dokumentu izstrādē NVO pārstāvji tika piesaistīti kā eksperti. Savukārt par 552 jeb 40 % projektiem un dokumentiem tika saņemti NVO atzinumi, kas liecina par samērā augstu NVO iniciatīvas un līdzdalības pakāpi (Nevalstisko organizāciju un Ministru kabineta sadarbības memoranda īstenošana, 2010).

1. tab. NVO līdzdalība tiesību aktu projektu izstrādē 2010. un 2015. gadā  
(autores veidota tabula)  
*Table 1 NGOs Participation in the Development of Draft Regulations*  
(author's calculations)

Salīdzinājums 2010. un 2015. gadā	2010		2015	
Ministriju sagatavotie projekti	1374		1193	
Tiesību aktu projektu un politikas plānošanas dokumentu skaits, kuru darba grupās bija iekļauts NVO pārstāvis	239	17%	266	22%
Tiesību aktu projektu un politikas plānošanas dokumentu skaits, kuri apspriesti konsultatīvajās padomēs	159	12%	164	14%
Tiesību aktu projektu un politikas plānošanas dokumentu skaits, kuru izstrādē NVO piesaistīja kā ekspertus	267	19%	246	21%
Tiesību aktu projektu un politikas plānošanas dokumentu skaits, par kuriem saņemti NVO atzinumi	552	40%	716	60%

Salīdzinājumam 2015. gadā ministrijas izstrādāja 1193 1152 tiesību aktu un politikas plānošanas dokumentu projektus, no tiem 266 jeb 21 % tika izstrādāti darba grupās ar nevalstisko organizāciju pārstāvju līdzdalību, 164 jeb 16 % tika apspriesti konsultatīvajās padomēs ar NVO līdzdalību, 246 jeb 12 % tika izstrādāti, iesaistot NVO pārstāvjus kā ekspertus. NVO ir iesniegušas atzinumus 512 jeb 43 % projektu un dokumentu (Nevalstisko organizāciju un Ministru

kabineta sadarbības memoranda īstenošana, 2015). Tādējādi var secināt, ka NVO iniciatīvai un līdzdalībai valdības lēmumu pieņemšanā ir tendence pieaugt (skat. autores apkopotos datus 1.tab.).

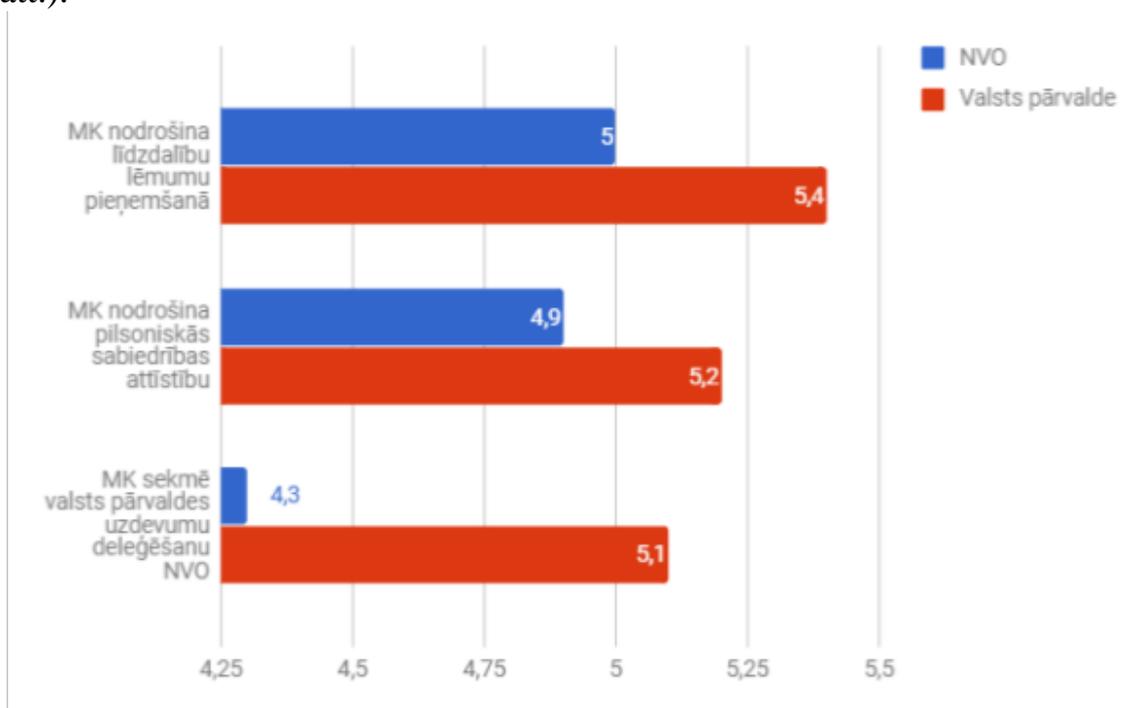
Lai attīstītu NVO līdzdalību publiskajā pārvaldē, tiek izmantotas vēl citas sadarbības formas: izglītojoši pasākumi nevalstisko organizāciju pārstāvjiem par līdzdalības iespējām valsts pārvaldē, konferences un informatīvi semināri, ministriju pārstāvju līdzdalība NVO pasākumos. Nozīmīga loma sabiedrības līdzdalībā ir pastāvīgajām konsultatīvajām padomēm ministrijās un valsts institūcijās, ministriju un NVO darba grupām ministrijās, kā arī sabiedriskajām apspriedēm un publiskajām apspriešanām.

Analizējot publiskās pārvaldes un nevalstisko organizāciju sadarbības praksi ministrijās, var secināt, ka visās ministrijās ir attīstītas dažādas sadarbības formas, kas nodrošina daudzveidīgas iespējas nevalstisko organizāciju līdzdalībai publiskajā pārvaldē. Tomēr vērtējot sabiedrības līdzdalību, jāatzīmē, ka samērā neliela daļa nevalstisko organizāciju ir iesaistījusies šajā sadarbībā un sniedz ieguldījumu lēmumu pieņemšanā, izsakot dažādu sabiedrības grupu viedokļu, sniedzot vērtējumu un ekspertu slēdzienus lēmumu sagatavošanas gaitā. Savukārt kā pozitīva sabiedrības līdzdalības tendence ir vērojams tas, ka pieaug NVO aktivitāte tiesību aktu un politikas plānošanas dokumentu izstrādē.

Tomēr neraugoties uz to, ka normatīvais regulējums nodrošina sabiedrības līdzdalības iespējas publiskās pārvaldes lēmumu pieņemšanā, kā arī ir attīstīta laba prakse, sabiedrības uzticēšanās publiskajai pārvaldei Latvijā un apmierinātība ar tās darbu diemžēl nepieaug. Politikas pētnieki bieži uzsver, ka lai gan valsts institūciju amatpersonas un nevalstisko organizāciju vadītāji jau sen ir atzinuši sabiedrības līdzdalības vērtību dažādiem mērķiem, procesiem un lēmumiem (Bryson et al., 2013), un nav šaubu, ka sabiedrības iesaistīšanās lēmumu pieņemšanas procesos uzlabos ierosinātā politikas attīstības dokumenta rezultātus, publiskās pārvaldes un NVO pārstāvjiem bieži vien nav labas izpratnes par to, kā veidot līdzdalības procesus, lai sasniegtu vēlamos rezultātus (Marzuki, 2015). Tādējādi lai noteiktu faktoros, kuri sabiedrības līdzdalības veidošanā apgrūtina iespējas palielināt sabiedrības apmierinātību ar publiskās pārvaldes darbību un veicināt sabiedrības uzticēšanos, ir veikta ekspertu aptauja, noskaidrojot 14 valsts iestāžu atbildīgo darbinieku un 44 NVO, valdības memorandu parakstījušo organizāciju, pārstāvju viedokļus. Aptauja tika veikta elektroniski, izsūtot aptaujas anketu ministriju darbinieku, kuru pienākumos ietilpst sabiedrības līdzdalības jautājumi, un nevalstiskajām organizāciju darbiniekiem, kuri piedalās valdības un NVO memoranda īstenošanā. Aptaujas mērķis bija noskaidrot iesaistīto ekspertu vērtējumu par NVO līdzdalību valdības lēmumu pieņemšanas procesos: cik lielā mērā valdības memoranda īstenošana sekmē pilsoniskās sabiedrības attīstību, valsts pārvaldes uzdevumu deleģēšanu, efektīvu un konstruktīvu savstarpējo viedokļu apmaiņu un sadarbību starp

nevalstiskajām organizācijām, sabiedrību un valsts pārvaldi, vai tā nodrošina regulāru sabiedrības pārstāvju līdzdalību ministriju konsultatīvajās padomēs un darba grupās un regulāru informācijas apmaiņu.

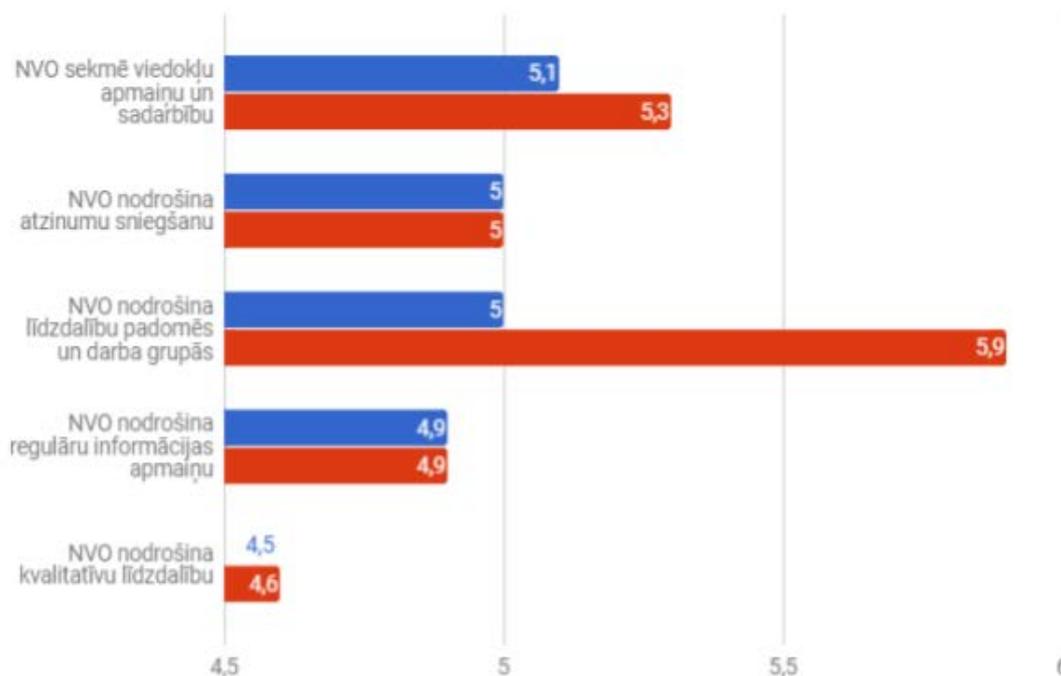
Kopumā ekspertu paustie viedokļi norāda, ka valdības un NVO sadarbības memorands veido atklātu un uz līdzdalību vērstu lēmumu pieņemšanas procesu, savlaicīgi iesaistot saskaņošanā NVO, sekmē valsts pārvaldes uzdevumu deleģēšanu, līdzdarbības līgumu slēgšanu ar NVO. Ekspertu vērtējumā NVO līdzdalība valdības memorandā sekmē arī efektīvu un konstruktīvu savstarpējo viedokļu apmaiņu, veido sadarbību starp NVO un valsts pārvaldi, nodrošina atklātāku un iesaistošāku veidu atzinumu gatavošanu par tiesību aktu un attīstības plānošanas dokumentu projektiem, kā arī sabiedrības līdzdalību sanāksmēs, konsultatīvajās padomēs un darba grupās. Tādējādi valdības un NVO memoranda radītie mehānismi nodrošina regulāru informācijas sniegšanu par līdzdalības praksi un sadarbību ar ministrijām, uzlabo publiskās pārvaldes un sabiedrības sadarbību, kā arī veicina kvalitatīvu līdzdalību, efektīvu, caurskatāmu un atbildīgu dialogu. Salīdzinot NVO un valsts pārvaldes ekspertu viedokļus, ir vērojams, ka samērā atšķirīgi tiek vērtēta Ministru kabineta loma sabiedrības līdzdalības veicināšanā, īpaši jautājumā par valsts pārvaldes uzdevumu deleģēšanu (skat. 1. att.).



1. att. NVO un valsts pārvaldes ekspertu viedokļi par valdības lomu (vidējais svērtais vērtējums)

Fig. 1 The opinions of NGOs and Public Administration Experts about role of the Government (Weighted Average)

Vērtējot NVO lomu sabiedrības līdzdalības, viedokļu atšķirības vērojamas jautājumā par NVO līdzdalību konsultatīvajās padomēs un darba grupās, savukārt liela vienprātība NVO un valsts pārvaldes ekspertu viedokļos pastāv jautājumos, kas skar NVO darbību atzinumu sniegšanā tiesību aktu un politikas plānošanas dokumentu projektiem, kā arī NVO aktivitāti informācijas apmaiņā (skat. 2. att.). Salīdzinot NVO un valsts pārvaldes ekspertu viedokļus jāatzīmē, ka valsts pārvaldes eksperti kopumā ir pozitīvāk noskaņoti par sabiedrības līdzdalības attīstību nekā NVO pārstāvji.



2. att. NVO un valsts pārvaldes ekspertu viedokļi par NVO lomu  
(vidējais svērtais vērtējums)

Fig. 2 The opinion of NGOs and Public Administration Experts about the role of NGOs  
(Weighted Average)

Tāpat ekspertu skatījumā, par nozīmīgākajiem instrumentiem sabiedrības līdzdalībā tiek uzskatīti šādi: atzinumu un viedokļu sniegšana par tiesību aktu un politikas attīstības dokumentu projektiem, dalība valsts iestāžu darba grupās un konsultatīvajās padomēs, kā arī publiska viedokļa paušana medijos (t.sk. sociālajos medijos). Padziļināti jautājot par pozīmīgākajiem trūkumiem valdības un NVO sadarbībā, eksperti ir atzinuši šādus aspektus: bieži vien sadarbība aprobežojas tikai ar informatīvo apriti, maz tiek iesaistītas nevalstiskās organizācijām no reģioniem, ir attīstīti pārāk daudz sadarbības mehānismu un informācijas apjoms ir pārāk liels, kā arī NVO maz komunicē ar sabiedrību kopumā. Tādējādi var secināt, ka valdības un NVO sadarbības memorands kopumā ir ļoti neregulēts mehānisms, kā sabiedrībai līdzdarboties valsts

pārvaldē, tomēr laika gaitā informācijas un mehānismu ir pārāk daudz un tie ir pārlietu birokratizējušies.

Vērtējot NVO kā sabiedriskās domas un politikas dienaskārtības veidotājus, eksperti uzsver, ka sabiedrības līdzdalības jautājumos NVO galvenokārt komunicē ar publisko pārvaldi, nevis sabiedrību kopumā, līdz ar to sabiedrībai trūkst informācijas par NVO līdzdalību un veikumu. Bieži vien NVO viedokļu dažādības dēļ nespēja vienoties par kopēju nostāju, kas sabiedrībā rada negatīvu tēlu par NVO sektoru, it īpaši, ja argumentācijā tiek izmantoti citas NVO vai valsts pārvaldes noniecināšana. Tātad neraugoties uz to, ka publiskajā pārvaldē ir attīstīti dažādi mehānismi sabiedrības līdzdalībai, lai palielinātu publiskās pārvaldes darbības atbilstību sabiedrības vajadzībām un vairotu sabiedrības apmierinātību ar publisko pārvaldi, tomēr informācijas trūkums plašākai sabiedrībai ir viens no iemesliem zemajai plašas sabiedrības iesaistei un līdz ar to arī zemajam uzticēšanās līmenim.

### **Secinājumi** *Conclusions*

Sabiedrības līdzdalība ir uzskatāma par ilgtspējīgas attīstības galveno elementu, jo publiskās pārvaldes pieņemtie lēmumi un politikas programmas tiek īstenotas, pamatojoties uz sabiedrības interesēm un vajadzībām. Tādējādi sabiedrības līdzdalība veido pamatu sabiedrības apmierinātībai ar publiskās pārvaldes darbu un var sekmēt sabiedrības uzticēšanos tai.

Analizējot sabiedrības līdzdalības nozīmi Latvijas publiskajā pārvaldē un tās ietekmi sabiedrības uzticēšanās veidošanā, var secināt, ka vairākas Latvijas valdības politiskās gribas līmenī ir deklarējušas savu nostāju par nevalstisko organizāciju līdzdalību publiskajā pārvaldē un tās nodrošināšanai ir pieņemti dažāda līmeņa dokumenti, nosakot skaidru ietvaru NVO iesaistei publiskajā pārvaldē un sabiedrības informēšanai. Īstenojot valdības un NVO sadarbības memorandu, ir radīti mehānismi sabiedrības līdzdalībai lēmumu pieņemšanā, kas pakāpeniski ir palielinājuši NVO līdzdalību publiskajā pārvaldē. Tātad sabiedrības līdzdalībai ir atvēlēta nozīmīga vieta Latvijas publiskajā pārvaldē.

Tomēr līdzdalība maz ietekmē sabiedrības uzticēšanos publiskajai pārvaldei, ko nosaka vairāki faktori. Pirmkārt, NVO, kuras kā līdzvērtīgs publiskās pārvaldes partneris aktīvi iesaistās politikas plānošanas procesos, pārstāv samērā mazu sabiedrības daļu. Pie tam informācija par līdzdalības iespējām un rezultātiem sasniedz tikai publiskās pārvaldes un NVO sektoru, bet ne plašāku sabiedrību. Otrkārt, bieži vien NVO pārstāvji sevi saredzēt vairāk kā sabiedrības interešu aizstāvjus nekā publiskās pārvaldes partnerus. Šajos gadījumos NVO kā protestētājs ar īpašām akcijām tiecas pievērst sabiedrības uzmanību kādai negatīvai publiskās pārvaldes parādībai vai procesam, kas savukārt sabiedriskajā

domā nostiprina pārliecību par publiskās pārvaldes darbības neatbilstību sabiedrības interesēm.

Tādējādi lai sabiedrības līdzdalība būtu pamats sabiedrības uzticēšanās veidošanai, nozīmīgs publiskās pārvaldes un NVO uzdevums ir ne tikai sabiedrības informēšana par topošajiem un pieņemtajiem lēmumiem, veicinot kvalitatīvu diskusiju un viedokļu apmaiņu, bet arī sabiedrības izpratnes veidošana, ka atbildība par valsts ilgtspējīgu attīstību nav tikai publiskās pārvaldes kompetence, bet katra valsts iedzīvotāja pienākums. Tātad ir nepieciešams optimāls NVO un publiskās pārvaldes attiecību modelis Latvijas sabiedrības aktivizēšanai, lai samazinātu zemo līdzdalību un sabiedrības uzticēšanos trūkumu valsts pārvaldei.

### **Summary**

Public participation is a key element of sustainable development, since decisions and policies of the public administration are implemented on the basis of public interests and needs. Thus, public participation forms the basis for a society's satisfaction with the work of public administration and can promote public trust in it.

Analysing the role of public participation in Latvian public administration and its impact on building public trust, it can be concluded that several Latvian governments have declared their position on the participation of non-governmental organizations in public administration. Various policy making documents have been adopted by establishing a clear framework to involve NGOs in public administration and to reach public awareness.

Within the framework of the Memorandum of Cooperation between Government and NGOs, a number of mechanisms have been created for public participation at the various stages of decision-making, which has gradually increased the participation of NGOs in public administration. Therefore, it is to be concluded that the public participation in the Latvian public administration have a significant role.

However, participation has little effect on public trust, which is determined by several factors. First of all, NGOs, which as an equal public administration partner are actively involved in policy making processes, represent a rather small part of society. In addition, information on participation opportunities and outcomes is only available to the public administration and the NGOs, but not to the general public. Second, NGO representatives often see themselves as advocates of public interest rather than public administration partners. In these cases, NGOs, as protesters with special campaigns, tend to focus the public attention on some negative phenomenon or process of public administration, which, in turn, reinforces public trust in the public administration.

Thus, in order to build public trust on the basis of public participation, the important task of public administration and NGOs is not only to inform the society about the decision making process, promoting a good discussion and exchange of opinions, but also raising public awareness that responsibility for the sustainable development of the state is not limited to public administration competence, but to the responsibility of every citizen. Thus, an optimal model of NGO and public administration relations for the activation of Latvian society is needed in order to reduce the lack of participation and public trust in public administration.

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## TOURISM DEVELOPMENT CONDITIONS IN THE MUNICIPALITIES OF LITHUANIA

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**Abstract.** *The authors of the paper discuss the tourism development conditions in the municipalities of Lithuania. The scientific problem - tourism development trends have not been studied at the local, municipality level in Lithuania and tourism in districts developed without a clear and long-term development strategy and consistent implementation of the programme. The aim of the research is to explore tourism development conditions in the municipalities of Lithuania. Objectives of the research are to characterize the factors influencing the development of tourism; to perform an analysis of the main factors of tourism development in Lithuania; to define the major factors of tourism management in the municipalities of Lithuania. Tourism development issues were discussed; the results of the research (an analysis of scientific literature and questionnaire survey, an analysis of strategic documents) were performed. The factors, which influence tourism the most are the human and financial resources, tourism infrastructure, the variety of tourism services, the virtual environment, the image of a tourism destination/ awareness, management of the tourism destination, the quality of tourism services and events. Tourism development in the municipalities of Lithuania is influenced by such factors, as the development of the tourism planning and management system, an adequate competence of human resources, cooperation between the public and private sectors, planning and organization, the legal framework for tourism, tourism projects development and implementation, a tourism development strategy and research in the tourism development area.*

**Keywords:** *conditions, factors, municipality, tourism, tourism development.*

### Introduction

Due to the influence of economic, social and political globalization processes tourism has become one of the leading industries in many countries. According to the data of the World Tourism Organisation (WTO), tourism, which has a direct and indirect impact on the economy, on a global scale creates 9 % GDP, 1 in 11 jobs, 6 % of the world's exports and it is forecasted that the number of international tourists could increase up to 1.8 billion by 2030. Over the last decade, tourism has become an important economic sector in Lithuania - since 2009 each year inbound tourism revenue steadily has increased. According to the

2016 data, Lithuanian tourism statistics, the expenditure of foreign tourists and day visitors amounted to EUR 1.25 milliard.

Many scientists have analysed tendencies of tourism development: Dwyer & Kim (2001), Gunn (2002), Dmitrijeva & Šeniavskij (2009) analysed tourism destination competitiveness factors, Dredge & Jenkins (2007), Sharpley & Telfer (2002), Hall (2007) - tourism planning and development, Go & Govers (2000) - integrated quality management for tourism destination and others. In Lithuania these issues were analysed by Korneičiuk & Pipirienė (trends and development of modern tourism, 2015), Žičkutė (development of eco-tourism in Lithuania, 2014), Romikaitytė & Kisieliauskas (the factors, affecting Lithuanian tourism sector development, 2012), Andrulienė, Armaitienė, Povilanskas, Janulienė, & Dulskis (assessment of Lithuanian tourism potential, 2011), Žilinskas & Petravičienė (conceptualization and trends of tourism development in the Lithuania, 2007), Ligeikienė (tourism development and management, 2003), Žilinskas & Skrodenienė (management of tourism development in the regions 2003) and others. Trends in tourism development at municipality level are researched by Paulauskienė (prospects for tourism management development in Lithuania, 2013), Dapkus & Gaižauskienė (tourism development at municipality level, 2009). However, tourism development conditions at municipality level have not been researched, only sporadic research studies have been performed. For these reasons, tourism in many municipalities has developed without a clear and long-term development strategy and consistent implementation of the programme.

*The object of the research* is tourism development conditions in the municipalities of Lithuania.

*The aim of the research* is to explore tourism development conditions in the municipalities of Lithuania.

*Objectives of the research are:*

1. To characterize the factors influencing the development of tourism.
2. To perform an analysis of the main factors of tourism development in Lithuania.
3. To define the major factors of tourism management in the municipalities of Lithuania.

**Research methods.** The authors of the paper applied the analysis of scientific literature, quantitative research – a survey, document analysis and questionnaire data generalization. The research instrument (questionnaire) developed by grouping questions into blocks, related to the research topic for the qualitative and quantitative researches. Taking into account the specifics of research, this method is considered to be an important data collection method. Data Sources: the Lithuanian Tourism Law, the National Tourism Development Programme for 2014-2020. Tourism development issues were discussed and the research results were presented.

**The survey sample.** The survey sample of the research was calculated according to the formula of Schwarze. The survey involved 25 tourism specialists, responsible for tourism development in tourism information centres and tourism and business information centers in the municipalities of Lithuania (according to the formula a sufficient size to ensure the representativeness of the research sample is 22 respondents).

### **Scientific discussion on the topic of tourism development in the municipalities**

The WTO defines tourism as a type of travel, tour, when a person leaves his job and place of residence for more than one day and less than 12 months, and the aim of the trip is not recruitment or paid activities. For all countries welcoming tourists one of the most important condition is to preserve and develop their national identity. Tourism development is understood as physical changes caused by the increasing tourist interest in the area and the expression of this interest through the increasing incoming flows. According to Ligeikienė (2003), tourism development can be seen as an assumption for the improvement of life quality of tourists and the local community. Tourism development goals in the overall economic structure have impact on and relate to strategies of other industries of the economy, their actions and measures, and the public sector, such as environmental protection, transport, agriculture, regions, development of small and medium businesses. Tourism and regional development are linked to each other in the national and even global context (WTO, 1980). Sharpley & Telfer (2002) states, that tourism has a direct impact on national, regional and local economies, whereas tourism development has potentially beneficial economic effects, which in turn positively affects the destination's economic development. Hall (2007) has supplemented tourism development with a new tradition of sustainable development, formed in the last decades.

In many countries, the most popular tourist attractions related to natural resources (the sea, beaches, climate, mountains, and so on). This shows that the development of tourism (as well as economic benefits) is based on the natural resources that are free, because they do not need to be built or created (Dredge & Jenkins, 2007). In order to determine the development of a tourism destination, tourism resources of the destination have to be estimated.

In recent decades, the general trend of public development has determined the rapid development of tourism - tourism has become one of the most popular leisure activities. According to the Organization for Economic Cooperation and Development (2010), rapid tourism growth was mostly influenced by the globalization process, reinforced by socio-economic factors: rising personal income and inheritance, prolonged life expectancy, faster and cheaper air

transport services, improvements in accessibility of various tourism destinations, intensive use of information technologies, the increasing living standard in new developing markets of inbound tourism.

Table 1 summarizes various factors, which influence the development of a tourism destination.

**Table 1 Factors, which influence the development of a tourism destination**  
(source: compiled by the authors of the article)

<b>Author</b>	<b>Factors</b>
<b>Foreign authors</b>	
Dmitrijeva & Šeniavskij (2009)	Political stability, the natural environment, safety, health and hygiene, transport infrastructure, information-communication technologies, price policy, personnel management, tourism infrastructure management of tourism destination, natural and cultural resources
Mikos von Rohrscheidt (2008)	Country economic situation, political situation, security and preparation emergency situation and crisis, country's geographical position, convenience of transportation, the image of the country in the world, market conditions, climate, social norms, scientific and technical progress, increasing life expectancy, lifestyle changes, prolonged leisure time and so on.
Dwyer & Kim (2003)	Natural resources, artificial resources, special events, supporting factors, tourism destinations management, demand factors, factors of market performance
Wöber (2002)	Cultural and natural resources, tourism, infrastructure, personnel competence, variety of the tourism market, the geographic environment, the virtual environment
Sharpley & Telfer (2002)	Creation of jobs places, economic diversification, support for the development of public services, recreational services for tourists and so on.
Go & Govers (2000)	Access to a tourism destination, availability of a tourism destination, quality of service, government support for tourism, price policy, the image of the tourism destination, climate and the environment and attractiveness
<b>Lithuanian authors</b>	
Žuromskaitė (2016)	Lifestyle and motivational factors, demographic, political, economic, environmental, social, technological factors
Indriūnas (2015)	Leisure (recreation) objects, infrastructure of services, infrastructure of passenger transport, engineering infrastructure of the tourism destination, organization of travel, tourism information and advertising

Paulauskienė (2014)	<i>Incentive factors at the municipal level:</i> assignment of EU support, development of tourism infrastructure, priority at national level, marketing of tourism at the municipal level
	<i>Incentive factors at the national level of tourism management:</i> a positive image and awareness of the country, development of tourism infrastructure, formulation of the vision, improvement of qualification
Pliustienė (2012)	Functions and decisions taken by public sector institutions
Baležentis & Žuromskaitė (2012)	Economic, political, demographical, technological factors, security/insecurity, fashion.
Andrulienė et al. (2011)	Tourism resources and infrastructure, components of the tourism industry, the flow of tourists, the image of the tourism destination, activities of tourism related agents, the position of the tourism destination in the tourism network.
Vaitiekūnas & Povilanskas (2011)	Having free time and money, curiosity and the gladness of cognition, globalization and the convergence of world cultures, attractiveness of recreational resources, increasing opportunities for international transport and advertising.
Ligeikienė (2003)	Conditions of globalization, integration, information technology and economic progress and changes in consumer behaviour
Bagdzevičienė et al. (2002)	Social accessibility, the demographic factor, natural resources, geographic accessibility, human resources, financial resources, legal acts, technology, infrastructure, international events, eco-accessibility.

As we can see, experts recommend to assign tourism resources, tourism infrastructure, the variety of tourism services, tourism management, the virtual environment, the quality of tourism services, the image of a tourism destination, and events to the development factors of the tourism destination.

In practice, the development of tourism is realized through plans and selected indicators. Gunn (2002) was one of the first scholars to describe tourism planning as a tourism destination development tool. According to Gunn (2002), the aim of planning relates to increase in income and employment, conservation of resources and conditions for traveler satisfaction. It is noted that in insufficiently or under-developed tourism destinations, plans can become a serious support for further development of tourism, while in the developed countries (regions) they are often used as a tool to 'revive the tourism sector and to maintain its viability in the future' (WTO).

The strategic goal of tourism development in Lithuania is to increase the competitiveness of the Lithuanian tourism sector, because tourism is an economic activity, whose main function is to generate economic growth. At the same time, the socio-cultural impact of tourism is no less important, which affects the infrastructure, increases services and entertainment offers, revives cultural life in the regions, increases opportunities for self-expression of the local population and strengthens cultural identity and individuality.

Planning and management of the Lithuanian tourism sector since 1998 has been based on the regulatory statutory acts and other documents (Tourism Law of the Republic of Lithuania and related secondary legislation), the Territory Planning Law of the Republic of Lithuania, rules for drafting tourism and recreation schemes and plans (projects). Tourism planning is one of the functions and tools of tourism sector management and policy. In order to increase the competitiveness of tourism, Lithuanian tourism development programmes for 2014-2020 provide for planning development goals and objectives. New goals and objectives are set the tourism development programmes in order to implement the national tourism development goals and objectives, which include competitive tourism products and services, development of tourism infrastructure and services, creation and promotion a favourable tourism business environment, implementation of effective marketing and communication devices, increasing the competitiveness and visibility of Lithuanian tourism in Lithuania and international markets, to promote tourism services exports to foreign countries under the principles of sustainable tourism. The goal is to make tourism, as one of the industries of the economy, by properly using the country's tourism resources and offering a marketable, high quality and competitive tourism products in foreign and domestic tourism markets, help increase the income of the population and to contribute to the development of new business niches in order to attract private investment, improve the country's gross domestic product as well as to address regional economic and social development issues, and together - to protect the landscape (natural and cultural) values, the rational use of natural and cultural resources.

As foreseen in the LR Tourism Law, the tourism policy in Lithuania is carried out at the national, regional and local levels as a means to achieve the country's strategic development goals. The research object of the present paper is the development of tourism conditions at the municipal level, and Table 2 presents municipality competences in tourism policy-making and management.

At the municipality level tourism development issues are evaluated in the strategic development plans, but the initiation of management of tourism activities at this level is not mandatory. According to Bryson (2004), the need for a strategic plan in municipalities is based on several factors which are more suitable for a sustainable than a competitive development strategy: to help the organization to organize and execute the changes, to improve decision-making, to increase the efficiency of the entire organization. According to V. Gražulis (2008), a properly chosen strategy helps take the desired location in a competitive market, and the managers to foster values, norms, roles and groups as a whole, while achieving strategic objectives. Success of strategic planning is highly dependent on how the strategic planning models, principles, procedures are associated with the actual performance conditions. According to T. Sudnickas (2011), successful

competition is not possible without a permanent response to the changes taking place and the efficient use of available resources, and is hard to imagine without the strategic management of the organization. Unfortunately, municipality strategic plans are usually seen as a precondition for assistance from the EU Structural Funds, and not as clear priorities and setting directions for balanced and productive activities.

Table 2 **Forming tourism policy and tourism management at the municipal level in Lithuania** (source: compiled by the authors of the article according LR Tourism law, 2015)

<b>Competences of municipality</b>
<p><b><i>Promotion of tourism business and establishment of tourism information centres:</i></b></p> <ol style="list-style-type: none"> <li>1. To promote the tourism business as a job creation and employment measure;</li> <li>2. To establish municipality tourist information centres.</li> </ol> <p><b><i>Preparation and implementation of the strategic documents and development projects:</i></b></p> <ol style="list-style-type: none"> <li>3. According to the provision of the Lithuanian tourism development programme, to prepare, approve and implement the municipal tourism development programmes (strategies) or municipal tourism and recreation schemes and projects;</li> <li>4. To develop and implement projects of public tourism and recreation infrastructure.</li> </ol> <p><b><i>Planning and implementation of recreational activities:</i></b></p> <ol style="list-style-type: none"> <li>5. To plan and implement the measures, necessary for the protection of recreational areas, recreation and tourism activities in these areas, to develop and manage accounting for recreational areas, to approve regulations for the usage of recreational territories;</li> <li>6. To plan and organize camps for children and youth activities, to determine the requirements for these camps and monitor their implementation;</li> <li>7. In order to ensure tourists calm rest, the Lithuanian Government shall have the right to restrict the construction, repair, reconstruction, installation works in resort territories of the municipal council during the tourism season;</li> <li>8. To perform market research and marketing of tourism resources and services in the municipality area;</li> <li>9. According to the law, to make contracts with the tourism service providers - legal and natural persons - for the recreational use of resources (lease) for tourism and recreation, to control the execution of contracts.</li> </ol>

### **The situation in the tourism sector in the municipalities of Lithuania**

According to the data of State Tourism Department (2017-10-30) Tourist Information Centers (TIC) or Tourism and Business Information Centers (TVIC) operate in 48 municipalities of Lithuania. During the survey, tourism specialists rated the image of the tourist destination with the highest score (4.84 points), in second place - the quality of tourism services (4.83 points), in third place - tourism management (4.68 points), in fourth place- resources (4.53 points), in fifth place - events (4.49 points), in sixth place – the virtual environment (4.45 points), in seventh place - tourism infrastructure and the variety of tourism services (4.42

points) (see Table 3). Improving the image of a tourism destination and promoting its tourism opportunities contributes to solving local social and economic issues and creating welfare.

**Table 3 Ratings of important factors, affecting Lithuanian tourism development**  
(source: compiled by the authors of the article according to the survey data)

<b>Factors</b>	<b>Rating, 5-point system</b>
Image of tourism destination/ awareness	4,84
Quality of tourism services	4,83
Management of tourism destination	4,68
Tourism resources (cultural, natural, human, financial)	4,53
Events	4,49
Virtual environment	4,45
Tourism infrastructure	4,42
Variety of tourism services	4,42

Tourism specialists rated the image of a tourism destination, the quality of tourism services and the management of the tourism destination quite high (see Table 3). Evaluating the resources, the maximum score was given to human (4.86 points) and financial (4.84 points) resources, a slightly lower grade were given to natural (4.42 points) and cultural (4.01 points) resources. Human resources in the tourism sector are very important, because employees of this sector create the country's tourism and hospitality image and hospitality is an integral part of the competitiveness of the tourism sector. In order to strengthen this potential, it is important to continuously develop the professional competence of tourism sector employees, i.e. to constantly improve their skills, knowledge of foreign languages, to improve the image, and develop intercultural competence. The country's tourism resources are one of the most important competitive advantages to attract tourist flows and increase the economic benefits of tourism. The abundance and diversity of Lithuanian natural and cultural tourism resources allows to create and develop products of recreation, cultural and educational tourism, ethnic, rural tourism and eco-tourism, focusing on the segments of the respective market.

Natural and cultural resources are very important in the development of tourism. Evaluating the natural resources, the respondents noted the importance of the presence of the sea (4.67 points), lakes (4.4 points), forest (4.46 points), and the river (4.13 points). Evaluating cultural resources, the respondents noted the importance of national cuisine (4.85 points), castles (4.8 points), manors (4.68 points), museums (4.54 points), folk traditions (4.52 points), urban heritage (4.4

points), archaeological values (4.32 points), folk crafts (4.25 points) and artistic values (4.2 points).

According to the results of the research, the following types of tourism are being developed in Lithuania: in accordance with to the current demand, types of niche, business, conferences, sports and adventure tourism are developed; according to the strategic documents: health sanatorium tourism, ecotourism, recreation, leisure, cognitive cultural, rural tourism (see Figure 1). Natural and cultural resources of Lithuania create preconditions for the development of all the mentioned types of tourism, and the development of health tourism relates to the activities of resorts and resort areas.

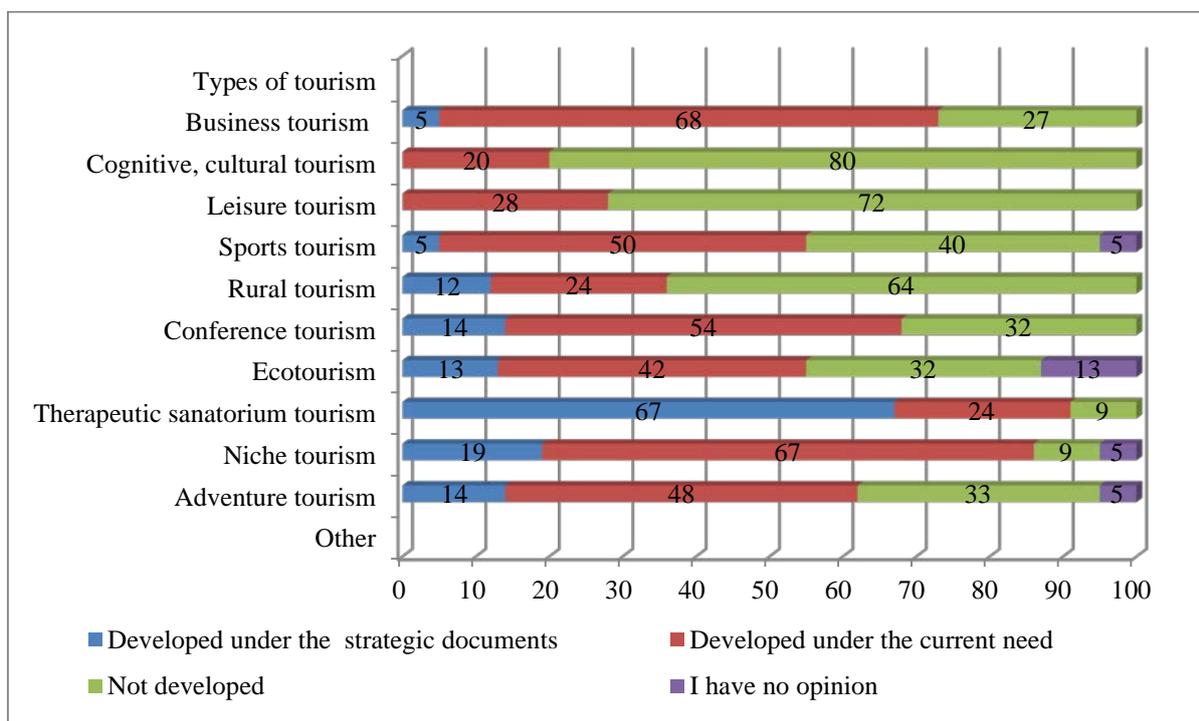


Figure 1. **Analysis of tourism development in Lithuania, %** (source: compiled by the authors of the article according to the survey data)

Various tourism services are being developed in Lithuania. Services are developed based on the current needs (water, catering, entertainment, conference organization, transportation services etc.) or according to strategic documents (tourist information, accommodation, travel organization services).

The tourism experts identified tourism information and accommodation services, social media (Facebook, Instagram etc.) and Internet sites, event organization, visiting heritage as tourism development strengths in Lithuania. The cultural resources to be noted: urban heritage, artistic, archeological values, folk traditions and crafts, museums. The strengths to be noted: tourism infrastructure

(asphalted roads), carriage by road transport, the image of the tourist destination, the management of the tourist destination, the quality of tourism services and human resources. The identified weaknesses included the absence of a variety of tourism services and tourist infrastructure - no bicycle path network, the lack of car parking lots and hiking trails, the poor quality of district roads, the inadequate infrastructure of water ways. The identified weaknesses for virtual services included the lack of mobile applications. There were such threats for tourism development in the region as unplanned change of state economic development priorities, population migration to other countries, the worsening demographic situation in the district and others. Tourism development in the region can benefit from the EU Funds, the growing demand for active recreation and health tourism products in the hospitality industry, quality improvement and implementation of international standards and other options in the domestic and foreign markets.

### **Conclusions**

1. Factors, which influence tourism the most, are the human and financial resources, tourism infrastructure, the variety of tourism services, the virtual environment, the image of the tourism destination/ awareness, management of the tourism destination, the quality of tourism services and events.
2. Tourism experts identified tourism information and accommodation services, social media (Facebook, Instagram etc.) and Internet sites, event organization, visiting heritage as tourism development strengths in the Lithuania. The cultural resources to be noted: urban heritage, artistic, archeological values, folk traditions and crafts, museums. The strengths to be noted: tourism infrastructure (asphalted roads), carriage by road transport, the image of the tourist destination, the management of the tourist destination, the quality of tourism services and human resources. The identified weaknesses include the absence of a variety of tourism services and tourist infrastructure - no bicycle path network, the lack of car parking lots and hiking trails, the poor quality of district roads, the inadequate infrastructure of water ways. The identified weaknesses for virtual services included the lack of mobile applications.
3. Tourism development in the municipalities Lithuania is influenced by such factors, as the development of the tourism planning and management system, an adequate competence of human resources, cooperation between the public and private sectors, planning and organization, the legal framework for tourism, tourism projects development and implementation, a tourism development strategy and research in the tourism development area.

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# STRENGTHENING VALUES IN LITHUANIAN JUDGES' ACTIVITY: DISCUSSION ON THE IMPLEMENTATION OF THE PRINCIPLE OF JUSTICE AND IMPARTIALITY

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**Abstract.** *In today's guaranteeing of justice, the public becomes an active evaluator of the activities of courts and judges. The latest changes in the legal regulation since 2013 have enabled any member of the public to turn to the Judicial Ethics and Discipline Commission due to doubtful judge's behaviour. In addition, this commission was given a new function of giving consultations to judges. This shows that the increasingly attention of the scientists and practitioners is paid to the observance of the principles of professional ethics of judges, while the judges must consciously understand the meaning of ethical provisions in their professional activities and lives, constantly uphold the fundamental values.*

*The aim of the paper is to analyse the principle of the ethics of Lithuanian judges – justice and impartiality. The analysis of the realization of this ethical principle in practice was carried out (49 decisions were analysed, among which 4 decisions adopted by the Judicial Ethics and Discipline Commission were relevant in this regard) which showed a high level of integrity of this principle. The research reveals two main vectors for the implementation of this principle of ethics by Lithuanian judges. Firstly, in the scientific and practical implementation of the principles of professional ethics there is a debate about its realization in practice (application). Secondly, this principle of the judge's ethics is most clearly elaborated by comparing the content of the principle of impartiality of the investigator or prosecutor.*

**Keywords:** *ethics principles, judge, Judicial Ethics and Discipline Commission, justice and impartiality, professional ethics.*

## Introduction

**Relevance of the research.** Recently, the professionalism of employees has increasingly become an indicator – a measure of public satisfaction for a particular profession, such as judges. The category of professionalism in the field of human resources management is important not only in practical activities, but also in the learning process, when one deliberately prepares to become a professional. Therefore, it is also made relevant in the modern study process (Neve et al., 2017). Apart from the two components of professionalism - qualifications and

competences – reasonably, the integral structural part of professionalism are personal and entrepreneurship characteristics, observance of professional ethics. The construction of modern concepts of professionalism has various trajectories, which allows one to interpret the content of professionalism in its own way (Evetts, 2013; Gewirtz, 2009). For example, it is said that professionalism consists of three components: behaviour, attitudes and intellectual components (Evans, 2015). The behavioural component is related to the activity performed, competence; intelligence competence – with knowledge. L. Evans attributes personal qualities, perceptions, motivation to a separate element of professionalism – the component of attitudes (Evans, 2015). Therefore, the author, on the basis of the already mentioned research results, positions the three-dimensional structure of professionalism by following the holistic view and emphasizing the development of the personality parameters vectors: the importance of personal and entrepreneurship characteristics, observance of ethical rules as an important component of the judge's professionalism.

**Novelty of the research.** Analysis of documents regulating the profession of judge shows that not only the definition of judge's qualification and competence, but also the necessary personal and entrepreneurship characteristics, observance of ethical principles are important. However, in today's scientific disputes there is a clear dilemma concerning the practical realization of values: how the observance of consolidated specific ethical provisions reveals itself in practical work of the judge, what are the main vectors of realizations.

Conceptually, a number of researchers analysed judicial ethics in Lithuania (Navickienė & Žiemelis, 2015; Kiršienė, 2015; *Judicial Ethics: from the status quo towards the exemplary model: a collective monograph*, 2016). In foreign countries, these issues are addressed (Whitecross, 2016; Baïada-Hirèche & Garmil, 2015, Reeves, 2010). The nature of the particular ethics of the judge, the nature of the content, by emphasizing the lack of clarity of content, were also analysed by scientists from different countries (Mahdavi, 2016; Adiyaryani et al., 2017; Husen et al., 2017). However, the question arises as how the specific ethical principle through the trajectory analysis of the judge's behavior is revealed.

**The aim of the research study** is by comparing the content of the ethical principle of pre-trial investigation of investigators and prosecutors, to analyse the principle of the fairness and impartiality of the Lithuanian judge in the practice of the integrity of values. **The object of this research** is oriented towards the implementation of the principle of ethics of justice of the Lithuanian judges – impartiality and justice – in practice. In order to achieve the aim, the following **research tasks** are identified:

1. To analyse the content of the judge's ethical principle – impartiality and justice – by comparing it with the content of the principle of the impartiality of prosecutors and investigators.
2. In analysing the decisions of the Judicial Ethics and Discipline Commission, to assess the vectors of implementation of this ethical principle of the judge in practice in the context of the integrity of values.

### **Methodology**

The paper uses these following theoretical and empirical research methods: descriptive-comparative, analytical-critical, the method of document content and the scientific literature analysis method. Using the descriptive-comparative method, comparison, as well as the methods of document content and analysis of scientific literature – the content of the principle of ethics of judge - impartiality and justice – is compared with the content of the principle of ethical impartiality of pre-trial investigation officials (investigators) and prosecutors. The analytical-critical and document analysis methods analysed the decisions taken by the Judicial Ethics and Discipline Commission for 2014-2017 (after changes in the legal regulation).

**Table 1 Decisions and consultations given by the Judicial Ethics and Discipline Commission for 2014-2017** (are made by authors of the article, source: The National Court Administration)

<b>Commission’s actions/ Year</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Decisions made</b>	6	25	12	8
<b>Consultations given</b>	8	4	2	6

After analysing the 51 decisions of the Judicial Ethics and Discipline Commission, 4 relevant decisions were selected, in which the implemented directions of judges' impartiality and justice as ethics principle were assessed in practice. Also, the contents of the twenty consultations provided by this commission in 2014-2017 were analysed, one consultation was selected, the content of which is relevant to the topic being analysed.

### **Peculiarities of legal regulation of justice and impartiality as a principle of ethics**

The principles of justice and impartiality, albeit with different expressions, are established by the ethical codes of all three entities – an investigator, a prosecutor and a judge. A pre-trial investigation officer must, in accordance with

the provisions of the Code of Conduct for Police must be fair, impartial, and ensure that decisions made by him/her are legal and objective, without self-serving incentives (The Code of Police Ethics approved by the General Police Commissioner of Lithuania, 2004). In this Code of Ethics, justice and impartiality are defined as abstract, semantically oriented towards objectivity and the absence of selfish motives, and therefore there is no more detailed interpretation of the content of these principles in other legal acts.

Another situation exists in provisions of the ethical code for prosecutors. The principles and requirements of prosecutors' ethics are enshrined in the second chapter of the Code of Ethics of the Prosecutors of the Republic of Lithuania, approved by the General Prosecutor of the Republic of Lithuania, 2012. Justice and impartiality are referred to as two independent ethical principles and their content is interpreted separately (see Table 2). Justice is understood as a wise and fair conduct, leadership based on the presumption of innocence, as well as decision-making in the case without any prejudices. The content of the principle of impartiality is interpreted as equally impartial treatment with the parties to the proceedings; cautious and objective treatment of media representatives, politicians, processors; if necessary, resigning from office. Summarizing, it can be said that these principles are similar in content: firstly, the impartial treatment of parties and other parties; secondly, the impartial decision-making process without prejudice; thirdly, in case of necessity, the moment of resignation from office (Code of Prosecutors Conduct of the Republic of Lithuania, approved by the General Prosecutor of the Republic of Lithuania, 2012).

**Table 2 Legal consolidation and interpretation of the content of the ethical principle of justice and impartiality of judges, prosecutors and pre-trial investigation officers (investigators) (are made by authors of the article)**

<b>Subjects/ Principles</b>	<b>Impartiality</b>	<b>Justice</b>
<b>Judge</b>	Established in the Constitution of the Republic of Lithuania and The Code of Judicial Ethics, in which it is detailed (collectively)	
<b>Prosecutor</b>	Established and detailed in the Code of Ethics for Prosecutors	Established and detailed in the Code of Ethics for Prosecutors
<b>Investigator</b>	Established in the Police Code of Ethics, but not detailed	Established in the Police Code of Ethics, but not detailed

- Unlike the code of ethics for prosecutors, in the activity of a judge, the content of these principles is explained together (collectively) (see Table 2). Article 109 of the Constitution of the Republic of Lithuania. (Constitution of the Republic of Lithuania, 1992), as well as Article 1 of the Law on Courts of the Republic of Lithuania. (The Law of the Courts of the Republic of

Lithuania, 1994) states that justice in the Republic of Lithuania is administered only by courts.

- In explaining the qualification requirements for the judge and emphasizing the importance of the qualification necessary for a lawyer, the Constitutional Court stated that "the principle of justice enshrined in the Constitution, as well as the provision of Paragraph 1 of Article 109 of the Constitution that justice is exercised only by courts, means that the constitutional value is not the adoption of a decision itself in court, but the adoption of a fair court judgment; the constitutional concept of justice implies not only the formal, nominal justice exercised by the court, not only the external appearance of justice administered by the court, but also, most importantly, such court decisions (other final lawsuits) that are not wrong in their content; the justice that is only formally executed by the court is not the justice that is enshrined, protected and defended by the Constitution "(Constitutional Court of the Republic of Lithuania, Ruling, 2008). The consolidation of the principle of justice essentially implies the principle of the impartiality of the judge, i.e. judges, when executing the justice, act impartially and obey only laws.
- Content of justice and impartiality is defined in Article 8 of the Code of Judicial Ethics. The fairness and impartiality of the judge occurs through the following actions of the judge (Code of Judicial Conduct of the Republic of Lithuania, 2006):
  - *Non-discrimination*: the judge cannot discriminate against individuals or groups of people by his/her language, actions or decisions;
  - *Absence of preliminary prejudice*: the judge must not have personal preliminary prejudices in the decision-making process or express a preliminary opinion;
  - *Showing no special attention*: the judge must not demonstrate his/her sympathy or dislike and exclusive attention to individuals or their groups, the persons involved in the proceedings, and to act impartially in conflict situations;
  - *Avoidance of conflicts of interest*: the judge must withdraw from the trial if there is a conflict of interest or information available that private matters may harm the proceedings;
  - *No comments on the progress of the case and the absence of expressions of personal opinion*: the judge must avoid public statements that can predict the outcome of the case, must not consider the case with the participants in the proceedings outside the court proceedings; must not express personal opinion in cases of communication with the public and the media.

The judge, in exercising his/her constitutional duty to administer justice and to take motivated and reasoned decisions, investigates the cases independently, and in his/her discretion, resolves all issues related to the case in question, in

accordance with law, based on a comprehensive and objective assessment of facts, his / her knowledge, inner convictions, and ethical requirements. Therefore, it is argued that the provisions of justice and impartiality include both internal aspects (the judge's inner attitude to perceive, determine and to be impartial), and external actions of the judge, which manifest themselves in a specific relationship with other persons.

Lithuanian scientists have paid a lot of attention to the content of this principle. Procedural justice is very important to ensure that material justice, i.e. the correct decision in a case would be achieved by the right and proper means (Dereškevičiūtė, 2013). Justice is called "the most sensitive and most vulnerable function", because the Seimas of the Republic of Lithuania, when announcing the amnesty and the President of the Republic of Lithuania, when granting a favour de facto, influences the execution of judgments when justice is already executed (Šileikis, 2005). Thus, it is generally recognized that absolute justice and impartiality are not possible – albeit indirectly, however a political influence is done on court decisions.

### **Discussions on the realization of the principle of fairness and impartiality in practice**

In implementing the provision of justice, the Judicial Ethics and Discipline Commission also emphasized that the implementation of this principle involves the authority of the judge, a firm internal impartiality provision, its procedural decisions and actions carried out in compliance with the requirements established by law, the rules of ethics of judges, the absence of specific and actual reproaches concerning the judge's bias (Decision of the Judicial Ethics and Discipline Commission to Start a Discipline Case for a Judge, 4 of April 2016, No. 18 P-1).

Data from a practical study indicate practical discussions about the implementation of this principle. Concerning the content and application of this principle in specific situations, the Commission for Judicial Ethics and Discipline also provided consultations (Consultation of the Judicial Ethics and Discipline Commission, 2014). However, the violation of this principle is acknowledged (Judgment Ethics and Discipline Commission on Discipline for a Judge, 4 of April 2016, No. 18 P-1).

Firstly, in the context of impartiality, the relationship between the judge and other participants in the process is discussed. In practice, questions often arise whether a judge is impartial when he/she communicates with lawyers (Decision of the Judicial Ethics and Discipline Commission on the Refusal to Start a Discipline Case for a Judge, 13 April 2015, (No. 18 P-11) or other parties of the proceedings. For example, in assessing the relationship between the judge and the

police officers who took the explanations from the applicant and collected the material, the possible bias of the judge, was emphasized, which seems to indicate the fact that the police and the court are located in one building, thus the judge may know the above-mentioned officials (Decision of the Judicial Ethics and Discipline Commission on Refusal to Start a Discipline Case for a Judge, 9 of March 2015, No. 18 P-3).

The Judicial Ethics and Discipline Commission, when assessing the judge's specific actions, stated that it is important to take into account the specific relationship between the judge and other persons, and in the absence of factual data confirming the conflict of interests of the judge or other circumstances of a personal nature due to relations with the police officers, the judge's biased actions also cannot be stated. Therefore, considering the question of possible violations of the impartiality principle in this aspect, not possible assumptions and hypotheses should be taken into account, but specific data proving biased actions of the judge. As the Judicial Ethics and Discipline Commission points out, there are no provisions in the Code of Judicial Ethics that categorically prohibit the judge from communicating with the participants of the trial (him/herself or through the court staff), therefore, not every judge's conversation with the participant in the proceedings from the point of view of the judicial ethics would in itself be considered to be blameworthy (Decision of the Judicial Ethics and Discipline Commission on Refusal to Start a Discipline Case for a Judge, 14 of December 2015, No. 18 P-23).

When assessing a possible conflict of interests of the judge, facts must be presented, based on which one could see what were the specific actions of the judge were and how the proceedings of the case were harmed by it. Therefore, it is argued that when considering the ethical aspect of the possible bias of a judge, particulars should be given regarding the conflict of interest or another personal interest of the judge.

However, in order to strengthen the realization of the principle of impartiality in practice, the author thinks that triple expression of the actions of the judge is necessary: first, the internal understanding of the judge and the conviction of being impartial and objective; and, secondly, the external actions of the judge, which prove the impartiality of his/her actions, are necessary, that is, the judge must establish such interpersonal relations with other persons that it would not call into question possible bias and objectivity, and, thirdly, to apply the form provided by the law to defend the impartiality of actions. As the Judicial Ethics and Discipline Commission points out, a judge must avoid situations and not to maintain or develop personal relationships that would personally impede him/her in the proper administration of justice, or raise doubts on his/her independence and impartiality (Judgment Ethics and Discipline Commission to Start a Discipline Case for a Judge, 4 of April 2016, No. 18 P-1). The Commission for

Judicial Ethics and Discipline recommends avoiding ambiguous situations that could cast doubt on whether the judge acts ethically (Judgment of the Judicial Ethics and Discipline Commission of 13 April 2015, No. 18 P-11).

The Judicial Ethics and Discipline Commission notes that in cases where the judge's knowledge of the process participants, for example with a lawyer, goes beyond the normal communication with him/her as a person involved in legal proceedings, the nature of both the relationship between the judge and the lawyer (private communication, friendship, etc.) should be assessed, including the social dimension of these relations – the attitude of the third parties, the media (Judgment of the Judicial Ethics and Discipline Commission to Start a Discipline Case for a Judge, 4 of April 2016, No. 18 P-1). In addition, when considering the possible violation of the principle of impartiality of a judge, the procedural form of this action should also be assessed: the procedural guarantee of the functioning of the principle of the impartiality of a judge – the law establishes the right of persons involved in a case to dismiss a judge and the duty of a judge to resign if he/she is directly or indirectly interested in the outcome of the case or there are other circumstances which raise doubts as to his/her impartiality.

The analysis of the content of the consultations provided by the Judicial Ethics and Discipline Commission for 2014-2017 suggests that judges are also active in solving various issues related to the determination of their activity and ethics. This demonstrates the initiative of judges themselves to deliberately understand and constructively respect the norms of professional ethics. On the other hand, not only the immediate interpretation of the content of ethical principles is important. The use of permanent didactic tools is also appropriate for organizing training sessions for judges in the field of professional ethics.

## **Conclusions**

Recent changes in legal regulation in Lithuania enabled the society to be more active as the assessor of activity and behaviour of courts and judges, and created important prerequisites for a scientifically re-evaluation of the key vectors for the implementation of ethical principles of judges. By comparing the content of the ethical principle of investigating prosecutors (investigators), prosecutors and judges, the principle of impartiality was specified and explained in more detail.

The content of the debate on the impartiality of the judge and the principle of justice do not raise any doubts – the principle is established clearly and specifically. However, the dilemma of absolute justice and impartiality is highlighted. It is acknowledged that this is the most sensitive function of the court,

albeit indirectly, but may be influenced by decisions of other public administration institutions.

The results of the research show that in practice, two main vectors of discussion often occur due to its realization. Firstly, the limits are unclear concerning the relationship between the judge and other participants in the process, such as lawyers. Secondly, the procedural form of impartiality as an action must be evaluated, where the law provides for the right of persons involved in a case to exclude a judge and the obligation of a judge to resign if he/she is directly or indirectly interested in the outcome of the case or there are other circumstances that raise doubts to his/her impartiality.

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# INFORMATION TECHNOLOGY AND CONSUMER BEHAVIOUR IN TOURISM: STUDENT TRAVEL PLANNING BY USING THE INTERNET

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**Abstract.** *The increasing competitiveness in the global tourism market and the use of ubiquitous mobile connection to the Internet by young customers encourage tourism operators to invest more in e-promotion and e-resources, in order to increase their business. Accordingly, it is useful to analyse students' expectations to understand their preferences as a potential customer group. This paper presents the first step of an ongoing investigation that focuses on the tourist preferences of university students. We report and discuss the result of a survey conducted involving the students of Sport and Tourism management at the Akademii Wychowania Fizycznego im. Jerzego Kukuczki in Katowice.*

*For our survey, we used "Google form tool" and "Statistica 13" software suite. The  $\chi^2$  test was used for data analysis. From our research, it emerged that the preferred means of communicating is email for female students whilst telephone for male students; for both Booking.com resulted to be the most popular tourism platform.*

**Keywords:** *Consumer behaviour, higher education, Internet, tourism, travel agency.*

## Introduction

Planning a trip does not require any more to purchase expensive guides, magazines, tourism dedicated books or maps in a bookstore. The Internet allows us to access useful applications and tools, thanks to which we can plan our stay at in the world (Alexiadis & Refanidis, 2016). Indeed, we can find more tourist proposals a travel agency can offer us. The emerging innovative online travel websites are the principal source of information for young tourists (Bhatiasevi & Yoopetch, 2015; Pabel & Prideaux, 2016).

How can the internet affect the tourist choices of young people? Indeed, the youth tourism market is growing, backpackers in particular, and, accordingly, the investigation of their travel patterns and attitudes became a research crucial point (Han, Kim, & Kiatkawsin, 2017).

To understand the tourist preferences of university students and the role of the Internet on planning a trip, it was decided to conduct a survey involving students of Sport and Tourism management at the Akademii Wychowania Fizycznego im. Jerzego Kukuczki in Katowice. The better understanding of their virtual behaviour in their search for information for tourism destinations will encourage tourism operators to invest in a proper way in e-promotion and e-resources, in order to increase their business (Schiopu, Padurean, Tala, & Nica, 2016).

An inherent element of every trip is the planning process. In the era of new media, our journey does not have to involve chaotic preparation, additional expenses and the proverbial “brick” in the backpack. With the help of a traveller come the travel website’s mobile apps (E-commerce w Polsce, 2017). Android, Apple and Windows Phone apps are common. These mobile tools can be used to search for and book travel deals and view the itinerary of upcoming or past trips. This is a fairly important category because it allows tourists to make and change travel itineraries on the way (Pesonen & Pasanen, 2017).

Six travel sites can be considered the best places to start the travel planning and customers should be able to search for a vacation by theme and also all types of accommodation. The lists below may be a good place to begin for travellers interested in a specific service.

Table 1 **Travel Sites** (own source)

	<b>Name</b>	<b>Best for</b>	<b>Home page</b>
1	Booking.com	Best Overall	<a href="https://www.booking.com">https://www.booking.com</a>
2	Priceline	Last-Minute Travel Deals	<a href="https://www.priceline.com/">https://www.priceline.com/</a>
3	Hotels.com	Lodging	<a href="https://www.hotels.com/">https://www.hotels.com/</a>
4	CheapTickets	Car Rentals	<a href="https://www.cheaptickets.com">https://www.cheaptickets.com</a>
5	CheapAir	Airfare	<a href="https://www.cheapair.com/">https://www.cheapair.com/</a>
6	Expedia	Vacation Packages	<a href="https://www.expedia.com/">https://www.expedia.com/</a>

In recent years, the greatest successes relate to services that enable planning a trip, effective booking or the management of the image of tourism-related infrastructure in social media (Ibanez et al., 2016; Kim et al., 2015). More and more Poles are choosing to holiday in the country. According to data prepared by Travelist.pl (Nowinski, 2018), nearly 40 % of tourists choose Baltic holiday, which every year tempts by more and more innovative attractions. The Mountains are close behind (almost 30 %), and only then are the cities and forests. The most popular seaside resorts are primarily: Kołobrzeg, Międzyzdroje, Ustka and

Jastrzębia Góra. However, the most popular cities in the Polish mountains are not necessarily Zakopane, but also Krynica Zdrój, Ustrzyki Dolne, Szczyrk and Szklarska Poręba.

The e-podróżnik.pl website is one of the most used for planning domestic and foreign travel (Soroczyński, 2012) in Poland. The search engine started its functioning in March 2008 and presents data from road and railway carriers. The e-podróżnik.pl website runs a nationwide bus ticket sales system. This search engine has been integrated with an app that can be used off line. The last update was done on 19 December 2017 and the Current Version, on 8 January 2018, is 1.2 and requires minimum Android 2.3. The app is offered by Teroplan S. A.

In the beginning of January 2018, up to 15,373 people had downloaded the application that is compatible with all mobile devices (Soroczyński, 2012). The official mobile app of the e-podroznik.pl website can be downloaded from google play. The App offers the possibility to search through the connections of over 600 Polish carriers [Trains, coaches and city public transport]. Find the best way to travel and buy tickets.

The following features and functions can be found in this application:

- Search for door-to-door connections [from address to address].
- Integrates long-distance and local public transport.
- Offers tickets for selected connections, including combined tickets.
- Use the navigation on the go.
- Plan journeys by public transport in the Czech Republic and Germany.

The main characteristics can be summarised:

- It is completely free.
- It has all the features of the web version of e-podroznik.pl.
- It saves recent searches and favourite routes.
- Integration of the account in the application with the account in the web version of e-podroznik.pl.
- Support for the sale of tickets without an identity document.
- Support for the promotional ticket fares.

## **Methodology**

The study involved 90 female and 64 male students - Management Faculty students at the Academy of Physical Education. J. Kukuczka in Katowice. Average age: 23.5; standard deviation: 3.16. The research was conducted at the turn of May and June 2017 using Google forms. Statistica 13.1 package from Dell Inc. was used for statistical analysis.

The research sample consisted of 16 % of rural population, 32 % of small towns' inhabitants of and more than half of inhabitants living in towns with more than a 100 thousand population.

For the survey purposes, the Google form tool was used to create an online questionnaire, and then an online survey was conducted by means of hyperlinks. The results available through the Google sheets have been transferred to Statistica 13 of StatSoft, Inc.. Single-choice closed questions and hierarchical questions were used in the questionnaire. For data analysis, descriptive statistics and quantitative techniques (Little 2013) were used. To verify the hypothesis that two qualitative features in a population are independent, the  $\chi^2$  test was used to compare the observed frequencies with the expected frequencies.

$$\chi^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i} \quad (1)$$

where:

$O_i$  = the number of observations of type  $i$

$E_i$  = the expected number of observations of type  $i$

Also, the test U-Manna-Whitney was used, which is a non-parametric equivalent of Student's t-tests:

$$Z = \frac{R_1 - R_2 - (n_1 - n_2)(n+1)/2}{\sqrt{n_1 n_2 (n+1)/3}} \quad (2)$$

where:

$R_1$  means the sum of the rankings awarded to the values of the first sample.

$R_2$  is the sum of the ranks given to the values of the second sample.

$n$  means the total number of observations ( $n = n_1 + n_2$ ).

## Research results

From our research, it emerged that the Internet is not only useful in planning a trip but also during and after the trip. In addition, to tracking news, receiving e-mails and notifications from Facebook, access to the web is useful for acquiring information necessary for travel and access to information on cloud computing and later to add new private information on social media. Tourists are able to check the weather forecast, timetables, look at services with maps. Having access to the Internet while traveling, tourists can change their accommodation reservations, buy rides, and keep in touch with their parents or friends. Connecting via Skype is cheaper than a phone, and on the Internet you cannot just send

e-mails, but also update the blog or Facebook, and in their way to report on the journey.

To understand better the role of the Internet while planning a trip by students, it was decided to find out the time the target group spent on the Internet outside of work or school per week. The aim is to have a better understanding of their virtual behaviour in their free time. Only 5 % of the researched group indicated that spent less than one hour. The largest number of respondents (42 %) used the Internet for at least 6 hours. This shows how important the Internet has become in recent years for our students.

In the question about the usefulness of the Internet for searching information about trip planning, searching for interesting tourist services [scale from 1 to 5 where 1 is not useful at all and 5 is very useful], - 98 % of the respondents indicated this usefulness, and the majority of them (68 %) pointed the highest degree. Such results are not surprising at all. The travel industry has very quickly begun to use the opportunities connected with the global network, and several dozen percent of e-commerce value relates to the tourism.

More diverse results we obtained in relation to the question about the specific behaviour of the respondents. In the question "Please rate how much you use the Internet to find interesting travel services," where 1 meant - "I do not use it at all", and 5 - "I use only the Internet ", 2 % of the respondents showed themselves as those who (using contemporary language) ostentatiously did not want to use the capabilities of the global network. In contrast, 37 % of the respondents used only the Internet for these purposes. The largest group (40 %) also appreciated the Internet's ability to find the interesting tourist services.

The results of the question about the need for using the Internet in a travel company, in comparison with the previous responses, should not be surprising. Nearly three quarters of the respondents (74 %) rated this need the highest, another 24 % indicated 4. Only 2 % chose option 3 on a five-point scale.

In the next points, the survey focused on the popularity of particular communication channels between the customer and the tourist company.

Although e-mail as a communication option is not the one of the fastest, it is still a very popular channel. Probably because just the electronic letter gives some sense of security that something is written "black on white". 83 % of the respondents stated that e-mail was needed or very needed. More than half of the respondents, 57 % rated this channel the highest.

However, less useful, in the respondents' opinion, is the discussion group on the company's website. Only 17 % indicated it as very important; 27 % as important and the largest – 37 % group - recognized that it was neither very important nor useless at all. To some extent, it is a shame because the discussion group could be something like FAQ or a dynamically growing knowledge base connected with company activities.

Chat on the company website was similarly evaluated. In this case, 17 % also thought that this channel was very important, 26 % rated its importance at 4 and 34 % at 3 on a scale from 1 to 5. It should be added that serious players in the banking market often use this communication channel with their customers.

The so-called social media has a great impact on the contemporary youth. Because the company's fanpage on the social portal was rated as a very important communication channel between the company and customer. Nearly half of the respondents (47 %) evaluated the fanpage at 5, another 31 % at 4. Only 3 % believed that the fanpage was not needed in the travel company.

On this occasion, it should be noted that the fanpage rating differed statistically the most from all the channels depending on gender ( $Z = 2.914$  at  $p=0.0036$ ): 56.7 % women and 33.3 % men described this means of communication as very important.

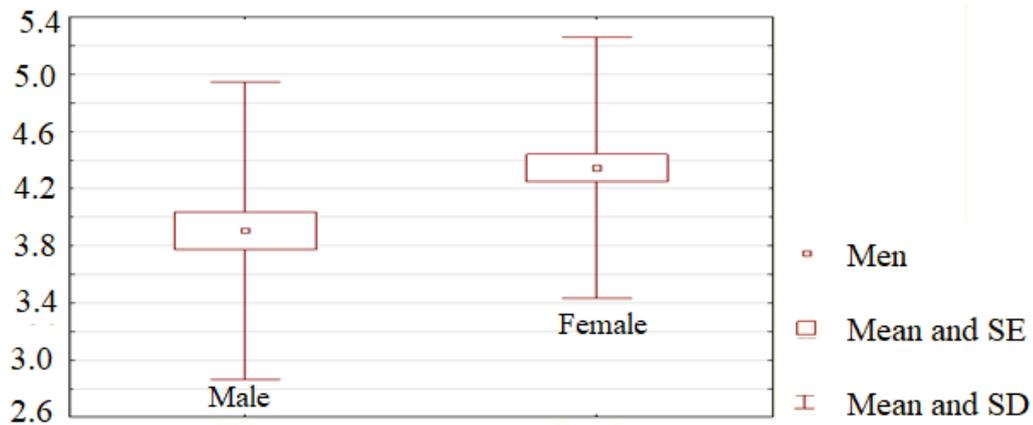


Figure 1. **Gender fanpage rating** (own source)

Figure 1 shows the average obtained from the answers of women and men [central point] and the average  $\pm$  standard error [box] and the average  $\pm$  standard deviation [whiskers]. Interestingly – differences in the assessment of the usefulness of social media can also be seen in terms of age. Dividing the studied population into two groups: younger [up to 22 years old] and older [at least 23 years old], statistically significant differences can also be noticed [ $Z = 1.95$   $p = 0.05$ ]. The younger group appreciated the role of a fanpage in a company and client communication.



Figure 2. Age fanpage rating (own source)

Figure 2 shows the average obtained from the answers of younger and older respondents [central point] and the average  $\pm$  standard error [box] and the average  $\pm$  standard deviation [whiskers].

The fact that e-mail communication is not interactive communication does not mean that customers do not expect a quick response. More than half of the respondents stated that they should receive the answer for their questions within 12 hours. Another 40 % expected answers up to 24 hours. So only a few percent did not pay attention to the speed of communication.

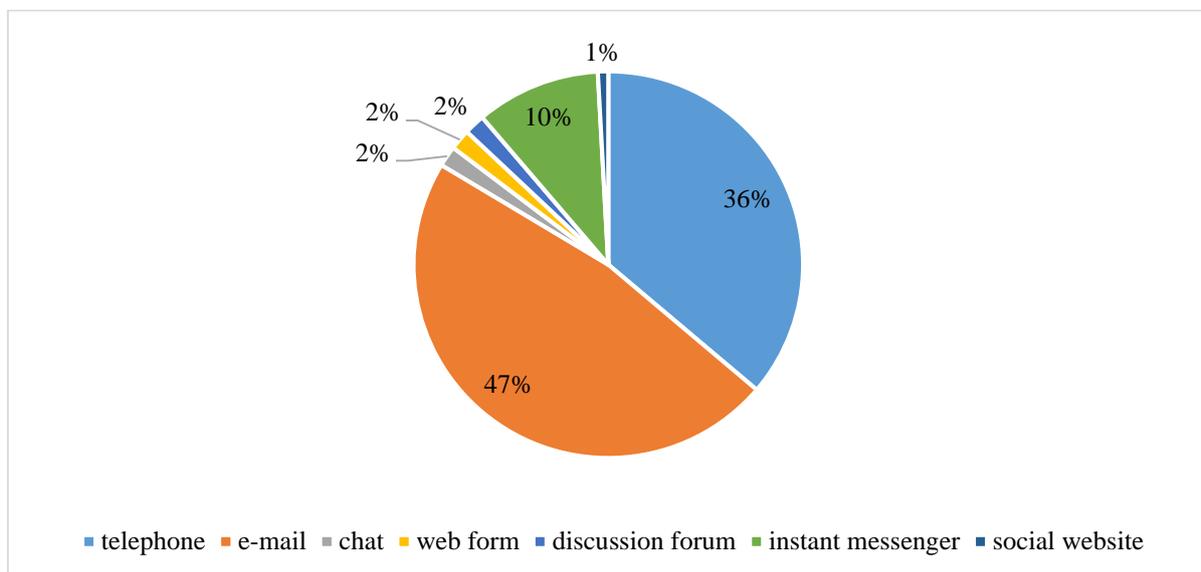


Figure 3. Interactive communication, % (own source)

The answers to the question about the favourite communication channel brought very interesting data.

“Specify, taking into account such a communication channels as: e-mail, telephone, a web form, instant messaging, a shop discussion forum; what would be your favourite way of communicating with your company?” Nearly half of the respondents (47 %) identified email as their favourite communication channel with the company. Over one third (36 %) chose the phone, and 10 % chose an instant messenger.

For years, email marketing has also related to the electronic mail. Many people have defined it simply as a spam. Despite the legal restrictions that come down to the fact that it is not permissible to send the unsolicited information electronically, anyway the customers still receive the advertising. Reality, however, is not so bad. The answers to the question about the frequency of receiving tourist advertising were as follows. The largest group (42 %) stated that they received such mails every few days. Almost one third (32 %) was of the opinion that every few weeks, 14 % said that at least 1 advertisement per day, while 12 % indicated that they did not get any.

Although many people treat all marketing activities as spam and throw them off without reading the content (54 %), however, there is a quite large group of respondents (38 %) who were interested in the content and 5 % were engaged enough to search on the Internet the advertised tourist service. Of the surveyed people, 3 % read selected emails if they were coming in the period when they made the travel decisions.

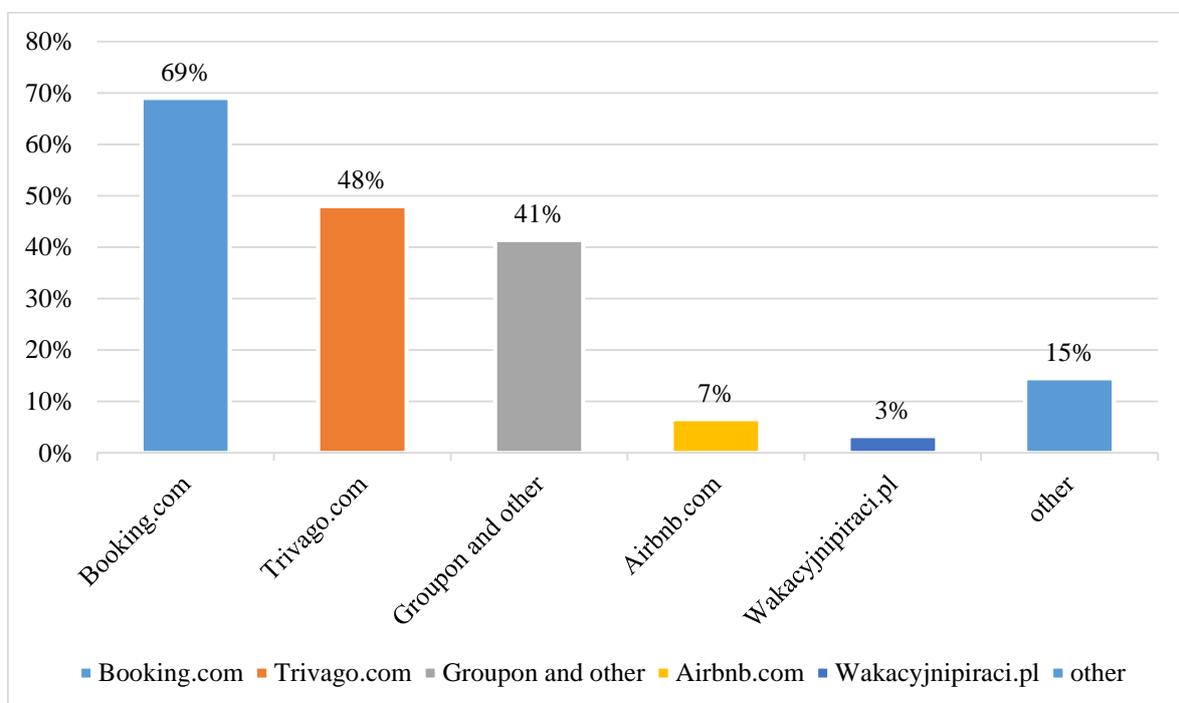


Figure 4. **Travel metasearch engine, %** (own source)

Obviously, the interesting issue is also the questions of the popularity of particular tourist portals. In the question of multiple choice “Which Internet services do you use to select the tourist services?”, there was the possibility to choose such options as Trivago.com, Booking.com, Groupon and the other group shopping, and another. It turned out that the most popular service during the survey period was Booking.com, which was indicated by 69 % of the respondents, 48 % of the surveyed chose Trivago.com, while less than 41 % indicated Groupon and similar. Much less popular (7 %), but only entering the Polish market, is Airbnb and Holidaypattern.pl (3 %). The other portals that already had only single indications included HRS, Itaka, Travelplanet, e-lodging, Fly4free, Esky, or Tripadvisor.

### **Conclusion**

Taking into account the answers broken down by gender, we can notice a similar structure of these in assessing the suitability of such communication channels on the client's line and a tourist company as a discussion group and chat. However, there are important differences in the case of e-mail and fanpage ratings. Almost 1/5 more women than men defined e-mail as a very important means of communication, and in the case of the fanpage, the difference was even greater [56.7 % female and 33.3 % male]. Statistically significant differences between the sexes were confirmed by the test U Manna-Whitney – for email  $Z = 2.797$  at  $p = 0.0051$ , and for the fanpage  $Z = 2.914$  at  $p=0.0036$ . There were also differences between a group of older and younger people. Younger respondents paid much more attention to social media.

Generally speaking, e-mail is a favourite means of communicating with a tourist company for women. More than half (54 %) the respondents identified it first. For a change, men were equally fond of the above method of communicating via the phone (39.5 %).

The popularity of websites for women and men is similar. The most popular service among women and men is booking.com. However, this portal was chosen by 57 % men and up to 77 % women. The other website is trivago.com: 47 % men and 48 % women.

Differences in the perception of websites are also visible in other studies. As to the question about the names of websites (spontaneous knowledge of up to 3 websites) related to online shopping, the first two websites had a similar number of responses: Allegro was mentioned by 73 % female and 69 % men.

Intensive changes in consumers' behaviour regarding tourism make us closely watch trends related to what should also be reflected in future research related to this subject.

### Acknowledgement

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# PAŠVALDĪBU VĒLĒŠANAS LATVIJĀ: PRIEKŠVĒLĒŠANU PROGRAMMU ANALĪZE

## *Municipality Elections in Latvia: Analysis of Pre-election Programs*

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**Abstract.** *The object of the research is the election of municipal governments (for cities of republican significance). The pre-election programmes of political parties, their associations and coalitions are analysed in the paper. The novelty of the research is determined by the fact that only pre-election programmes of political parties elaborated for the Saeima elections have been studied in Latvia so far, but there is no similar study on municipal elections. Voters, having become familiar with pre-election programmes of political parties, often recognise that these documents contain many uncertain and impossible promises. Assuming that the “quality” of party programmes could affect voter turnout and, consequently, the election results, it is possible to formulate the research problem: a different level of the specificity of the party pre-election programmes and its possible relation to the election results. In the research, by specificity (we will use this concept for the sake of convenience) we imply the relation between the number of promises, which can be assessed as concrete and realistic, and the total number of promises in the pre-election programmes. However, the aim of the research is to investigate the level of specificity of the party pre-election programmes and determine its relation to the results of the parties in municipal elections. The method of the content analysis has been used to evaluate the pre-election programmes. To achieve the aim of the research and determine whether there is a correlation between the level of specificity of the pre-election programmes and the results of the parties (votes obtained) in the municipal elections, Spearman’s rank correlation coefficient is used. In all cities (except two), the correlation between the two variables is markedly weak or even with a minus sign.*

**Keywords:** *content analysis, correlation analysis, municipality elections, political parties, pre-election programs.*

### **Ievads**

#### ***Introduction***

Tuvojoties 2017. gada pašvaldību vēlēšanām, šo rindu autors (kurš balsoja Rīgā) bija grūtas izvēles priekšā – par kuru no 11 sarakstiem atdot savu balsi. Pirmo soli spert bija vienkārši – tika atsijātas partijas, kuru ideoloģiskās nostādes neatbilst viņa pasaules uzskatam. Arī otro soli izdarīt bija viegli - malā tika nolikti saraksti, kuru līderu personības un publiskā retorika nelikās pieņemama (vai nu raisīja smaidu vai arī kaitināja). Tomēr šīs manipulācijas nedeva gaidīto rezultātu,

jo palika nevis viena, bet gan divas partijas, par kurām raksta autors būtu gatavs balsot. Šī iemesla dēļ nācās spert vēl trešo soli – iepazīties ar abu partiju priekšvēlēšanu programmām. Šī procedūra raisīja pārsteigumu, jo atklājās, ka abu partiju programmās ir daudz nekonkrētu un neizpildāmu solījumu. Šis atklājums mudināja iepazīties vēl arī ar citu politisko partiju priekšvēlēšanu programmām. Rezultāts bija līdzīgs. Šie “atklājumi” lika raksta autoram aizdomāties, vai priekšvēlēšanu programmu “kvalitāte” nav pētījuma vērtā problēma. Turklāt, bija salīdzinoši vienkārši noskaidrot, ka Latvijā līdz šim ir pētītas tikai Saeimas vēlēšanām sagatavotās politisko partiju priekšvēlēšanu programmas (Balcere, 2015), bet nav līdzīgu pētījumu par pašvaldību vēlēšanām. Zinot, cik daudz Latvijā ir pašvaldību, jau pašā sākumā (galvenokārt ierobežoto resursu dēļ) pētījuma autoram bija skaidrs, ka šī “nasta nav paceļama”. Šī iemesla dēļ tika veidota pētījuma “izlase”, iekļaujot tajā tikai pilsētu pašvaldības. Ņemot vērā Latvijas teritoriāli administratīvo iedalījumu un to, ka starp valsts 119 pašvaldībām ir 76 pilsētas, kļuva skaidrs, ka arī šī “nasta nebūs paceļama”. Tā kā starp 76 pilsētām 9 (Rīga, Jūrmala, Valmiera, Daugavpils, Rēzekne, Liepāja, Ventspils, Jelgava, Jēkabpils) ir republikas nozīmes pilsētas, tika pieņemts lēmums koncentrēties tikai uz tām (Republikas pilsētas un novadi, 2017; Latvijas pilsētas, 2017). Pētījuma sākuma stadijā bija iecerēts analizēt pēdējo trīs pašvaldību vēlēšanu programmas iepriekš minētajās 9 pilsētās. Tomēr, noskaidrojot, ka pēdējās 2017. gada pašvaldību vēlēšanās Centrālajā vēlēšanu komisijā iesniegto priekšvēlēšanu programmu skaits tuvojās simtam un pārliedzinoties, cik darbietilpīga ir programmu analīzes procedūra, tika pieņemts lēmums aprobežoties tikai ar 2017. gada pašvaldību vēlēšanām.

Ņemot vērā iepriekš teikto, pētījuma *problēma* ir dažāda partiju priekšvēlēšanu programmu konkrētības (lai raksturotu programmu “kvalitāti”, ērtības labad turpmāk lietosim tikai šo vienu jēdzienu) līmenis un šī līmeņa iespējamā saistība ar pašvaldību vēlēšanu rezultātiem republikas nozīmes pilsētās. Pētījuma *objekts* ir pašvaldību (republikas nozīmes pilsētu) domju vēlēšanas, bet pētījuma *priekšmets* – politisko partiju, to apvienību un koalīciju priekšvēlēšanu programmas.<sup>1</sup> Pētījuma *mērķis* ir izpētīt partiju priekšvēlēšanu programmās ietverto politiku solījumu konkrētības līmeni un noteikt tā saistību ar partiju rezultātiem pašvaldību vēlēšanās. Ar konkrētības līmeni pētījumā un rakstā tiek saprasta attiecība starp solījumu skaitu, kuru saturs ir vērtējams kā konkrēts un izpildāms, un kopējo solījumu skaitu priekšvēlēšanu programmās. Atbilstoši pētījuma mērķim, mēģināsim atbildēt uz trim jautājumiem. 1. Kādas pašvaldības

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<sup>1</sup> Republikas pilsētas domes un novada domes vēlēšanu likuma 15. pants nosaka, ka deputātu kandidātu sarakstus republikas nozīmes pilsētās var iesniegt, pirmkārt, reģistrēta politiska partija, otrkārt, reģistrētu politisko partiju reģistrēta apvienība, treškārt, divas vai vairākas reģistrētas politiskas partijas, kuras nav apvienojušās reģistrētā politisko partiju apvienībā (Republikas pilsētas domes un novada domes vēlēšanu likums, 2013).

iedzīvotāju dzīves jomas aptver politiku priekšvēlēšanu solījumi un uz kādām vēlēšanu grupām tie ir orientēti? Tiks veikta priekšvēlēšanu programmu satura analīze. 2. Vai konkrēto solījumu līmenis atšķiras dažādu politisko partiju un vēlēšanu apgabalu (pilsētu) priekšvēlēšanu programmās? Tiks aprēķināts partiju priekšvēlēšanu programmu konkrētības līmenis. 3. Vai pastāv saistība starp politiku solījumu konkrētības līmeni priekšvēlēšanu programmās un partiju rezultātiem pašvaldību vēlēšanās? Tiks aprēķināta sakarība (nosakot tās ciešumu) starp solījumu konkrētības līmeni partiju programmās katrā no 9 pilsētām un partiju rezultātiem vēlēšanās. Pētījumā tiek izvirzītas divas *hipotēzes*. 1. Partiju, kas sarakstus iesniegušas vairākās pilsētās, priekšvēlēšanu programmu konkrētības līmenis atšķiras. 2. Priekšvēlēšanu programmu konkrētības līmenis neietekmē partiju rezultātus vēlēšanās.

Lai sasniegtu izvirzīto mērķi un izpildītu nospraustos uzdevumus, pētījumā tiek izmantota sociālajās zinātnēs bieži lietotā kontentanalīzes jeb satura analīzes metode. Raksta turpinājumā lasītājs tiks iepazīstināts ar pētījuma metodoloģiju un rezultātiem.

### **Pētījuma metodoloģiskais ietvars** ***Methodological Framework of the Research***

Ir divi kontentanalīzes veidi: kvantitatīvā un kvalitatīvā. Ja kvantitatīvās satura analīzes gadījumā mēģina noteikt tikai, piemēram, tekstā lietoto vārdu, vārdu savienojumu vai teikumu skaitu, tad kvalitatīvās metodes izmantošanas gadījumā tiek veikta teksta interpretācija. Kvalitatīvās pieejas gadījumā dominē indikatīvā analīzes metode, bet kvantitatīvās – deduktīvā (Merten, 1995: 19). Pēc vācu pētnieka Filipa Meiringa domām (Mayring, 2010: 16-17), par kvantitatīvo kontentanalīzi var runāt gadījumos, kad, lai izvērtētu iegūtos datus, jēdzienus „pārvērš” skaitļos un, lai izpētītu kopsakarības, izmanto matemātiku. Visos pārējos gadījumos tiek lietota kvalitatīvā analīze. Velkot paralēles ar aptaujas anketās lietotajām skalām, varot teikt, ka kvalitatīvās analīzes gadījumā tiek izmantota nominālā skala, bet kvantitatīvās analīzes gadījumā intervāla un attiecību skala. Šādi tiek norādīts uz to, ka kvalitatīvajā pētījumā pētnieks mazāk orientējas uz mērīšanu, bet vairāk uz teksta saprašanu un tāpēc šo metodi varētu saukt arī par “hermeneitisko” satura analīzi, bet kvantitatīvo - par “empīrisku” teksta analīzi. Tomēr arī kvantitatīvās metodes izmantošanas gadījumā nevar pilnībā izvairīties no interpretācijas un konteksta analīzes, no iegūto datu nozīmes un kopsakarību apjēgšanas – tāpat līdz ar to arī no kvalitatīvās metodes klātbūtnes. Tieši to pašu var teikt par kvalitatīvo kontentanalīzi, jo šīs metodes izmantošanas gadījumā, savukārt, nav iespējams pilnībā iztikt bez kvantitatīvās satura analīzes. Turklāt abos gadījumos esot jāveido analīzes kategorijas. Ja kvantitatīvajā analīzē kategoriju veidošana notiek balstoties lielākoties teorijā, tad kvalitatīvās metodes

izmantošanas gadījumā tā galvenokārt balstās materiāla empīriskajā analīzē. Tomēr ir gandrīz neiespējami strikti nodalīt abas pieejas.

Praksē lielākoties nākas izmantot jauktu pieeju un tikai pētījuma noslēgumā var sākt vērtēt, piemēram, kāda procedūra dominē kategoriju veidošanā. Tieša un skaidra abu metožu nodalīšana ir praktiski neiespējama. Abas metodes var mēģināt pretnostatīt teorētiski, bet ne praktiski (Früh, 2017: 67).

Ņemot vērā iepriekš teikto, nākas secināt, ka arī raksta autora veiktajā pētījumā izmantotās empīrisko datu analīzes metodes ir sarežģīti klasificēt. Pavisam droši var apgalvot, ka ir lietota kvantitatīvā pieeja, Tieši šāda tipa analīze tika izmantota, lai izpildītu vienu no pētījuma uzdevumiem – veikt pilsētu domju vēlēšanu programmu satura analīzi. Viens no kvantitatīvās kontentanalīzes tipiem (Мертоп, 2006: 723) paredz vienkāršu “simbolu” jeb atsevišķu atslēgas vārdu, vārdu savienojumu vai teikumu saskaitīšanu. Šāda analīze ļāva izpētīt, cik liela uzmanība (noteikt tās apjomu) partiju priekšvēlēšanu programmās tika pievērsta tai vai citai problēmai, tēmai, kā arī noskaidrot tās iedzīvotāju grupas uz kurām galvenokārt ir vērsta priekšvēlēšanu aģitācija.

Savukārt kvalitatīvās kontentanalīzes elementi tika izmantoti divu citu pētījuma uzdevumu izpildē. Viens no tiem paredzēja izpētīt, vai konkrēto solījumu līmenis atšķiras dažādu politisko partiju un vēlēšanu apgabalu priekšvēlēšanu programmās. Otrs - vai pastāv saistība starp politiķu solījumu konkrētības līmeni priekšvēlēšanu programmās un partiju rezultātiem pašvaldību vēlēšanās. Lai to izdarītu, vispirms bija jānosaka solījumu konkrētības līmenis, kas nav iespējams bez kvalitatīvās satura analīzes metodikas izmantošanas.

Kontentanalīzes procedūra ietver vairākus soļus. Pirmkārt, analīzes kategoriju izdalīšana. Šī procedūra paredz teksta analīzes virzienu iezīmēšanu, noteiktu teorētisku konstrukciju radīšanu. Analīzes kategoriju izdalīšanas pamatā ir pētījuma mērķis, uzdevumi, hipotēzes, problēmas konceptuālais redzējums. Otrkārt, kodēšanas vienību noteikšana (kodēšanas vienība var būt vārds, teikums, arī tēma), kas atbilst iepriekš izdalītajām analīzes kategorijām. Nosakot kodēšanas vienības, ļoti būtiski ir izstrādāt klasifikatoru jeb rokasgrāmatu. Klasifikatorā, cik vien iespējams detalizēti un precīzi, tiek izklāstīta kodēšanas procedūra. Ar šī rīka palīdzību tiek “meklēts” analīzes kategorijas raksturojošs, atbilstošs empīriskais “materiāls”. Treškārt, teksta kodēšana, iegūto datu apstrāde un analīze (Atteslander, 2010: 203-205; Готлиб, 2005: 329-337).

Izdalot kvantitatīvā pētījuma analīzes kategorijas, autors vadījās no pieņēmuma, ka pašvaldību vēlēšanās, rakstot priekšvēlēšanu programmas, politiķiem vajadzētu piedāvāt saviem vēlētajiem (attiecinīgās pašvaldības iedzīvotājiem) nozīmīgu jautājumu un problēmu risinājumu. Programmās nevajadzētu ietvert nacionāla līmeņa jautājumus (piemēram, valsts dalība NATO vai tautas vēlēts prezidents). Likuma “Par pašvaldībām” 15. pants, kas nosaka pašvaldību autonomās funkcijas, paredz plašu šo funkciju klāstu, piemēram,

organizēt komunālos pakalpojumus, teritorijas labiekārtošanu, gādāt par izglītību un rūpēties par kultūru, nodrošināt veselības aprūpes pieejamību un sociālo palīdzību, sniegt palīdzību dzīvokļa jautājuma risināšanā, sekmēt saimniecisko darbību, nodrošināt sabiedrisko kārtību, organizēt sabiedriskā transporta pakalpojumus u.c. pienākumus (Par pašvaldībām, 2015).

Daudz sarežģītāk bija ar analīzes kategoriju veidošanu kvalitatīvās analīzes gadījumā. Pētījuma procesā netika veidots klasifikators, jo kategoriju precizēšanai un definēšanai var izmantot vairākas pieejas. To var darīt balstoties teorijā (teorijā balstīta pieeja) un to var darīt balstoties analizējamajā materiālā (datos balstīta pieeja) (Atteslander, 2010: 211-214). Tā kā priekšvēlēšanu programmās (lai arī tēmas atkārtojas) solījumi ir ļoti dažādi, šajos dokumentos labākajā gadījumā var mēģināt saskatīt tendences un šai analīzē nez vai var palīdzēt teorija. Šī iemesla dēļ analīzi nācās veikt, balstoties galvenokārt empīriskajā materiālā un izmantojot tikai pieredzi nevis teoriju, tātad - pielietojot datos balstīto pieeju. Varētu teikt, ka tieši solījumu lielā daudzveidība radīja pārlicību par klasifikatora izveides ne tikai nelietderību, bet arī neiespējamību. Iepriekš minētie apsvērumi bija pamatā divu analīzes kategoriju izdalīšanai, proti, partiju programmās ietvertu politiķu solījumu analīzē pētījumā tika izmantotas divas skalas: konkrēts – nekonkrēts un izpildāms - neizpildāms. Pirmā skala tika “operacionalizēta” mēģinot atbildēt uz diviem jautājumiem. 1. Vai solījums orientēts precīzi definētai pašvaldības iedzīvotāju grupai? 2. Cik detalizēti solījumā fiksēti veicamie darbi? Līdzīgi arī otrās skalas lietošanas gadījumā analizējot programmās ietvertos solījumus bija jāatbild uz diviem jautājumiem. 1. Vai solījums atbilst pašvaldības kompetencei, ko nosaka likums “Par pašvaldībām”? 2. Vai domes budžeta līdzekļi ir pietiekami solījuma izpildei?

Kā kodēšanas vienība pētījumā tika izmantots teikums, jo visbiežāk konkrēts piedāvājums ir izteikts viena teikuma robežās. Retāk sastopami gadījumi, kad, lai formulētu partijas piedāvājumu, tiek izmantoti vairāki teikumi vai arī, kad vienā teikumā ir ietverti divi solījumi. Pirmajā gadījumā - arī vairāki teikumi nemaina piedāvājuma būtību, otrajā – teikums tiek sadalīts un tiek kodēti kā divi (vai vairāki) piedāvājumi. Praksē tas nozīmēja, ka priekšvēlēšanu programmās solījums var būt gan konkrēts un izpildāms, gan nekonkrēts un neizpildāms, gan arī konkrēts, bet neizpildāms. Piemēram, Jēkabpilī kā konkrēti un izpildāmi tika vērtēti šādi solījumi: “Izveidosim velo parku aktīvai atpūtai” (Gods kalpot mūsu Latvijai); “Veiksim Jēkabpils Valsts ģimnāzijas sporta zāles, fasādes un iekštelpu remontu” (Vienotība); “Izveidosim mūsdienu prasībām atbilstošu atskurbtuvi” (Vienotība); “Ierīkosim pacelāju cilvēkiem ar īpašām vajadzībām A.Žilinska Jēkabpils mūzikas skolā.” (Jēkabpils Reģionālā partija); “70 % atlaide vienas interešu izglītības programmas apmācībai katram bērnam” (Nacionālā apvienība “Visu Latvijai!” – “Tēvzemei un Brīvībai/LNNK”).

Savukārt kā nekonkrēti un neizpildāmi vai arī kā konkrēti, bet neizpildāmi tika vērtēti šādi solījumi, piemēram, Rēzeknē: “Iztāsimies no NATO bloka, pieņemsim neitralitātes hartu (kā Šveice)”; “Mainīsim valsts politiskās pārvaldes formu, padarot Latviju par prezidentāri parlamentāru republiku. Valsts prezidenta vēlēšanās jāpiedalās visai Latvijas tautai” (Eiroskeptiķu Rīcības partija). Arī šādi solījumi Jēkabpilī un Rēzeknē: “Turpināsim attīstīt Jēkabpils reģionālo slimnīcu, no ES fondiem piesaistot 5 miljonus eiro” (Jēkabpils Reģionālā partija); “Rēzeknes iedzīvotājam draudzīgas, modernas pilsētvides izveide un attīstība” (Partija “Vienoti Latvijai”); “Ienākumu pārdale par labu pilsētai no dzelzceļa tranzīta nozares.” (Partija “Savienība Latgales sirds”. Vai arī šādi solījumi Jūrmalā: “Ūdens tūrisma attīstība pilsētā” (Saskaņa); “Ciešāka sadarbība ar Jūrmalas uzņēmējiem” (Saskaņa); “Atbalstīsim jaunās ģimenes” (Nacionālā apvienība); “Paplašināt pabalstu klāstu senioriem un ģimenēm ar bērniem” (Gods kalpot mūsu Latvijai).

Kontentanalīzi iespējams veikt divos veidos (Atteslander, 2010: 215-222). Klasiskā jeb manuālā kontentanalīze paredz, ka empīriskās informācijas kodēšanu veic pētnieks (vai īpaši apmācīts cilvēks – eksperts). Otra pieeja paredz datortehnikas un speciālas programmatūras izmantošanu. Empīriskā materiāla salīdzinoši nelielais apjoms un nepieciešamība, vērtējot politiķu solījumus ņemt vērā kontekstu, noteica to, ka priekšvēlēšanu programmu analīzē tika lietota pirmā pieeja.

Veicot kontentanalīzi, ir svarīgi novērtēt iegūto rezultātu ticamību. Šī iemesla dēļ pētījumā kodēšana tika veikta atkārtoti, iesaistot ekspertus. Atkārtoto kodēšanu veica divi raksta autora RTU Humanitārā institūta kolēģi (Dr.sc.pol. un Mg. hist.). Priekšvēlēšanu programmas starp abiem ekspertiem tika sadalītas izmantojot vienkāršo nejaušo izlasi. Lai novērtētu, vai atkārtotais mērījums dod tādus pašus rezultātus, tika izmantots Kapas koeficients (Kappa coefficient). Koeficienta vērtība tika aprēķināta dalot kodēto solījumu skaitu, kas abās kodēšanas reizēs tika iekļauti vienā un tajā pašā kategorijā, ar kopējo kodēto solījumu skaitu. Ir pieņemts uzskatīt, ka rezultāti ir ar augstu ticamības pakāpi, ja koeficienta vērtība ir  $\geq 0,70$  (Atteslander, 2010: 206). Aprēķinos iegūtā vidējā koeficienta vērtība ir 0,97, kas vērtējama kā augsta un apliecina rezultātu ticamību.<sup>2</sup>

Lai sasniegtu pētījuma mērķi, tika formulēts uzdevums noteikt vai pastāv sakarība starp priekšvēlēšanu programmu konkrētības līmeni (konkrēto un izpildāmo solījumu attiecība pret nekonkrētajiem un neizpildāmajiem, kā arī konkrētiem, bet neizpildāmiem) un partiju rezultātiem (iegūtajām vēlēšanu balsīm) pašvaldību vēlēšanās. Šim nolūkam pētījumā tika izmantots Spīrmena rangs

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<sup>2</sup> Pilsētās koeficienta vērtības bija: Rīga: 0,99; Jūrmala: 0,95; Rēzekne: 0,94; Jēkabpils: 0,92; Ventspils: 0,99; Valmiera: 0,96; Daugavpils: 0,99; Liepāja: 0,99; Jelgava: 0,97.

korelācijas koeficients (Spearman's correlation coefficient). Šis koeficients ( $r$ ) mēra sakarības virzienu starp diviem mainīgajiem un to, cik tā ir cieša. Koeficienta vērtība var svārstīties diapazonā no 0 (sakarības nav) līdz +/- 1. Ja koeficients  $r$  ir ar mīnuss zīmi, tad korelācija ir negatīva (t.i., pieaugot vienam mainīgajam, otrs mainīgais samazinās), ja ar pluss zīmi – pozitīva. Ja koeficienta  $r$  vērtība ir tuvu +1, var runāt par spēcīgu korelāciju – sakarība starp pazīmēm ir gandrīz viennozīmīga un nejaušas novirzes iespējamība reta. Ja koeficienta vērtība ir tuvu 0, tad korelācija ir vāja – sakarība ir haotiska un neprognozējama (Хили, 2005: 429-433).

Pētījumā tika izanalizētas 88 partiju programmas (sk. 1. tab.). Visvairāk (13) to bija Daugavpilī, bet vismazāk – Valmierā (6). Visvairāk 5 % barjeru pārvarējušo sarakstu ir Jēkabpilī (9 no 10), vismazāk – Ventspilī (2 no 7). Piecu procentu barjeru pārvarējušo sarakstu skaits vidēji ir 40,9 %.

### **Politisko partiju priekšvēlēšanu programmu analīze** *Analysis of Pre-election Programmes of Political Parties*

Viens no pētījuma uzdevumiem bija veikt pilsētu domju vēlēšanu programmu satura analīzi, lai noskaidrotu, kādas pašvaldības iedzīvotāju dzīves jomas aptver politiķu priekšvēlēšanu solījumi un uz kādām vēlēšanu grupām tie galvenokārt ir orientēti. Lielākā daļa priekšvēlēšanu programmu (53 no 88) ir strukturētas – atsevišķas to sadaļas ir izdalītas ar attiecīgo tematiku raksturojošiem virsrakstiem. Analīzē tika izmantoti atslēgas vārdi, kurus var atrast šajos virsrakstos. Visbiežāk (65 reizes) virsrakstos skartā tēma ir vide, sākot no vēlētajā mājokļa un pilsētas infrastruktūras līdz pat vides aizsardzībai (mūsu mājas, par ērtu satiksmi, pilsētvide, teritorijas labiekārtošana, ekoloģija). Kas galvenokārt slēpjas aiz šī atslēgas vārda - vide? Programmās var atrast solījumus sakārtot un/vai atjaunot dzīvojamo fondu (38 saraksti), piemēram, jaunu māju (īres namu, municipālo, sociālo māju) būvniecība, ēku siltināšana. Sekojot *Saskaņas* piemēram Rīgā, arī daudzas citas partijas vairākās pilsētās sola sakārtot iekšpagalmus (23 saraksti) un izbūvēt veloceļņus (14 saraksti). Populāri ir arī solīt remontēt ceļus, ielas un izbūvēt autostāvvietas (58 saraksti). Tomēr topa augšgalā ir solījumi uzbūvēt vai arī renovēt un kapitāli izremontēt dažādas sabiedriski nozīmīgas celtnes un objektus (74 piedāvājumi, daudzos sarakstos arī vairāki). Tā, piemēram, tiek solīts uzbūvēt koncertzāles, muzejus, skolas, stadionus, ledus halles, peldbaseinus, kartodromus, bērnu dārzus, zoodārza ēku u.c. objektus.

1. tab. **Priekšvēlēšanu programmu skaits un vēlēšanu rezultāti** (autora veidota)  
*Table 1 Number of Pre-election Programmes and the Election Results*  
 (constructed by the author)

Pilsētas	Priekšvēlēšanu programmu skaits	5% barjeru pārvarējušo sarakstu skaits (abs.sk)	5% barjeru pārvarējušo sarakstu skaits (%)
Daugavpils	13	3	23,1
Jūrmala	12	4	33,0
Rīga	11	5	45,5
Rēzekne	11	4	36,4
Liepāja	10	3	30,0
Jēkabpils	10	9	90,0
Jelgava	8	6	75,0
Ventspils	7	2	28,6
Valmiera	6	4	66,7
	∑ 88	∑ 36	40,9

Daudz retāk (39 saraksti) nekā videi, programmu virsrakstos uzmanība tiek pievērsta uzņēmējdarbībai (piemēram, atbalsts uzņēmējdarbībai, ekonomiskā attīstība). Aiz uzņēmējdarbības seko (37 saraksti) sociālā joma (piemēram, sociālā palīdzība, sociālā atbildība, sociālie pakalpojumi, sociālā drošība, sociālie jautājumi, sociālā sfēra). Ļoti bieži varam atrast arī tādus atslēgas vārdus kā sports (34 saraksti), izglītība (32 saraksti), kultūra (30 saraksti). Uzmanība tiek pievērsta arī pilsētas pārvaldei (25 saraksti), drošībai (drošība uz ielām, sabiedriskā kārtība) (14 saraksti), bet visretāk – ģimenei (tikai 5 saraksti). Sadaļās “pilsētas pārvalde” galvenais solījums ir izvērtēt iepriekšējās vadības darbu, un visbiežāk lietotais vārds – audits. Savukārt, centrālā drošības tēma partiju programmās ir videonovērošanas sistēmu pilnveidošana, precīzāk – jaunu videonovērošanas kameru uzstādīšana, pašvaldības policijas darba uzlabošana, Rēzeknē - arī tās darbības atjaunošana.

Pētījumā tika skaidrots, uz kādām vēlēšanu jeb sociālajām grupām politiķu solījumi ir orientēti. Izanalizējot visus programmās ietvertos solījumus, nākas secināt, ka lielākā daļa no tiem ir orientēti uz uzņēmējiem (57 solījumi, lielākā daļa no kuriem atkarojas). Visbiežāk tiek piedāvātas nodokļu atlaides, industriālo parku izveide, investoru un ES fondu naudas piesaiste. Uzmanības centrā ir arī pensionāri jeb seniori (tiek lietoti abi apzīmējumi) un izglītības darbinieki. Pensionāriem tiek piedāvātas dažādas atlaides un palīdzība. Piemēram, tiek piedāvāta piemaksa pensijai, bezmaksas braukšana (vai vismaz atlaides) sabiedriskajā transportā, atlaides pirts apmeklēšanā, līdzmaksājumi ārstēšanās izdevumiem, bezmaksas medicīniskā pakete (varam atrast 52 piedāvājumus, kuri atkal atkarojas). Savukārt pedagogiem (programmās ir viss spektrs: augstskolu

pasniedzēji, vispārīzglītojošo skolu skolotāji, bērnu dārzu jeb pirmskolas iestāžu pedagogi) tiek solīts algu pielikums, piemaksas pie algas, izdienas pensija, veselības apdrošināšana, skolu rekonstrukcija. Kopumā programmās var atrast 50 šādus un līdzīgus piedāvājumus, kuri, protams, atkārtojas. Dažās programmās netiek aizmirsti arī izglītojamie - studentiem tiek piedāvātas stipendijas, skolniekiem naudas balvas. Skolēniem tiek piedāvātas arī brīvpusdienas (28 saraksti) un bezmaksas sabiedriskais transports (21 saraksts).

Priekšvēlēšanu programmās visretāk pieminētā vēlētāju grupa ir jaunatne. Tikai 4 programmās jauniešiem ir atvēlēta atsevišķa sadaļa (Liepājas partija, Liepāja kvadrātā, arī Vienotība Liepājā un Latgales partijas, Nacionālās apvienības un Vienotības kopējais saraksts Rēzeknē).

Analīze tiek turpināta ar priekšvēlēšanu programmās ietverto politiku solījumu saviem vēlētajiem vērtēšanu. Pirms izvērtēt solījumu konkrētības līmeni dažādu politisko partiju priekšvēlēšanu programmās un katrā no vēlēšanu apgabaliem atsevišķi, tiek aplūkota "kopaina" visās 9 pilsētās. Apkopojot datus par visām 88 programmām, varam secināt, ka konkrētie solījumi tajās veido tikai aptuveni trešdaļu (33 %). Tai pat laikā vērojamas būtiskas atšķirības programmu konkrētības līmenī gan starp politiskajām partijām, gan starp vēlēšanu apgabaliem. Turklāt pēc šī parametra atšķiras arī vienas un tās pašas partijas programmas dažādās pilsētās.

Ja aplūko to partiju programmas, kas vēlēšanās startēja vismaz trīs apgabalos, varam secināt, ka vidējais konkrēto solījumu līmenis nevienai no partijām nav lielāks par 50 % (sk. 2. tabulu). Pirmās trīs vietas ieņem *Vienotība*

(44,4 %), *Saskaņa* (43,1 %) un *Gods kalpot mūsu Latvijai* (38,8 %). Tai pat laikā konkrēto solījumu līmenis programmās atsevišķās pilsētās partijām ir ļoti atšķirīgs. Vislielākās atšķirības starp pilsētu ar vislielāko konkrēto solījumu skaitu un pilsētu ar vismazāko konkrēto solījumu skaitu priekšvēlēšanu programmās ir četrām partijām. *Vienotībai* starpība starp Valmieru un Daugavpili ir 72,5 %, *Saskaņai* starp Jelgavu un Jēkabpili 60,2 %, *ZZS* starp Jelgavu un Daugavpili 59,1 %, bet *Reģionu apvienībai* starp Rēzekni un Liepāju 54,1 %. Pārējo 5 partiju priekšvēlēšanu programmām šīs atšķirības, lai arī ievērojamas, tomēr ir mazākas par 50 %.

Tas, ka vidējais konkrēto solījumu līmenis nevienai no partijām nav lielāks par pusi no visiem solījumiem, neizslēdz to, ka atsevišķu partiju programmās vairākās pilsētās konkrēto solījumu skaits tomēr pārsniedz nekonkrēto un konkrēto, bet neizpildāmo solījumu skaitu. Ar tik augstu konkrētības līmeni ir trīs *Saskaņas* programmas (Jūrmalā (60,4 %), Rēzeknē (61,1 %) un Jelgavā (78,1)) un divas *Vienotības* programmas (Rīgā (85,7 %) un Valmierā (86,8 %)). Pa vienai programmai arī *Jēkabpils Reģionālai partijai* (64,7 %), *Gods kalpot mūsu Latvijai* (66,7 %) Jēkabpilī, *ZZS* (73,0 %) Jelgavā; Apvienībai *Iedzīvotāji* (65,2 %) Rēzeknē, kā arī partiju koalīcijas (*Latvijas Reģionu apvienība*, *Latvijas attīstībai*,

*Alternative*) sarakstam Rēzeknē (65,9 %). Iepriekš veiktā analīze ļauj izdarīt pieņēmumu, ka partijām ir atšķirīga interese par dažādiem vēlēšanu apgabaliem vai arī atšķiras priekšvēlēšanu programmu veidotāju komandu kompetence un līdz ar to arī gala rezultāts.

2. tab. **Politisko partiju priekšvēlēšanu programmu konkrētības līmenis** (autora veidota)  
*Table 2 Level of Specificity of Political Party Pre-election Programmes*  
 (constructed by the author)

Partijas (saraksti iesniegti vismaz 3 pilsētās)	Pilsētu skaits, kurās iesniegtas programmas	Solījumu skaits visās programmās (abs.sk.)	Solījumu skaits vidēji vienā programmā (abs. sk.)	Konkrētības līmenis** visās programmās (%)
Vienotība	9	151/189*	16,8/21,0	44,4
Saskaņa	9	129/170	14,3/18,9	43,1
Gods kalpot mūsu Latvijai	5	66/100	13,2/20,0	39,8
Latvijas attīstībai	4	43/77	10,8/19,3	35,8
Reģionu apvienība	6	59/119	9,8/19,8	33,1
Jaunā Konservatīvā partija	3	41/87	13,7/29,0	32,0
ZZS	7	75/173	10,7/24,7	30,2
Nacionālā apvienība	8	74/220	9,3/27,5	25,2
No sirds Latvijai	5	43/138	8,6/27,6	23,8
KPV LV	5	11/94	2,2/18,8	10,5
Eiroskeptiķu Rīcības partija	4	6/68	1,5/17,0	8,1

\* Šķērsvērtības kreisajā pusē konkrētie un izpildāmie, labajā pusē nekonkrētie un neizpildāmie vai konkrētie, bet neizpildāmie solījumi

\*\* Ar konkrētības līmeni pētījumā tiek saprasta attiecība starp solījumu skaitu, kuru saturs ir vērtējams kā konkrēts un izpildāms, un kopējo solījumu skaitu

Viens no iespējamajiem cēloņiem šādi selektīvai pieejai varētu būt partiju pastiprināta interese tieši par valsts lielākajām pilsētām. Piemēram, *Saskaņas* politiķi pirms vēlēšanām neslēpa, ka mēģinās uzvarēt ne tikai Rīgā un Rēzeknē, bet arī Daugavpilī, Liepājā un Jūrmalā, sūtot uz šīm pilsētām partijas “spices” politiķus - Saeimas deputātus. Savukārt *Zaļo un zemnieku savienība* jau ilgstoši “par savējo” uzskata Jelgavu. Iegūtie dati un veiktā analīze ļauj secināt, ka ir apstiprinājusies pirmā hipotēze par to, ka partiju, kas sarakstus iesniegušas vairākās pilsētās, priekšvēlēšanu programmu konkrētības līmenis atšķiras un par dažām pilsētām tām ir lielāka interese.

Vēl viens pētījuma uzdevums bija noteikt, vai pastāv sakarība starp konkrētības līmeni partiju priekšvēlēšanu programmās un partiju rezultātiem pašvaldību vēlēšanās. Lai to izdarītu, tika lietots Spīrmena rangu korelācijas koeficients ( $r$ ). Katrā pilsētā partijām tika piešķirts rangs, proti, tās tika izkārtotas atbilstoši konkrēto solījumu līmenim priekšvēlēšanu programmās, un atbilstoši saņemtajām balsīm (procentos) vēlēšanās. Tikai divās pilsētās – Rīgā ( $r=0,71$ ) un Daugavpilī ( $r=0,74$ ) koeficienta vērtība liecina par pozitīvas, nozīmīgas korelācijas esamību. Visās pārējās pilsētās korelācija starp abiem mainīgajiem ir izteikti vāja (izņemot Jūrmalu) vai pat ar mīnuss zīmi.<sup>3</sup> Tas, ka tikai divās pilsētās koeficienta vērtība norāda uz nozīmīgas korelācijas esamību, pēc pētījuma autora domām, drīzāk ir interpretējama kā nejaušība, jo pārējās 7 pilsētās ir vērojama diametrāli pretēja aina. Pētījuma rezultāti liek piekrist Latvijā populārajam apgalvojumam, ka vēlētāji priekšvēlēšanu programmas lielākoties nelasa. Var izteikt pieņēmumu, ka partijas to ir sapratušas un pieņēmušas zināšanai, un tāpēc atļaujas pret programmu rakstīšanu izturēties nepietiekami nopietni un atbildīgi. Programmas drīzāk tiek uzlūkotas kā formāls priekšnosacījums tam, lai varētu piedalīties vēlēšanās. Tas, ka nedz vēlētāji, nedz politiķi nevelta pietiekami lielu uzmanību programmām, norāda uz to, ka vēlētāji partijas, par kurām balsot, izvēlas pēc citiem kritērijiem. Atbildi uz jautājumu, kas galvenokārt ietekmē vēlētāju izvēli (vai tie ir sarakstu līderi vai priekšvēlēšanu reklāma medijos, vai vēl kaut kas cits), šis pētījums nesniedz. Tomēr šī pētījuma rezultāti ļauj secināt, ka arī otra pētījumā izvirzītā hipotēze par to, ka priekšvēlēšanu programmu konkrētības līmenis neietekmē partiju rezultātus vēlēšanās, ir apstiprinājusies. Šis secinājums ir attiecināms vismaz uz 2017. gadā notikušajām pašvaldību vēlēšanām. Tai pat laikā jāpiebilst, ka, lai izdarītu vispārinājumus un pārbaudītu, vai nozīmīgas korelācijas esamība Rīgā un Daugavpilī ir interpretējama tikai kā nejaušība, ir plašāka pētījuma uzdevums.

### Secinājumi Conclusions

1. Lielākā daļa priekšvēlēšanu programmu ir strukturētas un atsevišķas to sadaļas ir izdalītas ar attiecīgo tematiku raksturojošiem virsrakstiem. Visbiežāk skartā tēma sadaļu virsrakstos ir vide, sākot no vēlētāja mājokļa un pilsētas infrastruktūras līdz pat vides aizsardzībai. Daudz retāk (dilstošā secībā) uzmanība tiek pievērsta uzņēmējdarbībai, sociālajai jomai, sportam, izglītībai, kultūrai, pilsētas pārvaldei, drošībai, bet vismazāk – ģimenei. Tomēr izanalizējot visus programmās ietvertos solījumus, nākas secināt, ka

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<sup>3</sup> Pilsētās koeficienta vērtības bija: Jūrmala:  $r= 0,52$ ; Rēzekne:  $r= 0,20$ ; Liepāja:  $r= 0,15$ ; Jelgava:  $r= 0,14$ ; Ventspils:  $r= -0,46$ ; Valmiera:  $r= -0,31$ ; Jēkabpils:  $r= -0,08$

- lielākā daļa no tiem ir orientēti uz uzņēmējiem. Uzmanības centrā ir arī pensionāri un izglītības darbinieki. Visretāk pieminētā vēlētāju grupa ir jaunieši.
2. Apkopojot datus par visām programmām, tiek secināts, ka konkrētie solījumi ir aptuveni trešdaļa. Tai pat laikā vērojamas būtiskas atšķirības programmu konkrētības līmenī gan starp politiskajām partijām, gan starp vēlēšanu apgabaliem. Turklāt pēc šī parametra atšķiras arī vienas un tās pašas partijas programmas dažādās pilsētās. Var izteikt pieņēmumu, ka par atsevišķām pilsētām partijām ir lielāka interese.
  3. Viens no centrālajiem pētījuma uzdevumiem bija atbildēt uz jautājumu, vai pastāv sakarība starp konkrētības līmeni partiju programmās un partiju rezultātiem vēlēšanās. Tikai divās pilsētās Spīrmēna rangu korelācijas koeficienta vērtība liecina par pozitīvas, nozīmīgas korelācijas esamību, ko drīzāk, pēc pētījuma autora domām, varētu interpretēt kā nejaušību. Visās pārējās 7 pilsētās korelācija starp abiem mainīgajiem ir izteikti vāja vai pat ar mīnuss zīmi. Veiktie aprēķini ļauj secināt, ka pētījumā izvirzītā hipotēze ir apstiprinājusies - priekšvēlēšanu programmu konkrētības līmenis neietekmē partiju rezultātus republikas nozīmes pilsētu domju vēlēšanās.
  4. Var izteikt pieņēmumu, ka pētījuma rezultāti apstiprina Latvijā populāro apgalvojumu, ka vēlētāji priekšvēlēšanu programmas lielākoties nelasa. Tāpat var izteikt vēl vienu pieņēmumu - partijas to ir sapratušas un pieņēmušas zināšanai, un tāpēc atļaujas pret programmu rakstīšanu izturēties nepietiekami nopietni un atbildīgi. Programmas drīzāk tiek uzlūkotas kā formāls priekšnosacījums tam, lai varētu piedalīties vēlēšanās.

### **Summary**

The paper introduces readers to the research, the object of which is the election of Latvian municipal governments (for cities of republican significance). The focus of the research is the analysis of the pre-election programmes of political parties, their associations and coalitions. The aim of the research is to investigate the level of specificity of the party pre-election programmes and determine its relation to the results of the parties in municipal elections. The method of content analysis has been used within the framework of the research.

To reach the goal of the research, three questions have been addressed: 1) Which municipality residents' spheres of life do the politicians' pre-election promises cover and which groups of voters are they oriented to? The content analysis of the pre-election programmes has been performed; 2) Is the level of concrete promises different in pre-election programmes of different political parties and election districts? The level of specificity of party pre-election programmes has been determined; 3) Is there a correlation between the level of specificity of politicians' promises in pre-election programmes and the results of parties in municipal elections? The correlation (identifying the density) has been determined between the level of specificity of the promises in the party programmes in each of the nine cities and the results of the parties in the elections.

It should be noted that most pre-election programmes are well structured, and there are also separate sections with titles characterising the relevant topics discussed. The most common topic that frequently appears in the titles is the environment, which concerns the voters' dwellings and urban infrastructure, as well as environmental protection. Rarely (in descending order) attention is devoted to business, the social sphere, sport, education, culture, city administration, and safety, but least often – to the family. Having analysed all the promises covered in the programmes, it can be concluded that most of them are business-oriented. However, it should be mentioned that the focus is also on pensioners and educational staff. The least often mentioned group of voters is youth.

Collecting the data on all 88 programmes, it can be concluded that the specific promises make up only one-third of them (33 %). At the same time, there are significant differences in the level of programme specificity among both political parties and election districts. Moreover, by this parameter the programmes of the same party vary in different cities.

One of the main objectives of the research has been to find an answer to the question whether there is a correlation between the level of specificity in party programmes and the party election results. Only in two cities (out of nine) of republican significance, the value of Spearman's rank correlation coefficient indicates the existence of a positive, significant correlation. According to the author of the research, it could rather be interpreted as a coincidence. In all the other cities, the correlation between the two variables is markedly weak or even with a minus sign. The calculations performed allow concluding that the hypothesis put forward in the research has been proven: the level of specificity of the pre-election programmes (at least in most cases) does not affect the results of the parties in city council elections of republican significance.

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# NODOKĻU PIEMĒROŠANAS SALĪDZINOŠĀ IZPĒTE AUTORATLĪDZĪBAS LĪGUMIEM

## *Comparative Research on Tax Application to Royalties Contracts*

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**Abstract.** *Royalties and copyright as an economic category and topical legal terms scored in the 20th century, while improving the country's fiscal policy and differentiating tax items; the usage of economic categories of “royalties” expands and becomes important. To be able to compare how royalties beneficiaries comply with legislative acts and requirements relating to the taxation of another European Union Member State, the author compares the taxation in Latvia and Estonia. In 2018, an ambitious tax reform has been implemented in both countries. The aim of the research: to conduct a comparative study on tax requirements and issues related to royalties in Latvia and Estonia. To achieve the aim of the research, the monographic method, the methods of comparative and analytical analysis, and the grouping and graphic methods were used additionally. In the result of the research study, the author concluded that, despite the unification of tax systems in the Baltic States, the regulatory framework is different in both countries. Estonian taxpayers' tax burden in respect of royalties is significantly higher than that of the Latvian income recipient.*

**Keywords:** *incomes, legislation, royalty contract, taxes.*

### **Ievads**

#### **Introduction**

Autoratlīdzība un autortiesības kā ekonomiskā kategorija un juridiskais termins savu aktualitāti ieguva jau 20.gs., savukārt, pilnveidojot valsts fiskālo politiku un diferencējot nodokļu objektus, ekonomiskās kategorijas “autoratlīdzība” izmantošana paplašinās un kļūst nozīmīga.

Saskaņā ar aktuālo likumdošanu autortiesību un autoratlīdzības līguma objekti pamatā ir mākslas un kultūras jomā radītas vērtības. Tomēr jāatzīmē, ka arī komercdarbībā arvien biežāk tiek izmantoti autoratlīdzības līgumi. Kā viena no nozarēm, kur nosacīti dominē autoratlīdzības līgumi par sniegtajiem pakalpojumiem ir izglītības nozare, galvenokārt augstākā izglītība un mūžizglītība.

Pēc Latvijas Republikas kontrolējošo iestāžu aizrādījumiem nākas secināt, ka autoratlīdzības tiek piemērotas arī profesionālajā sportā, kas skatoties pēc darījumu ekonomiskās būtības, ir diskutabls jautājums.

Lai varētu salīdzināt, kā autoratlīdzību saņēmējiem jāievēro likumdošanas normu prasības attiecībā uz nodokļu piemērošanu citā Eiropas Savienības valstī, pētījuma ietvaros tiek salīdzināta nodokļu piemērošana Latvijā un Igaunijā saskaņā ar aktuālo redakciju, ņemot vērā, ka 2018.gadā abās minētajās valstīs tiek realizēta vērienīga nodokļu reforma.

Pētījuma mērķis: veikt salīdzinošo izpēti par nodokļu piemērošanas prasībām un problēmjautājumiem autoratlīdzības līgumiem Latvijā un Igaunijā.

Kā pētījuma bāze tiks izmantota attiecīgo valstu aktuālā likumdošana.

Pētījuma mērķa sasniegšanai tika izmantota monogrāfiskā metode, salīdzināšanas un kontentanalīzes metodes, papildus tika pielietotas grupēšanas un grafiskās metodes.

Autoratlīdzību izpēte zināmā mērā prasa starpdisciplināru pieeju, ko apliecina arī līdzšinējie zinātniskie pētījumi. Šī jomas izpētē ir saistoša grāmatvežiem, revidentiem, mākslinieku vadītājiem un advokātiem, kas ir gatavi rast risinājumu sarežģītajām situācijām honorāru uzskaitē (Conniff, 2002). Autoratlīdzības parasti saistās un tiek identificētas kā ieņēmumi, nevis peļņu (Garvey, 2018). Tas rada diskusiju par atšķirīgu pieeju nodokļu politikas veidošanā. Tāpat jāatzīmē, ka pasaules praksē autortiesību pielietojums ir plašāks un daudzpusīgāks nekā Latvijā un Igaunijā.

### **Autoratlīdzības jēdziena interpretācija** *Interpretation of the concept of royalties*

Pētot dažādus avotus, var secināt, ka autortiesības pārsvarā tiek definētas kā intelektuālais īpašums. Atsevišķus šī jēdziena skaidrojumus sniedz dažādas terminu skaidrojošās vārdnīcas. Piemēram, Ekonomikas skaidrojošā vārdnīca sniedz autortiesību definīciju: “Autora izņēmumtiesības izstādīt, izpildīt, publicēt un pārdot savus radošos (zinātniskos, mākslas, mūzikas, literatūras u. c.) darbus. Δ katrā valstī aizsargā likums; LR šādu likumu pieņēma 1993. g. maijā. Δ ievērošanu mūsu valstī kontrolē LR Patentu valde un Autortiesību aģentūra” (Ekonomikas skaidrojošā vārdnīca, 2000). Terminoloģiskā vārdnīca sniedz šādu definīciju: “Starptautiskajā Ženēvas autortiesību konvencijā (Universal Copyright Convention, UCC) 1952.g. noteikts autora tiesiskais stāvoklis - sevišķas tiesības publicēt, reproducēt un izplatīt literatūru, muzikālu, mākslas u.tml. darbu. Tiek aizstāvētas tikai to autoru tiesības, kuru publikācijās iespiesta autortiesību zīme (c)” (Bibliotēku fondi un katalogi, 1993). Eiropas Savienības terminu vārdnīca savā sniegtajā definīcijā to vairāk attiecina uz

literārajiem darbiem: “Literāra darba autora tiesības, kas tiek atzītas un apstiprinātas ar spēkā esošu likumu. Nemateriāla tiesība, kas tiek juridiski noteikta konkrēta literāra vai mākslas darba autoram, uz noteiktu laiku piešķirot viņam izņēmuma tiesības šo pašu darbu kopēt, pavairot, publicēt un pārdot (Eiropas Savienības terminu vārdnīca, 2004).

Latvijā autoratlīdzības regulē likums “Autortiesību likums”, kur tiek skaidroti jēdzieni “autors” un “autora darbs”:

“1) autors – fiziskā persona, kuras radošās darbības rezultātā radīts konkrētais darbs;

2) darbs – autora radošās darbības rezultāts literatūras, zinātnes vai mākslas jomā neatkarīgi no tā izpausmes veida, formas un vērtības” (Autortiesību likums, 1.pants)

Likums definē arī aizsargājamus darbus, kas ir literārie, muzikālie, horeogrāfiskie, mākslas un dizaina darbu, kā arī projekti, skices, datu bāzes un citi autoru darbi. Latvijā izplatīti ir autoratlīdzības līgumi par atvasinātajiem aizsargājamajiem darbiem, tie ir:

“1) tulkojumi un apdares, pārstrādāti darbi, anotācijas, referāti, kopsavilkumi, apskati, muzikāli aranžējumi, ekranizācijas un dramatisējumi un tamlīdzīgi darbi;

2) darbu krājumi (enciklopēdijas, antoloģijas, atlanti un tamlīdzīgi darbu krājumi), kā arī datu bāzes un citi salikti darbi, kas materiālu atlases vai izkārtojuma ziņā ir radošās darbības rezultāts.” (Autortiesību likums, 5.pants).

Jāatzīmē, ka likumā nav definēts jēdziens “autoratlīdzība”, savukārt, tā skaidrojumu ir atrodams Latvijas un citu valstu konvencijās par nodokļu dubultās uzlikšanas un nodokļu nemaksāšanas novēršanu attiecībā uz ienākuma nodokļiem. Piemēram, Latvijas Republikas un Singapūras savstarpēji noslēgtā līgumā ir sniegts sekojošs skaidrojums:

“Jēdziens “autoratlīdzība” šajā pantā nozīmē jebkāda veida maksājumus, ko saņem kā kompensāciju par jebkuru autortiesību izmantošanu vai par tiesībām izmantot jebkuras autortiesības uz literāru, mākslas vai zinātnisku darbu (ieskaitot kinofilmas un filmas vai ierakstus radio vai televīzijas pārraidēm), uz jebkuru datorprogrammu, patentu, firmas zīmi, dizainu vai modeli, plānu, slepenu formulu vai procesu, vai par ražošanas, tirdzniecības vai zinātnisko iekārtu izmantošanu vai par tiesībām tās izmantot, vai par informāciju attiecībā uz ražošanas, tirdzniecības vai zinātnisku pieredzi” (Latvijas Republikas valdības un Singapūras Republikas valdības līgums par nodokļu dubultās uzlikšanas un nodokļu nemaksāšanas novēršanu attiecībā uz ienākuma nodokļiem, 12.pants).

Latvijas Civillikumā jēdziens “intelektuālais īpašums” netiek lietots, ir tikai atrunāts, ka lietas var būt ķermeniskas vai bezķermeniskas un ka

bezķermeniskas lietas ir dažādas personiskas, lietu un saistību tiesības, ciktāl tās ir mantas sastāvdaļas (Civillikums, 841.pants).

Tā kā autortiesības ir privāttiesības un vērtējamas saskaņā ar Civillikuma noteikumiem, tajās abas puses ir līdzvērtīgas, un atšķirībā no publisko tiesību imperatīvā rakstura civiltiesiskās attiecības var veidot, tikai savstarpēji vienojoties. To apliecina arī Autortiesību likuma 2.pantā noteiktais princips, ka autortiesības tiesiskā režīma ziņā pielīdzināmas tiesībām uz kustamu mantu Civillikuma izpratnē. (Rozenfelds, 2004).

1967. gada 14. jūlijā dibinātās Pasaules intelektuālā īpašuma organizācija (*World Intellectual Property organisation*) dibināšanas konvencijas 2. pantā noteikts, ka tiesības uz intelektuālo īpašumu attiecas uz:

1. Literārajiem, mākslinieciskajiem un zinātniskajiem darbiem;
2. Mākslinieku interpretētāju interpretācijām un aktieru izpildītāju izpildījumiem, fonogrammām un radoraidījumiem;
3. Izgudrojumiem jebkurā cilvēku darbības jomā;
4. Zinātniskajiem atklājumiem;
5. Dizainparaugiem un industriālajiem modeļiem;
6. Preču, tirdzniecības un pakalpojumu zīmēm, kā arī komercnosaukumiem un firmas zīmēm;
7. Aizsardzību pret negodīgu konkurenci (*World intellectual property organization*).

Intelektuālo īpašumu var raksturot arī kā tiesības uz lietām, kuras rodas cilvēka intelektuālās darbības rezultātā, – idejas, izgudrojumi, literārie sacerējumi, dizaini utt. (Philips, Firth, 1990).

Intelektuālais īpašums ir ekskluzīvu tiesību kopums, kas piešķirts intelektuālās jaunrades darbiem. Intelektuālā īpašuma tiesības var tikt iedalītas divās daļās: rūpnieciskā īpašuma tiesībās, kas ietver izgudrojumus (patentus), preču zīmes, rūpnieciskos dizainparaugus un ģeogrāfiskās izcelsmes norādes, un autortiesības, kas attiecas uz literāriem un mākslas darbiem.” (LR Tieslietu ministrija).

Kopumā var secināt, ka jēdziens “autoratlīdzība” dažādos avotos tiek skaidrots atšķirīgi, un vienojošais elements minētajos skaidrojumos ir tas, ka autortiesības dominējoši tiek attiecinātas uz mākslas un literatūras darbiem.

### **Reglamentējošās likumdošanas salīdzinošā izpēte** *Comparative study of the regulatory framework*

Svarīgākie tiesību akti un politikas plānošanas dokumenti intelektuālā īpašuma jomā ir:

1. Rūpnieciskā īpašuma institūciju un procedūru likums;

2. Speciālie likumi intelektuālā īpašuma tiesību jomā, t.i., likums „Par preču zīmēm un ģeogrāfiskās izcelsmes norādēm”, Patentu likums, Dizainparaugu likums, Autortiesību likums);
3. Eiropas Parlamenta un Padomes 2004. gada 29. aprīļa direktīva 2004/48/EK par intelektuālā īpašuma tiesību piemērošanu;
4. Intelektuālā īpašuma tiesību aizsardzības un nodrošināšanas pamatnostādnes 2015. - 2020. gadam.

2006.gadā Eiropas Parlamenta un Padomes 2004. gada 29. aprīļa direktīva 2004/48/EK par intelektuālā īpašuma tiesību piemērošanu normas tika integrētas Latvijas Republikas likumdošanā.

Intelektuālā īpašuma tiesību aizsardzības un nodrošināšanas pamatnostādnes 2015. - 2020. gadam” ir vidēja termiņa politikas plānošanas dokuments, kas nosaka Latvijas valdības politikas pamatprincipus, mērķus un rīcības virzienus intelektuālā īpašuma tiesību aizsardzībā un nodrošināšanā turpmākajiem pieciem gadiem un iezīmē arī nozares ilgtermiņa attīstības virzienus.

Igaunijas Republikas Satversme 39.pantā nosaka, ka autoram ir neatņemamas tiesības uz viņa radīšanu. Valsts aizsargā autora tiesības (Igaunijas Valsts vēstnesis).

Autortiesību likums nosaka:

- 1) literāro, māksliniecisko un zinātnisko darbu autoru tiesību (autortiesību) aizsardzība pret viņu radošā darba rezultātiem;
- 2) personu grupa, kura var iegūt tiesības uz autora radītajiem literārajiem, mākslinieciskajiem un zinātniskajiem darbiem un viņu tiesībām;
- 3) tiesības izpildītājiem, fonogrammu producentiem un televīzijas un radio pakalpojumu sniedzējiem (tiesības, kas saistītas ar autortiesībām)” (Igaunijas Valsts vēstnesis).

Nodokļu ieturēšanu no autoratlīdzības Latvijā regulē likums “Par iedzīvotāju ienākuma nodokli” un likums “Par valsts sociālo apdrošināšanu”. Igaunijā šo funkciju pilda “Ienākuma nodokļa likums”, kas stājās spēkā 2000.gada 1.janvārī.

Latvijā par ienākumu no autoratlīdzībām, no 2018.gada papildus iedzīvotāju ienākuma nodoklim, jāmaksā arī sociālās iemaksas. Latvijā fiziskā persona, kura saņem autoratlīdzību (autortiesību un blakustiesību atlīdzību), ir pakļauta pensiju apdrošināšanai, un par viņu iemaksas tiek veiktas saskaņā ar šā likuma 23.1 pantu. Obligāto iemaksu objekts ir autoratlīdzība (autortiesību un blakustiesību atlīdzība), no kuras autoratlīdzības (autortiesību un blakustiesību atlīdzības) izmaksātājs veic iemaksas pensiju apdrošināšanai. 23.1 pants nosaka, ka autoratlīdzības (autortiesību un blakustiesību atlīdzības) izmaksātājs, izņemot mantisko tiesību kolektīvā pārvaldījuma organizāciju, no saviem līdzekļiem

maksā obligātās iemaksas piecu procentu apmērā no šīs autoratlīdzības (autortiesību un blakustiesību atlīdzības) tās saņēmēja valsts pensiju apdrošināšanai. Likumdošanas izmaiņas ir vērstas uz personu sociālā nodrošinājuma uzlabošanu. Līdz 2018.gadam autoratlīdzību saņēmējam netika nodrošināta nekāda sociālā aizsardzība. Likumdošanas izmaiņu mērķis ir nodrošināt kaut minimālu sociālo aizsardzību, sasniedzot pensijas vecumu. Izmaiņu trūkums ir tas, ka attiecīgās normas nesniedz sociālo aizsardzību citos sociālās apdrošināšanas gadījumos. Likums Par valsts sociālo apdrošināšanu nosaka, ka Sociālā apdrošināšana ir pasākumu kopums, ko organizē valsts, lai apdrošinātu personas vai tās apgādībā esošo personu risku zaudēt darba ienākumu sakarā ar sociāli apdrošinātās personas slimību, invaliditāti, maternitāti, bezdarbu, vecumu, nelaimes gadījumu darbā vai saslimšanu ar arodslimību, bērna kopšanu, kā arī papildu izdevumiem sakarā ar sociāli apdrošinātās personas vai tās apgādībā esošās personas nāvi. (Likums Par valsts sociālo apdrošināšanu 3.pants)

Tiesību akts skaidro situācijas, kad autors, gūstot arī cita veida ienākumus, drīkst nemaksāt sociālās iemaksas, t.i., autoratlīdzības saņēmējs, kurš ir reģistrēts un sociāli apdrošināts kā darba ņēmējs un par kuru obligātās iemaksas mēnesī pie viena vai vairākiem darba devējiem tiek veiktas no iemaksu objekta, kas sasniedz vai pārsniedz Ministru kabineta noteiktās minimālās mēneša darba algas apmēru, neregistrējas un neveic iemaksas no autoratlīdzības kā pašnodarbinātais (likums "Par valsts sociālo apdrošināšanu"). Savukārt, ja autoratlīdzības saņēmēja ienākums citās ienākuma gūšanas vietās nenasniedz minimālās algas apmēru, tad sociālo iemaksu veikšana ir atkarīga no autoratlīdzības apmēra. Tiek noteiktas divas iespējamās situācijas: ja autoratlīdzības apmērs nenasniedz minimālās algas apmēru, papildus sociālās iemaksas nav jāveic, bet, ja autoratlīdzības apmērs sasniedz vai pārsniedz minimālās algas apmēru, atlīdzības saņēmējam ir jāreģistrējas par saimnieciskās darbības veicēju un jāveic papildus sociālās iemaksas pēc likumdošanā noteiktās likmes, kas parastā kārtībā 2018.gadā ir 32.15%. Šīs iemaksas drīkst neveikt personas, kurām ir noteikta I vai II grupas invaliditāte, kā arī personas, kas sasniegušas vecumu, kas dod tiesības saņemt valsts vecuma pensiju vai pensija piešķirta priekšlaicīgi.

Papildus likumdošanas normas regulē situācijas, kad autors saņem ienākumus no uzņēmuma, kas mikrouzņēmuma ienākuma nodokļa maksātājs, vai ir lauku sezonas darbos nodarbināta persona, jo minētās kategorijas ienākumiem tiek noteiktas fiksētas ienākuma nodokļa likmes (likums "Par valsts sociālo apdrošināšanu").

Iedzīvotāju ienākuma nodokļa piemērošanas kārtība Latvijā no 2018.gada ir būtiski mainījies un likumdošanas normas paredz progresīvā iedzīvotāju

ienākuma nodokļa ieviešanu. Attiecībā uz autoratlīdzībām likumā “Par iedzīvotāju ienākuma nodokli” tiek noteikts normatīvais regulējums par fiksētu nodokļa likmi, t.i., nodokļa likmi 20 procentu apmērā taksācijas gada laikā piemēro autoru un izpildītāju ienākumiem no autoratlīdzības.

Papildus autoratlīdzības izmaksātājam – nodokļa destinatoram, jāievēro normatīvais regulējums attiecībā uz autora attaisnotajiem izdevumiem. Latvijas Republikas likumdošana nosaka divu lielumu attaisnoto izdevumu likmes – autors, pamatojoties uz sava autordarba likumdošanā noteikto iedalījumu, drīkst neaplikt ar ienākuma nodokli 25% no autoratlīdzības vai 50% no autoratlīdzības. Attiecīgās normas regulē Ministru kabineta izdotie noteikumi Nr. 899.

Likumdošana attiecībā uz nodokļu piemērošanu autoratlīdzībām Igaunijā ir salīdzinoši vienkāršāka. Normatīvais regulējums iekļauts Ienākuma nodokļa likumā, kurš apvieno ienākuma nodokli gan fiziskām, gan juridiskām personām.

Igaunijā, autors saņemot autoratlīdzības ienākumu, maksā ienākuma nodokli, kas netiek definēts, kā atsevišķi ar nodokļiem apliekams ienākums. Tas tiek pieskaitīts fiziskas personas kopējiem ienākumiem un ienākuma nodokļa likumā tas tiek definēts kā apliekams ienākums, kuram tiks pielietota nodokļa pamatlikme.

Igaunijā, tāpat kā Latvijā, 2018.gadā ir ieviestas būtiskas likumdošanas izmaiņas. Kopš 2018.gada sākuma Igaunijā ir noteikts mēneša un gada neapliekamais ienākums – attiecīgi mēnesī 500.00 eiro, gadā 6000.00 eiro. Šāds neapliekamais lielums tiek piemērots ienākumam līdz 14400.00 eiro gadā.

Likuma 23.pantā noteikts: “(2) Ja ienākumi pārsniedz EUR 14 400, ienākumu no nodokļiem aprēķina pēc šādas formulas:  $6000 - 6000/10 800 \times (\text{ienākumu summa} - 14 400)$ . Tomēr ienākumi no nodokļiem nedrīkst būt mazāki par nulli (Ienākuma nodokļa likums). Ja autors saņem ienākumu no autordarba, pēc Igaunijas spēkā esošās likumdošanas, no šī ienākuma, pēc neapliekamā ienākuma aprēķināšanas, ietur ienākuma nodokli 20% apmērā.

Salīdzinot ar Latvijas likumdošanu, Igaunijā netiek piemēroti autora attaisnotie izdevumi. Likmes abās valstīs ir vienādas – 20% no apliekamā ienākuma.

### **Nodokļu praktiskās piemērošanas salīdzinošā izpēte** *Comparative study on the practical application of taxation*

Pamatojoties uz iepriekš veikto salīdzinošo nodokļu likumdošanas izpēti Latvijā un Igaunijā, pētījuma ietvaros tiek sniegti praktisko aprēķinu piemēri autoratlīdzības saņēmēja ienākumam abās valstīs.

Nosacīts piemērs. Aprēķins autora ienākumam par mākslas darba radīšanu (glezna) Latvijā. Līgumā noteiktā autoratlīdzība ir 2000.00 eiro. Pēc Latvijas likumdošanas normatīvā regulējuma var būt divi nodokļu aprēķinu veidi:

pirmais - aprēķinot sociālās iemaksas 5% apmērā no autoratlīdzības summas, ja autors maksā sociālās iemaksas vismaz no valstī noteiktās minimālās algas apmēra (2018.gadā 430.00 eiro/mēnesī) kādā citā ienākuma gūšanas vietā; otrais – ja autors negūst citus ienākumus vismaz minimālās algas apmērā, par kuriem tiktu samaksātas sociālās iemaksas, autoram pašam jāmaksā sociālais nodoklis no ienākuma daļas, kas vienāda vai lielāka ar minimālās algas apmēru. Likuma normas nosaka, ka autoratlīdzības izmaksātājam jebkurā gadījumā ir pienākums no saviem līdzekļiem samaksāt 5% pensiju apdrošināšanai no autoratlīdzības summas, kas noteikta līgumā.

**1.tab. Nodokļu aprēķins no autoratlīdzības ienākuma Latvijā**  
(avots: autora veidots pēc regulējošās likumdošanas)  
*Table 1 Calculation of taxes on royalty income in Latvia*  
(source: author based on regulatory legislation)

Piemērojot sociālās iemaksas 5%		Izmaksas saimnieciskās darbības veicējam	
Atlīdzība	2000.00	Atlīdzība	2000.00
Sociālās iemaksas 5%	100.00	Sociālās iemaksas 5%	100.00
Atvieglojumi 50%	1000.00	Atvieglojumi 50%	1000.00
Apliekamā summa	1000.00	Apliekamā summa	1000.00
IIN 20%	200.00	IIN 20%	200.00
NETO ienākums	1800.00	NETO ienākums izmaksas vietā	1800.00
Papildus sociālās iemaksas	NAV	Minimālās sociālās iemaksas 32.15%	138.25
		NETO ienākums	1661.75

Pēc piemērā esošajiem aprēķiniem, autoratlīdzības izmaksātājs pirmajā gadījumā samaksās sociālās iemaksas pensiju apdrošināšanai 5% apmērā, bet saņēmējs valsts budžetā samaksās Iedzīvotāju ienākuma nodokli 10% no saviem autora ienākumiem. Citu nodokļu samaksas pienākumu autoratlīdzības saņēmējam nav. Attiecīgi otrajā gadījumā autoratlīdzības izmaksas vietā nodokļu aprēķins ir identisks, bet autoram ir pienākums veikt papildus obligātos sociālā nodokļa maksājumus, kas sastāda papildus 6.9%. Kopējais nodokļu slogs autoratlīdzības saņēmējam sastāda 16.9% no autoratlīdzības ienākuma.

Nodokļa aprēķins identiskā situācijā Igaunijā. Nepieciešams aprēķināt neapliekamo ienākumu. To aprēķina pēc iepriekš minētās formulas, attiecinot to uz mēneša ienākumu:

$$500 - 500/900 \times (\text{izmaksa} - 1200)$$

$$500 - 500 / 900 \times (2000 - 1200) = 55.56$$

2.tab. **Nodokļa aprēķins no autoratlīdzības ienākuma Igaunijā**  
**(avots: autora veidots pēc regulējošās likumdošanas)**  
*Table 2 Calculation of tax on royalty income in Estonia*  
*(source: author based on regulatory legislation)*

<b>Ienākuma nodokļa aprēķins</b>	
Atlīdzība	2000.00
Neapliekamais ienākums	55.56
IIN 20%	388.89
NETO ienākums	1611.11

Salīdzinot Igaunijas likumdošanas normas attiecībā uz autoratlīdzību aplikšanu ar nodokļiem, ar Latvijas likumdošanas normām, ir acīmredzamas būtiskas atšķirības. Neskatoties uz to, ka autoru darbu atlīdzība Latvijā 2018.gadā tiek papildus aplikta ar sociālajām iemaksām, Igaunijas nodokļu sistēma paredz lielāku nodokļu slogu autoriem. Konkrētajā piemērā nodokļa slogs autoratlīdzības saņēmējam ir 19.4% no ienākuma. Latvijas likumdošanā pastāv attaisnoto izdevumu norma, kura būtiski samazina nodokļu slogu.

Eiropas Savienības valstīs jau daudzus gadus notiek nodokļu sistēmu unifikācija. Temps šim procesam ir lēns, jo Eiropas Savienības valstis ir ļoti dažādas pēc saviem ekonomiskajiem rādītājiem un savām vēsturiski izstrādātām nodokļu politikām. Šobrīd notiek Baltijas valstu nodokļu sistēmu unifikācijas process. Šajā pētījumā esošās atziņas un salīdzinošā izpēte apliecina, ka abu valstu nodokļu sistēmas joprojām ir atšķirīgas.

### **Secinājumi** **Conclusions**

Pētot dažādus avotus, var secināt, ka autortiesības pārsvarā tiek definētas kā intelektuālais īpašums. Atsevišķus šī jēdziena skaidrojumus sniedz dažādas terminu skaidrojošās vārdnīcas. Saskaņā ar aktuālo likumdošanu autortiesību un autoratlīdzības līguma objekti pamatā ir mākslas un kultūras jomā radītas vērtības. Kā viena no nozarēm, kur nosacīti dominē autoratlīdzības līgumi par sniegtajiem pakalpojumiem ir izglītības nozare, galvenokārt augstākā izglītība un mūžizglītība. Pēdējos gados parādījusies tendence piemērot autoratlīdzības līgumus arī tādās nozarēs, kā celtniecība, arhitektūra un rūpniecība.

Jēdziens “autoratlīdzība” Latvijas likumdošanas normatīvajos aktos netiek skaidrots, termina skaidrojums atrodams starptautiskajos līgumos. Apkopojot un izanalizējot iegūto informāciju no dažādiem avotiem – skaidrojošajām vārdnīcām, likumdošanas aktiem un publikācijām, var secināt, ka jēdziens “autoratlīdzība” dažādos avotos tiek skaidrots atšķirīgi.

Latvijā autoratlīdzības regulē likums “Autortiesību likums” un savstarpēji noslēgtie starptautiskie līgumi. Nodokļu piemērošanā ir saistoši likums “Par iedzīvotāju ienākuma nodokli” un likums “Par valsts sociālo apdrošināšanu”. No 2018.gada autoratlīdzības tiek apliktas papildus ar sociālajām iemaksā, kuras tiek novirzītas pensiju apdrošināšanai.

Igaunijā autoratlīdzības regulē Autortiesību likums un starptautiskie līgumi, līdzīgi kā Latvijā. Nodokļu piemērošana noteikta Ienākuma nodokļa likumā, kurā tiek skaidrotas normas, kas attiecas gan uz juridisku, gan fizisku personu aplikamo ienākumu.

Salīdzinot Latvijas un Igaunijas likumdošanas normatīvo aktu regulējumu, var secināt, ka saskaņā ar Latvijas likumdošanas piemērošanas kārtību nodokļu slogs autoratlīdzībām veidojas mazāks nekā Igaunijā. Ienākums tiek aplikts ar ienākuma nodokli pēc vienādas likmes, kas ir 20%. Atšķirības ir regulējumā par autoratlīdzības attaisnotajiem izdevumiem, kurus var piemērot Latvijas autori savam ienākumam. Attiecīgi, autoratlīdzības saņēmējam Igaunijā nodokļu slogs var būt lielāks par 3 līdz 9 procentpunktiem, salīdzinot ar Latvijas autoratlīdzības saņēmēju vienlīdzīgās situācijās.

### **Summary**

The aim of the research: to conduct a comparative study of tax requirements and issues related to royalties in Latvia and Estonia. In the result of the research study, the author concluded that, despite the unification of tax systems in the Baltic States, the regulatory framework is different in both countries. Estonian taxpayers' tax burden in respect of royalties is significantly higher than that of the Latvian income recipient.

Comparing the regulatory enactments of Latvia and Estonia, the author concludes that Latvian legislation imposes a lower tax burden than the Estonian regulatory framework. Income is subject to income tax at an equal rate of 20%. The differences are in the regulation of eligible expenses on royalties, which can be applied by Latvian authors to their income. Accordingly, a recipient of royalties in Estonia, compared with a recipient of Latvian royalty, may have a tax burden of more than 5 to 9% higher in equal situations. The unification of tax systems at the Baltic level will still require major tax changes in both Estonia and Latvia. This may affect the migration of income recipients to other European Union MEMBER States.

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## TAXONOMIC ANALYSIS OF DIVERSITY OF LOCAL LABOUR MARKETS IN POLAND

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**Abstract.** *The situation in the labour market is conditioned by many factors that often have a local dimension. Identification of different levels of development of labour demand as well as potential of labour supply on the local level is a crucial element of diagnosis of reasons for regional and local diversity and implementation of an appropriate labour market policy. As there is available a variety of indicators describing regional labour relations, there is a need to create synthetic measure to include different aspects of the labour market situation. The aim of the paper is identification of the diversity of the situation in the local labour markets of all 16 Polish voivodeships. At the first step, a synthetic measure including eight variables was created. At the second stage 16 Polish voivodeships were clustered following Ward's and k-means methods. As the authors assume that the position of voivodeship labour markets is connected with the position of capital cities, the analysis was deepened by ranking voivodeship cities based on Hellwig's method. As a result of conducted research and the classification of Polish voivodeships and their capital cities in the context of the situation in the labour market, there have been identified the reasons of regions' positions and proposed recommendations for the labour market policy.*

**Keywords:** *local labour market, regional diversity, Hellwig's method, the cluster analysis.*

### Introduction

The concept of the local labour market refers to its spatial dimension. The criteria of local delimitation of labour markets, which are the most frequently suggested in the literature, are the administrative criterion and the criterion of labour force mobility (Góra & Sztanderska, 2006; Głuszczyk, 2012). According to the first criterion, the local labour market is a space that is a part of the country's labour market. In the case of Poland, it is a voivodeship, powiat or municipality area that is considered to be the individual territorial level. According to the second criterion, the local labour market is an economically integrated geographical area where inhabitants may find employment or change it without changing the place of residence (Gruchociak, 2012).

Local labour markets differ in terms of the economic, social or demographic situation, which is not constant and can be changed under the influence of internal and external circumstances (Słomińska, 2009). Therefore, the comparison of the situation in local labour markets is a complex issue. It should take into account all major economic categories that are associated with labour supply and labour demand. Diagnosing the situation of local labour markets, it seems reasonable to consider indicators reflecting the degree of use of labour resources, working conditions and potential opportunities to create new jobs (Adamczyk, 2015).

The aim of the article is identification of the diversity of the situation in the local labour markets of all 16 Polish voivodeships. To achieve the aim, a ranking of territorial units was created, which was based on the values of the previously constructed synthetic variable describing the state of the local labour market. In the paper, local labour markets in Poland are determined spatially at the level of 16 voivodeships.

As a research method, taxonomic analysis was applied for the purpose of classifying territorial units in Poland based on selected criteria. The research study was based on data of the Local Data Bank of the Central Statistical Office of Poland. It covers the most recent available data for 2016.

At the first step, a synthetic measure of the labour market situation was created, which included eight variables. At the second stage, 16 Polish voivodeships were clustered following Ward's and k-means methods, which were used for the analysis of diversity of labour markets. The cluster analysis is widely used in the literature to present the heterogeneity of labour markets (Rollnik-Sadowska, 2016; Pivonka & Loster, 2013, Muntaner et al., 2012). As the authors assume that the position of voivodeship labour markets is connected with the position of capital cities, the analysis was deepened by ranking voivodeship cities based on Hellwig's method. This method of selection of variables in linear model is popular in Polish literature for creation of ranking of territorial units (Michoń, 2017).

The paper is structured as follows. In the first section, there are described the main theories of local development. Section 2 identifies possible determinants of the labour market situation in Poland. The following section presents the taxonomic analysis of voivodeship labour markets. The summary and concluding remarks are given in the last section.

### **Determinants of local diversity – theoretical assumptions**

The problem of diversifying the economic development of regions, and hence the diversification of regional labour markets, can be considered through the prism of various theories of regional development (Pietak, 2014). The explanation of differences in regional development is one of the most popular

challenges undertaken by economists, geographers and representatives of other social sciences. Interest in this issue began in the 1950s. From that moment on, at least a few dozen theories and concepts of various scope have arisen, which, starting from different methodological orientations, explain the diverse spatial dynamics of socio-economic processes (Kisiała & Stępiński, 2013).

Among them there are concepts formulated in the so-called Keynesianism period (referring to the centre-periphery model). They include such theories as: the concept of growth poles, the export base, uneven development and polarized development, structuralism theories (theory of product life cycle), theories inspired by critical realism (theory of spatial division of labour), theories formed on the basis of system analysis (theory of spatial self-organization) and theories and institutional concepts (concept of learning regions, regional innovation systems, related diversity and the triple helix) (Kisiała & Stępiński, 2013). Each of these concepts identifies one or more factors determining the development of the region and indicate the mechanisms of inter-regional differences.

Some of them refer to traditional factors of regional development, including natural resources, capital resources and labour resources. Part, in turn, to factors of qualitative nature, including, inter alia, scientific, technical and technological progress. Institutional theories, however, assign a significant role efficiency of public administration institutions in regional development (Glińska et al., 2017).

According to Pietak (2014), by emphasizing every new factor of development, these groups of theories are not mutually exclusive. At the same time, however, they do not provide a single answer explaining the problem of regional divergence.

In the context of the analyses carried out for the purposes of this paper, the theory of growth poles by Francois Perroux is particularly relevant. It indicates the spatial concentration of regional development and its economic and political consequences. In accordance with its assumption, in metropolitan centres, business entities representing technologically advanced branches of industry are characterized by high competitiveness. In this way, these centres become the nucleus of the region, gaining an advantage over smaller cities and surrounding areas. The most developed regions, in turn, are winning economic competition with peripheral regions and making them dependent on their own industrial and commercial policy (Grosse, 2002).

### **Factors differentiating the labour market situation in Poland**

The labour market differs from other markets because it is, in fact, a conglomerate of many labour sub-markets (Góra & Sztanderska, 2006).

The dependencies on the regional labour market are extremely comprehensive and understanding them requires analysing both the situation on

the labour demand and supply side, as well as issues related to their interaction and the environment of the labour market (Decker & Rollnik-Sadowska, 2015).

Labour demand and supply in the market economy are shaped by a number of variables, among which the level of wages, labour productivity and demand for products resulting from work, the number of people with specific qualifications, non-wage benefits from work, non-wage benefits from alternative activities can be mentioned and socio-cultural determinants of professional activity. However, this list of determinants is much wider, as the shaping of demand and supply depends on: labour mobility, amount of unemployment benefit and its relation to the minimum wage rate in the given country, the activity of trade unions, policies made by the state on the labour market, tax rates, labour costs, as well as the general economic climate. The situation in the labour market is the resultant of many interrelated factors (Milewski, 2000; Sloman, 2006; Blanchard, 2006).

The labour market situation in Poland is spatially heterogeneous when it comes to the level of unemployment (including long-term unemployment) (Maksim & Wojdyło-Preisner, 2015) and the employment potential. The labour market variables are spatially diversified (Dykas & Misiak, 2014). It mainly concerns the structure of age of labour supply, the level of natural increase and net migration. Moreover, spatial diversification is noticed in Poland in the field of labour demand – in this, above all, the number of entities, investment expenditures and level of wages.

### **Spatial diversity in the labour market in Poland**

The research was preceded by both the substantive and statistical selection of diagnostic features (Jarocka, 2013). In order to select the list of potential indicators, one of the heuristic methods – brainstorming among the authors of the paper – was used. In order to perform a comparison analysis of voivodeships of Poland in regard to factors for the socio-geographical, economic, economic infrastructure as well as the employment market spheres, the following variables were selected:

- X1 - people registered as unemployed for a period lasting longer than 1 year (% of overall unemployed), inhibitor
- X2 - average monthly number of people registered as unemployed per one job offer, inhibitor
- X3 - unemployment rate, %, inhibitor
- X4 - average monthly gross earnings in relation to the national average (Poland=100), %, booster
- X5 - newly registered entities per every 10 thousand of working age population, booster
- X6 - business investment expenditures per one working age person, booster

X7 - national economy entities per one thousand working age citizens, booster

X8 - employment rate – employed/number of working age people \*100, %, booster.

Values of variables portraying the labour market situation of individual voivodeships of Poland in 2016 have been presented in Table 1.

**Table 1 Values of variables portraying the labour market situation of individual Voivodeships of Poland in 2016** (source: developed by the authors on the basis of the Local Data Bank of the Central Statistical Office of Poland)

Voivodeship	X1	X2	X3	X4	X5	X6	X7	X8
Dolnoslaskie	36.7	11	7.2	102.2	160	8 477	200.7	40.6%
Kujawsko-pomorskie	41.9	20	12	85.6	124	4 104	149.8	34.2%
Lubelskie	45.4	34	10.3	88.9	109	2 915	132.4	27.7%
Lubuskie	33.1	10	8.6	87.1	147	5 695	176.0	34.4%
Lodzkie	43.1	19	8.5	91.5	135	6 111	161.2	37.3%
Malopolskie	39.9	17	6.6	95.0	155	5 087	177.0	35.5%
Mazowieckie	45.4	21	7	122.1	208	10 445	241.8	46.5%
Opolskie	37.3	10	9	91.5	100	10 368	159.7	32.3%
Podkarpackie	45.2	35	11.5	85.2	107	4 135	125.4	31.3%
Podlaskie	46.0	36	10.3	87.8	109	3 380	134.3	28.3%
Pomorskie	35.6	11	7.1	99.6	180	6 002	201.1	36.8%
Slaskie	37.9	11	6.6	100.1	123	7 085	165.7	41.0%
Swietokrzyskie	37.7	29	10.8	85.5	118	2 639	144.0	29.1%
Warminsko-mazurskie	38.9	30	14.2	84.4	114	3 286	137.0	29.6%
Wielkopolskie	35.0	11	4.9	90.8	156	6 905	192.2	41.7%
Zachodniopomorskie	36.5	14	10.9	92.0	167	3 871	207.7	30.8%

The subsequent stage of analysis consisted of a statistical verification of the set of characteristics of voivodeships. The concept of the statistical criterion for the selection of diagnostic variables mainly came down to the elimination of variables having a low level of diagnosticity.

The values of variation coefficients are presented in Table 2.

Since the values of their coefficients of variation are greater than 10 %, all the indicators selected for analysis are characterized by high discrimination ability.

In the selection of variables, the correlation analysis was omitted. In the theory of multidimensional comparative analysis, there are opinions about not rejecting diagnostic features even strongly correlated with each other, as soon as their substantive value is high (Pociecha, 1996). Therefore, the selection of comparative criteria will be mainly determined by substantive factors.

Table 2 The values of variation coefficients (source: own study)

Statistics	X1	X2	X3	X4	X5	X6	X7	X8
Standard deviation	4.22	9.79	2.48	9.54	30.83	2485.6	32.76	0.05
Arithmetic mean	39.7	19.9	9.1	93.1	138.3	5 656.6	169.1	0.3
Variation coefficients	10.6%	49.1%	27.2%	10.2%	22.3%	43.9%	19.4%	15.8%

In the next part of the study, a comparative analysis of voivodeships was made. The choice of methods for research was determined by their popularity and access to the research tool – Statistica 13.1 software.

In order to classify Polish voivodeships in regard to their labour market situation cluster methods – agglomerative Ward's and k-means methods - were used.

To identify voivodeships whose labour market situations were similar, we first completed the standardization of indicators selected for the research study and then clustered them utilizing Ward's method and the Euclidian distance method. As a result of this classification, voivodeships were divided into three groups that were different but which contained regions with similar labour market situations (Figure 1).

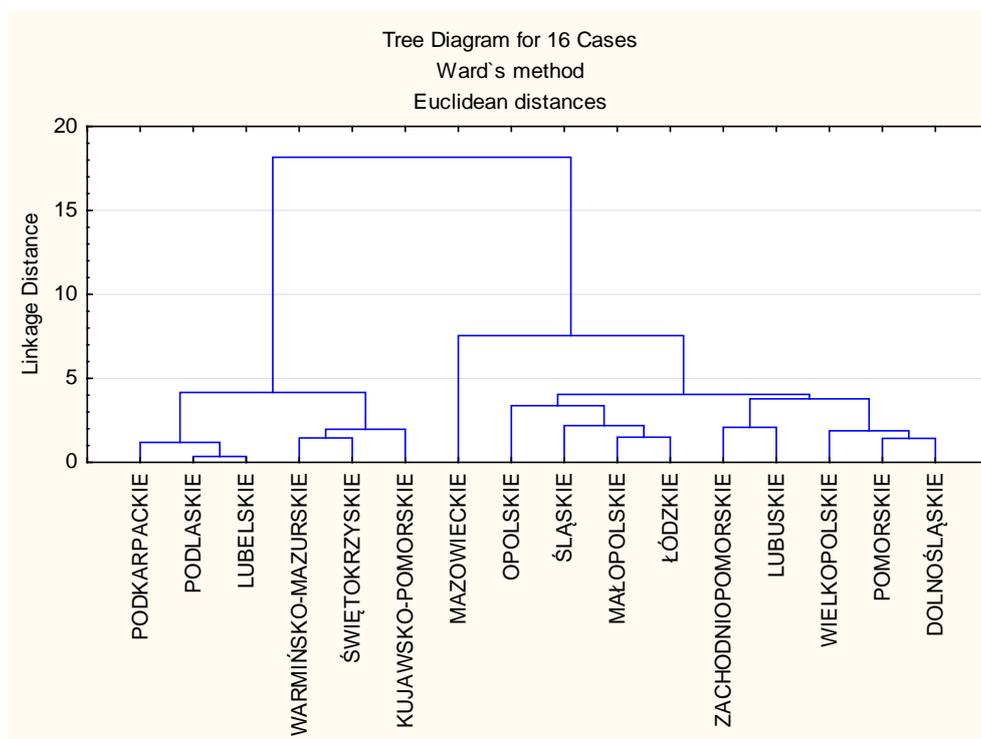


Figure 1. Classification of Polish voivodeships in regard to their labour market situation (source: developed by the authors using the STATISTICA 13.1 software)

One of the groups thus formed contains the Podkarpackie, Podlaskie, Lubelskie, Warminsko-Mazurskie, Swietokrzyskie and Kujawsko-Pomorskie voivodeships. Another group – the most numerous one in regard to having similar diagnostic characteristics describing their situation in the labour market – includes the Opolskie, Slaskie, Malopolskie, Lodzkie, Zachodniopomorskie, Lubuskie, Wielkopolskie, Pomorskie and Dolnoslaskie voivodeships. The third set consists of only one voivodeship – Mazowieckie. Additionally, through a detailed analysis of the tree diagram, it is possible to identify voivodeships or groups of them which are the most similar. A comparable labour market situation can be seen in the following pairings of voivodeships: Podlaskie and Lubelskie, Swietokrzyskie and Warminsko-Mazurskie, Malopolskie and Lodzkie, Zachodniopomorskie and Lubuskie as well as Pomorskie and Dolnoslaskie.

To characterize the individual groups of regions (voivodeships), a different classification method, the k-mean method, was used. The calculations resulted in the same distribution of objects as that obtained through the use of Ward's agglomeration method. Elements of resulting clusters are presented in Table 3.

Table 3 **Voivodeships of Poland divided into clusters obtained through the use of the k-means** (source: developed by the authors using the STATISTICA 13.1 software)

Number of cluster	Cluster elements	Distance from the centre of cluster
No. 1	Kujawsko-pomorskie	0.521376
	Lubelskie	0.380413
	Podkarpackie	0.342876
	Podlaskie	0.414290
	Swietokrzyskie	0.448981
	Warminsko-mazurskie	0.495535
No. 2	Dolnoslaskie	0.536780
	Lubuskie	0.517473
	Lodzkie	0.628684
	Małopolskie	0.411740
	Opolskie	0.879356
	Pomorskie	0.509172
	Slaskie	0.516936
	Wielkopolskie	0.587902
	Zachodniopomorskie	0.805285
No 3	Mazowieckie	0.000000

To compare voivodeships within each cluster as well as to visually identify differences of mean values of indicators being considered between clusters and subsequently determine features characteristic to individual groups of regions, a linear graph of means for clusters, presented in Figure 2, has been developed.

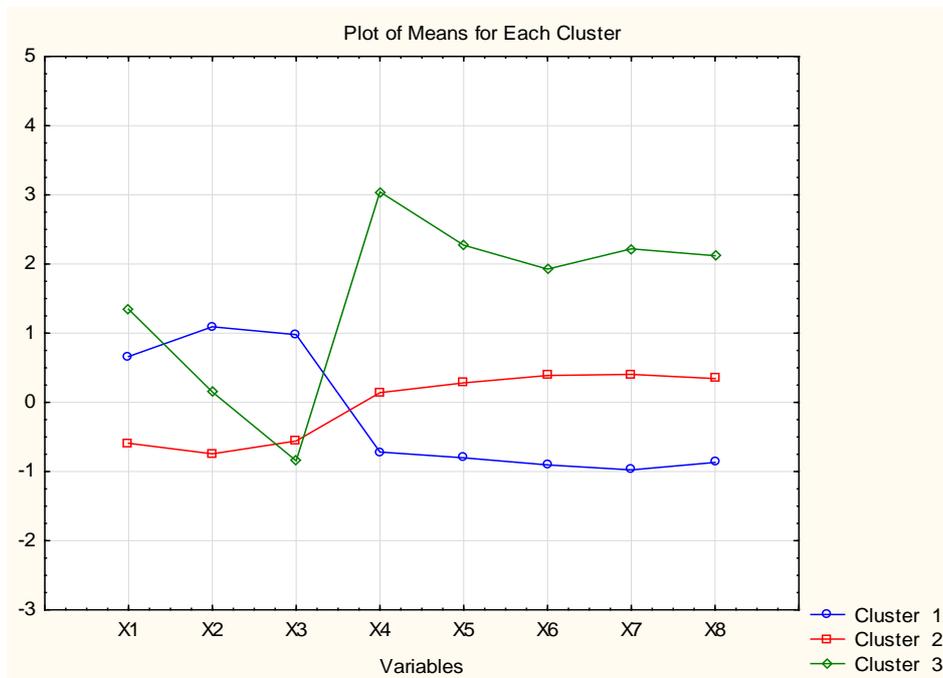


Figure 2. Means graph for individual clusters (source: developed by the authors using the STATISTICA 13.1 software)

The diagram shows that voivodeships from cluster 1 have the worst labour market situations. Cluster 2 includes voivodeships whose selected indicator values indicate an average labour market situation. The Mazowieckie voivodeship, the sole element of cluster number 3, stands out in comparison to other voivodeships. Only in regard to people registered as unemployed for a period longer than one year (X1) as well as in respect to the average monthly number of people registered as unemployed per job offer (X2) it does show unfavourable values in comparison to the other administrative units of Poland.

During the next stage of the spatial variation analysis of regions of Poland in regard to their labour market situations, a ranking of voivodeship capitals was created. Its structure was based on X1-X8 variables used in the classification of voivodeships. Values of the diagnostic characteristics used in the construction of this ranking are presented in Table 4.

**Table 4 Values of variables reflecting the labour market situation of Polish voivodeship capitals in 2016** (source: developed by the author on the basis of the Local Data Bank of the Central Statistical Office of Poland)

City	X1	X2	X3	X4	X5	X6	X7	X8
Wroclaw	38.9	5	2.7	111.9	265	12 167	299.9	66,7%
Bydgoszcz	35.1	9	4.8	92.1	156	5 877	200.9	55,0%
Torun	36.2	13	6.1	97.2	180	5 090	210.0	48,9%
Lublin	49.5	32	7.2	97.2	188	6 354	214.8	55,7%
Gorzow Wielkopolski	23.3	8	3.9	85.5	178	9 566	236.8	50,5%
Zielona Gora	29.2	4	4.6	91.4	206	7 018	249.4	50,4%
Lodz	49.7	18	7.9	98.6	186	6 587	225.9	54,9%
Krakow	45.0	9	3.5	108.0	251	9 425	287.4	67,1%
Warszawa	43.7	10	2.6	133.8	364	19 304	404.3	83,5%
Opole	37.0	3	4.9	102.0	182	8 098	287.0	70,7%
Rzeszow	54.4	15	6.6	100.7	197	8 093	226.2	70,1%
Bialystok	47.5	37	8.9	92.5	159	3 747	186.4	43,5%
Gdansk	36.6	9	3.5	119.3	238	13 585	270.7	56,5%
Katowice	39.9	8	2.8	122.9	195	9 847	260.8	86,7%
Kielce	43.7	26	7.6	91.4	176	5 511	242.9	59,9%
Olsztyn	33.6	20	5.1	99.2	168	6 118	216.7	57,3%
Poznan	32.3	8	1.9	111.2	270	11 264	338.5	72,1%
Szczecin	34.2	9	4.7	105.8	227	5 001	279.9	43,4%

The Hellwig method was used to compile the ranking of cities. Based on an array of standardized diagnostic characteristics, the coordinates of a standard unit were established using the formula:  $z_{0j} = \max_i \{z_{ij}\}$  for boosters and  $z_{0j} = \min_i \{z_{ij}\}$  for inhibitors where  $i = 1, \dots, n, j = 1, \dots, m$ . Then, using the Euclidian

metric  $d_{i0} = \left[ \sum_{j=1}^m (z_{ij} - z_{0j})^2 \right]^{0.5}$ ,  $i = 1, \dots, n$ , distances of every region from the standard were calculated. After assigning synthetic measures defined as (Panek,

2009):  $s_i = 1 - \frac{d_{i0}}{\bar{d}_0 + 2S(d_0)}$ , where:

$$\bar{d}_0 = \frac{1}{n} \sum_{i=1}^n d_{i0}, S(d_0) = \left[ \frac{1}{n} \sum_{i=1}^n (d_{i0} - \bar{d}_0)^2 \right]^{0.5}$$

a list ranking the cities was created.

The results of the ranking of voivodeship capitals in regard to their labour market situations are presented in Table 5.

Table 5 **Ranking of voivodeship capital cities in respect to the labour market situation**  
(source: own study)

<b>Position on the ranking list</b>	<b>City</b>	<b>Voivodeship</b>	<b>The value of a synthetic variable</b>
1	Warszawa	Mazowieckie	0.746849
2	Poznan	Wielkopolskie	0.628588
3	Wroclaw	Dolnoslaskie	0.569431
4	Gdansk	Pomorskie	0.523351
5	Katowice	Slaskie	0.484786
6	Krakow	Malopolskie	0.46947
7	Opole	Opolskie	0.407485
8	Szczecin	Zachodniopomorskie	0.345421
9	Zielona Gora	Lubuskie	0.327909
10	Gorzow Wielkopolski	Lubuskie	0.306023
11	Olsztyn	Warminsko-mazurskie	0.272795
12	Rzeszow	Podkarpackie	0.26103
13	Bydgoszcz	Kujawsko-pomorskie	0.235099
14	Torun	Kujawsko-pomorskie	0.234099
15	Lodz	Lodzkie	0.205872
16	Kielce	Swietokrzyskie	0.198642
17	Lublin	Lubelskie	0.169395
18	Bialystok	Podlaskie	0.027803

The ranking of voivodeship capital cities is topped by Warsaw which stood out on account of its significant economic potential. The municipalities around Warsaw create the largest local labour market in Poland (Gruchociak, 2015). Highly ranked in regard to their labour market situation are such cities as: Poznan, Wroclaw, Gdansk or Katowice. These cities distinguish themselves from the others through their high development of entrepreneurship determining high demand for employees. Kielce, Lublin and Bialystok occupied the lowest places on the list proclaiming their weakest labour market situation in comparison to the capitals of other provinces.

The lowest indicator for Bialystok is worrying because the provincial city is the only major centre of the Podlaskie voivodeship (Gruchociak, 2015). At the same time the position of Podlaskie province in the weakest cluster but not on the last position testifies to the importance of other centres (smaller cities) for the development of the local labour market.

## Conclusions

Local diagnosis of the labour market is extremely important (Słomińska, 2009). The example of Poland proves that regional labour markets are diverse.

The conducted analysis allowed for identification of three clusters of voivodships in terms of the situation in the local labour market. One of the clusters covers only the Mazowieckie voivodeship, which is characterized by the best situation in the labour market in terms of almost all criteria included in the analysis (which is largely influenced by the specificity of the city of Warsaw as the capital of the region and at the same time the capital of the country). The second cluster includes voivodships with the lowest labour market rates. These are mainly regions located in north-eastern and eastern Poland. The remaining voivodeships were qualified to the third cluster. They are characterized by a moderate situation in the labour market.

The diversity of the needs of local labour markets signals the necessity for decentralization of the labour market policy. Local authorities will be able to identify the causes of the existing situation on the labour market as well as to adjust actions to improve it. The existence of clusters among Polish voivodships points to the possibility of exchanging good practices and experiences among regions characterized by a comparative potential on the labour market.

As a part of the further research procedure, it is preferable to deepen the analysis of the local labour market in Poland at the level of poviats and municipalities to analyse labour market diversity not only at the national level, but also at the level of individual voivodships.

Based on the conducted taxonomic analysis, it can be concluded that the position of voivodeship labour markets in Poland is significantly determined by the economic potential of its centres – capital cities. Voivodships with the best situation in the labour market are characterized by having economically strong capitals, while voivodships located lowest in the ranking have capitals whose situation is relatively worse. It is recommended, following the Perroux concept, to develop existing growth poles (capital cities) or to create the new ones (smaller cities with strategic importance for the local labour market).

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# IMPLEMENTATION OF ENERGY EFFICIENCY PROJECTS IN LATVIA'S HOUSING STOCK AND ITS INFLUENCE ON THE CONSTRUCTION INDUSTRY

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**Abstract.** *Development of the housing and utilities sector for provision of necessary living conditions is one of the most significant areas in the national socio-economic transformation. Residential construction, housing services and public utilities, that ensure regeneration and maintenance of housing stock and bring housing and utilities to their direct consumers, are the key industries of the sector. The development of the housing sector in Latvia fails to meet the EU requirements: tasks placed on the sector are not carried out properly thus significantly lowering quality of life of the population. Therefore, the issue of housing and utilities stands to be one of the most pressing social problems in the country. The housing and utilities sector suffers from substantial difficulties due to lack of financing, weak physical infrastructure, an insufficient number of skilled personnel, lack of a forethought housing and utilities policy, and inadequately developed regulations for companies operating within the area of housing services maintenance. To the author, the key issue of the housing services in Latvia is renovation of obsolete housing stock. In the presented scientific paper, based on studies of the economic effect from the implementation and development of energy efficiency projects (renovation) of multi-apartment buildings in Latvia, an analysis is performed of the influence of renovation projects on the construction industry in Latvia. Therefore, the aim of the research is to examine the potential of the energy efficiency (renovation) projects of multi-apartment buildings in Latvia as a tool for development of the construction industry and of the economy of the country in general.*

*Econometric methods as well as methods of sociological research and statistical analysis are applied in this work. In the final part, the author demonstrates that the programmes for raising the energy efficiency of housing stock are an effective tool for development of the construction industry in Latvia.*

**Keywords:** *construction industry, energy efficiency, housing stock, renovation, Latvia.*

## Introduction

The state of the housing stock and housing and utility sector of Latvia has lately been drawing attention of both the government and the expert community. One of the main issues on the agenda is energy efficiency of multi-apartment buildings (MABs) and the infrastructure ensuring operations of residential as well as social and industrial buildings. The author applies the term “renovation” for describing the housing stock energy efficiency programmes. Econometric

methods were applied for assessing the influence of the renovation programme of Latvia's housing stock on the construction industry. In the final part of the paper, the housing stock energy efficiency programmes are demonstrated to have a recovery effect on the construction industry as such and the economy in general.

The aim of the research is to examine the potential of the energy efficiency (renovation) projects of multi-apartment buildings in Latvia as a tool for development of the construction industry in Latvia.

The research applies econometric methods, methods of statistical analysis and sociological research.

### **Main results of theory and practice**

The housing and utilities sector has a significant place in the national economy, largely defining social, economic and technical tasks for shaping the daily living environment, ensuring safe and favourable housing and living conditions. Housing and utilities is one of the most significant sectors and its development has a direct impact on the quality of life. Therefore, nowadays, among the focus areas are favourable conditions for development of housing and utilities services, support of innovative technologies and ideas aimed at sustainable allocation of vital natural resources, growth of financial support for modernization, renovation and construction of housing stock and objects of community infrastructure. Among the researchers focusing on the management of housing and utilities is V. Gassul (Gassul, 2018). He examines the structure of the municipal housing economy and offers ways of its reorganization in the Russian Federation. John C. Macih in his monograph *“Preventative Maintenance for Multi-Family Housing: For Apartment Communities, Condominium Associations and Town Home Developments”* explores interoperability of the structures engaged in maintenance of multi-apartment buildings (Macih, 2005). The authors mainly explore the issues related to the management of multi-apartment buildings and development of interconnected structures for delivering maintenance of multi-apartment buildings. In this paper, it is suggested to consider the housing and utilities sector as a tool of economic recovery and improvement of quality of life for the nation.

Renovation is a current trend not only for Latvia but for Europe in general. Initiatives for housing stock insulation stem from the common EU energy efficiency policies that are being substantially financed. Renovation offers a complex solution to the main problems: insulation of outer walls, upper storeys, basements, semi-basement floors, replacement of doors and windows in the shared space, renovation of general utilities, installation of modern metering devices, etc. This allows renovating buildings both inside and outside (renovated buildings look as newly built structures) and significantly save on costs for

utilities, especially heating. Heating is around 32-62 % cheaper for the apartments in the renovated buildings (Sakovskis & Chekalin, 2017). Hot water bills are also significantly smaller.

In comparison with the developed countries of Europe, Latvia demonstrates low quality of housing conditions as the period of service of most of the residential buildings is substantial, but the technical state and consumer scope are far from the current requirements (Sakovskis & Chekalin, 2017). For instance, thermal capacity of the majority of the buildings is insufficient. More than half of the buildings (58 %) were built before 1940, and 26.5 % of the buildings were built in 1941-1980. These require renovation (capital repair). Since 71 % of the population lives in the buildings built during 1941-1990, direct attention must be drawn to the time-frame and quality of renovation and construction works as well as housing insulation activities (LR Labklajibas Ministrija, 2011).

According to the data of the Central Statistical Bureau of Latvia for 2015, an average living floor space per one resident is 38 m<sup>2</sup>. Therefore, as presented in Table 1, around 72 % of the population in Latvia live in serial multi-apartment buildings.

Table 1 **Breakdown of residential buildings in Latvia by type, 2014**  
(source: The Ministry of Economics of Latvia)

Building type	Number, thousand pcs	Floor space, million m <sup>2</sup>
One- or two-bedroom apartment buildings	313	32
Multi-apartment building with 10 and more apartments	39	55
TOTAL	352	87

Therefore, the standard-design MABs built during the Soviet era that account for more than 80 % of all the standard MABs are of particular research interest. There are 39.1 thousand MABs in Latvia, while in Riga, there are 11.9 thousand buildings comprising almost 30 % of the total residential housing and accommodating half of Latvia's population.

In their 2015 research, the Institute of the Civil Engineering and Real Estate Economics at RTU in cooperation with the Latvian Real Estate Association (LANĪDA) indicate that according to the State Land Service of Latvia there were only 2164 MABs built during 1992-2014 (only six percent of the total housing stock). At the same time, the useful service life of 3000 MABs ends in 2020-2040, while the useful service life of a number of engineering infrastructure facilities, utility networks in particular, is already complete.

According to the state joint-stock company ALTUM responsible for allocation of the EU funds for the MABs renovation, the state of around 10000 residential houses in Latvia (more than 25 % of the total MABs) is critical. While according to Riga Energy Agency, 6000 MABs are in urgent need of renovation. The total floor space of these is 12 million m<sup>2</sup>, comprising 20 % of the total housing stock available floor space in the city (Golunovs, 2014).

It is generally obvious that the renewal of Latvia's housing stock is very slow: the market can offer only 0.3 percent of new required housing stock. According to independent experts, significant part of Riga's housing stock is worn out and in need of capital repair, including heating insulation works and change of utility networks. Moreover, the useful life of a number of MABs ends soon, creating a significant safety problem that must be solved at the national level. Therefore, in the author's opinion, there are currently no alternatives to the MABs renovation.

The renovation and energy efficiency of MABs represent a sector that could potentially provide a new life for residential buildings, objects of social infrastructure and industrial buildings, and reanimate the construction industry, manufacturing of modern building materials, provide new jobs in the affiliated accounting, legal and transportation companies. The renovation process brings a dual effect: first, it creates a considerable market for the development of the construction industry and related sectors of the economy; second, it brings savings of energy resources across the country.

Several indicators of already finished projects of MABs renovation are used to demonstrate connection between the financing of renovation projects for the housing stock in Latvia and the main indicators of the construction industry which were available in the database of the Central Statistical Bureau of Latvia: volume of construction, number of the employed and average gross earnings in the construction industry. For testing the assumption, the main indicators are accommodated in two tables: Table 2 and Table 3. Since the statistics of renovation project financing for MABs is available starting from 2010, the other indicators are shown for the period of 2010-2016. According to the data of the Central Statistical Bureau of Latvia, active allocation of the EU funds for energy efficient renovation of housing stock started in 2010 (Table 2).

For further analysis, the author combined into one table the main indicators of the constructions industry in Latvia taken from the data base of the Central Statistical Bureau of Latvia: the volume of construction, the number of the employed in the construction industry and monthly gross earnings in the construction industry. These are presented in Table 3.

**Table 2 EU structural funds allocation for housing stock renovation projects, 2017**  
 (source: The Ministry of Economics of Latvia)

<b>Year</b>	<b>Number of projects</b>	<b>Total investment, EUR</b>
2010	14	1,562,659
2011	42	5,086,750
2012	87	11,910,669
2013	171	32,560,748
2014	181	40,112,412
2015	170	39,273,899
2016	80	20,241,645
<b>Total</b>	<b>745</b>	<b>150,748,781</b>

**Table 3 Main indicators of the construction industry in Latvia, 2010-2016**  
 (source: The Central Statistical Bureau of Latvia)

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Volume of construction, thousand EUR	1,077,886	1,235,994	1,515,188	1,661,001	1,796,874	1,743,726	1,100,000*
Average number of the employed in the construction industry	57,000	60,875	62,350	67,275	73,250	71,900	66,400
Average monthly gross earnings in the construction industry, EUR	555.75	586.25	595	637.5	688.25	744	747

\*Data for 2016 are approximate since the CSB of Latvia provides data for the first 6 months of 2016: €528,894 thousand.

Further, by applying Pierson's correlation coefficient, a correlation between the number of the employed in the construction industry and the amount of investment and earnings is calculated. Table 4 presents the calculated data.

According to the preformed calculations, a correlation between the number of the employed in the construction industry and the amount of investment in the construction industry is 0.86, presenting a strong correlation. This reflects the situation: an increase in investment brings an increase of the number employed in the industry.

An average correlation of 0.75 is between the amount of investment and earnings in the industry. Undeniably, the relation is significant, however, other factors also influence the presented indicators.

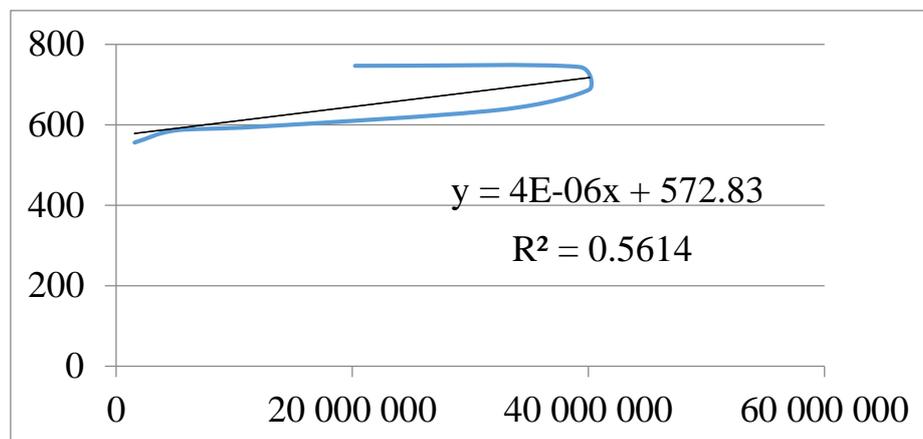
**Table 4 Pierson’s correlation between the number of the employed in the construction industry and the amount of investment and earnings in Latvia, 2010-2016**

(source: table created by the author based on data of the Central Statistical Bureau of Latvia and the Ministry of Economics of Latvia)

Year	Number of employed	Investment, EUR	Earnings, EUR
2010	57,000	1,562,659	555.75
2011	60,875	5,086,750	586.25
2012	62,350	11910,669	595
2013	62,275	32,560,748	637.5
2014	73,250	40,112,412	688.25
2015	71,900	39,273,899	744
2016	66,400	20,241,645	747
	Correl	0.86	0.75

The calculations of the coefficient of determination  $R^2$  show high dependency of 0.75 between the presented variables. The graph shows high dependency between the indicators.

Further, regression analysis is used for exploring the investment in energy efficiency project impact on the average level of earnings in the industry (Figure 1).



**Figure 1. Analysis of the investment impact on average earnings in the industry**

(source: figure created by the author based on data of the Central Statistical Bureau of Latvia and the Ministry of Economics of Latvia)

The calculations present linear dependency between the earnings level in the industry and the amount of investment in renovation projects for the housing stock

in Latvia in 2010-2016. The correlation coefficient of 0.56 shows reasonably average interconnection between the presented variables.

A correlation analysis for gross earnings in the construction industry and the amount of investment in the housing stock renovation is presented in Table 5.

**Table 5 Correlation of gross earnings in the construction industry and the amount of investment in the housing stock renovation projects**

(source: table created by the author based on data of the Central Statistical Bureau of Latvia)

Years	Amount of investment, EUR	Industry gross earnings, EUR
2010	747	555.75
2011	1,235,994	586.25
2012	1,515,188	595
2013	1,661,001	637.5
2014	1,796,874	688.25
2015	1,743,726	744
2016	1,100,000	747
	Correl	0.521915

**Table 6 Gross domestic product in current prices, the amount of investment in the housing stock renovation projects and the total output of the construction industry in Latvia** (source: table created by the author based on data of the Central Statistical Bureau of Latvia and and the Ministry of Economics of Latvia)

Years	Amount of investment in renovation, EUR	Output of the construction industry, thousand EUR	GDP, thousand EUR	Share of investment in renovation in the total output of the construction industry
2010	1,562,659	1,077,886	17,937,881	0.14%
2011	5,086,750	1,235,994	20,302,761	0.41%
2012	11,910,669	1,515,188	21,885,613	0.79%
2013	32,560,748	1,661,001	22,786,588	1.96%
2014	40,112,412	1,796,874	23,618,163	2.23%
2015	39,273,899	1,743,726	24,320,324	2.25%
2016	20,241,645	1,100,000	24,926,688	1.84%

The correlation analysis shows a modest coefficient of 0.52 between gross earnings in the construction industry and the amount of investment during the chosen period. This corresponds to the overall economic situation in the country

in the context of the formation of wages. A considerably high level of a shadow economy exists in the construction industry of Latvia.

Lastly, the correlation between the gross domestic product of Latvia and the investment in the housing stock renovation projects and the total volume of construction is explored in Table 6.

Table 6 provides insight into the share of investment in renovation of the housing stock of Latvia in relation to the total output of the construction industry in current prices. The analysis show that the share is quite low, the highest number being only 2.25 %. However, the broader picture is provided in Table 7 by exploring the correlation between the main indicators previously presented in Table 6.

**Table 7 The correlation between the amount of investment in renovation and total output of the construction industry, the total output of the construction industry and GDP, the amount of investment in renovation and GDP in Latvia**

(source: table created by the author based on data of the Central Statistical Bureau of Latvia and and the Ministry of Economics of Latvia)

Correlation between the amount of investment in renovation and the total volume of construction	0.84012
Correlation between the total volume of construction and GDP	0.50078
Correlation between the amount of investment in renovation and GDP	0.78832

The calculations show peculiar dependency. While the share of the amount of investment in renovation is quite low in the total output of the construction industry, the correlation coefficient between these indicators is considerably high: 0.84. This proves that the construction industry's development in Latvia is highly dependent on the implementation of the housing stock renovation projects. While the correlation between the total output of the construction industry and GDP is average, 0.50, the correlation between the amount of investment in the housing stock renovation and GDP is also quite high: 0.79. This shows a high impact of implementation of the energy efficiency projects on the economy of the country in general and not only in terms of the construction industry, but in terms of the energy industry too.

## **Conclusions**

The performed econometric analysis of the influence of energy efficiency project implementation for housing stock in Latvia on the construction industry has shown that a definite correlation exists between the amount of investment in the housing stock renovation and the growth of the general indicators of the construction industry and GDP. A more prominent correlation exists between the

growth of investment and the number of the employed in the industry, while a less prominent correlation is present between investment growth and the growth of average earnings. It is important to stress that data for the period of 12-15 year would allow for higher veracity of analytical calculations. Since investment in the housing stock renovation at large begun in 2010, only data for a period of 7 years (2010-2017) are used for the purpose of this paper. This could have influenced the calculations. However, even this period has demonstrated the accuracy of the assumption that the growth of investment in the housing stock will bring an increase in all the indicators of the construction industry and the economy in general.

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*Sakovskis, 2018. Implementation of Energy Efficiency Projects in Latvia's Housing Stock and its Influence on the Construction Industry*

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# ФОРМИРОВАНИЕ КОНФЛИКТОЛОГИЧЕСКОЙ КОМПЕТЕНТНОСТИ БУДУЩЕГО СПЕЦИАЛИСТА СФЕРЫ УПРАВЛЕНИЯ ПЕРСОНАЛОМ

## *Conflict Competence Development of Future Professionals in Staff Management*

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**Natallia Sukhankina**

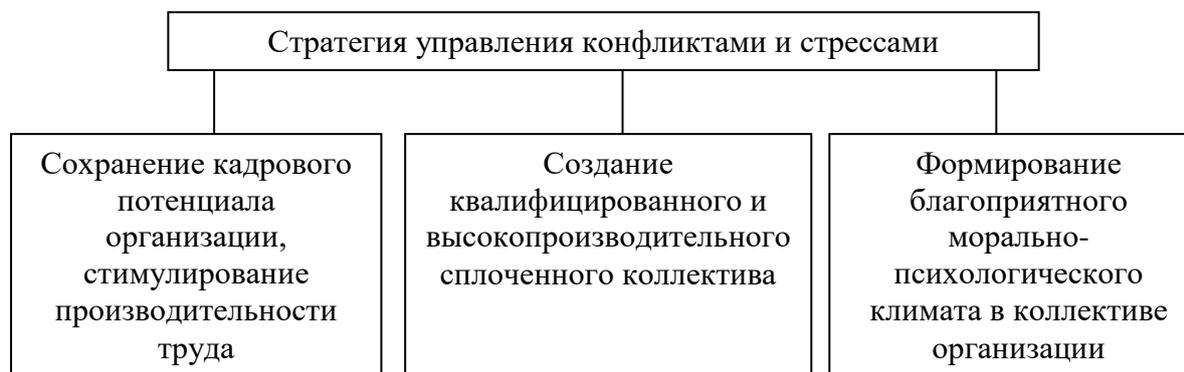
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**Abstract.** *A high level of conflict competence is a crucial managerial proficiency characteristic in the staff management sphere, as constructive conflict and stress management positively contributes to the output of an organization. Research Objective: the rationale and development of methodological guidelines to improve conflict competence of master-students majoring in “HR management”, employees and executives; the creation of conflict counseling system. Research methods: surveys have been conducted to assess the relevance of conflict competence for the professional activities of HR managers. The paper contains the author’s concept of scientific methodological and educational support for the course “Conflict and Stress Management in an Organization”. The main problems of conflict competence development in the sphere of staff management are identified. Special attention is paid to the introduction of innovative active and interactive teaching methods that require motivational, methodological, technological, methodical and expertise willingness of the university lecturer. In this research study, the interrelation between the structural components of the lecturer’s methodical competence and the quality characteristics of master’s training programmes on staff management is revealed to prove their determinism. The paper provides the examples of various training assignments as well as the conflict competence development course description.*

**Keywords:** *conflict competence, conflict problem, educational milieu, managerial competence, social interaction, staff management professional, training*

## **Введение** ***Introduction***

Современное управление, нацеленное на стратегическое развитие, предъявляет все более высокие требования к персоналу. В настоящее время происходит обогащение содержания труда; повышение значимости саморазвития и самоконтроля результатов трудовой деятельности; рост требований к повышению эффективности системы управления персоналом организации; внедрение новшеств и инноваций. Ключевой стратегией кадровой политики современной организации должна стать реализация ее конкурентоспособности за счёт повышения уровня профессиональной компетентности персонала, формирования высокосплоченного, высококвалифицированного и мобильного трудового коллектива, ориентированного на длительные социально-трудовые отношения. Особую актуальность в конфликт-менеджменте приобретают вопросы формирования стратегий в области управления конфликтами и стрессами. Стратегия направлена на социально-трудовые отношения и на систему нормативно-правового регулирования трудовой деятельности (рисунок 1).



**Рисунок 1. Цели управления конфликтами и стрессами в организации**  
(Кибанов и др., 2017)

***Figure 1. Aims of a conflict and stress management strategy for an organization***  
(Kibanov et al., 2017)

Накопленные к настоящему времени результаты научных исследований и опыт практической деятельности создают определенные предпосылки для разработки новых методов и стратегий управления организационными конфликтами и профессиональными стрессами. Социально-психологические аспекты управления и разрешения конфликтов отражены в работах В. Зигерта (Зигерт & Ланг, 1990), Х. Корнелиуса (Корнелиус & Фэйр, 1992), З. Фрейда (Фрейд, 2011), Д. Скотта (Скотт, 1993) и других ученых. Специфику современных

социальных и трудовых конфликтов исследовали А. В. Дмитриев (Дмитриев, 2002), Т. С. Сулимова (Сулимова, 2006), А. Г. Здравомыслов (Здравомыслов, 1996), Н. В. Гришина (Гришина, 2008), А. И. Пригожин (Пригожин, 2010), В. Н. Шаленко (Шаленко, 2008), В. П. Пугачев (Пугачев, 2011), О. И. Щербакова (Щербакова & Вербицкий, 2010), А. Я. Анцупов (Анцупов & Шипилов, 2011), А. Я. Кибанов (Кибанов et al., 2009) и др.

Навыки управления конфликтами и стрессами в организации являются важным управленческим инструментом в работе менеджера по управлению персоналом, так как осознанное применение соответствующих принципов, методов и механизмов помогает формировать и развивать кадровый потенциал организации. *Актуальной* является проблема формирования конфликтологической компетентности руководителей (менеджеров по управлению персоналом) и работников организации. Вклад в осмысление интегрального понятия «компетенция» внесли С. К. Prahalad and G. Hamel (Prahalad & Hamel, 1990), D. Mc Clelland (Mc Clelland, 1998), С. Woodruffe (Woodruffe, 1991), L. Spencer and S. Spencer (Spencer & Spencer, 1993), J. Burgoyne (Burgoyne, 1989), F. Hartle (Hartle, 1995), G. Beaumont (Beaumont, 1996). Анализ методов консультационного сопровождения в управленческих процессах в конфликтных ситуациях проводится Н. Prein (Prein, 1982), W. Mastenbroek (Mastenbroek, 1987). Решению проблем управления конфликтами и стрессами в организации, принципов и методов формирования конфликтологической компетентности работников и менеджеров, методик конфликтологического консультирования посвящены многие современные работы. В исследовании R. N. Anantharaman et al. (Anantharaman et al., 2017) анализируется роль самоэффективности и коллективной эффективности в качестве модераторов профессионального стресса работников организации. В статье G. Brown et al. (Brown et al., 2005) анализируются факторы трудового поведения, которые используются для создания благоприятного социально-психологического климата в организации. Методы повышения квалификации работников организации, направленные на повышение коммуникативной компетентности персонала и руководителей, рассматриваются в работе J. Costello et al. (Costello et al., 2011). В исследовании А. В. Алейникова и А. И. Стребкова (Aleinikov & Strebkov, 2017) анализируются процессы институционализации конфликтологии как учебной дисциплины. Особое внимание авторы уделяют основным особенностям междисциплинарного анализа конфликта.

### **Актуальность проблемы** *Relevance of the problem*

В настоящее время в современных организациях уровень социальной напряженности, деструктивной конфликтности и профессионального стресса в трудовых коллективах возрастает. Данный факт обусловлен не только различными экономическими, социальными, демографическими и психологическими причинами, но и невысоким уровнем сформированности конфликтологической компетентности руководителей и работников организации. Служба управления персоналом организации будет работать с наибольшей эффективностью, если конфликтологическая подготовка ее будущих сотрудников будет носить системный и преемственный характер. В данном случае можно согласиться с тем мнением, что мониторинг и учет мнений работодателей о «потенциальном профессиональном портрете» выпускника служит определенным этапом в образовательной технологии формирования конфликтологической компетентности менеджера по управлению персоналом. Конфликтологическая компетентность – это система научных знаний о конфликте и умении управлять им, целенаправленно развиваемых в процессе специально организованного обучения применительно к ситуациям учебного и профессионального взаимодействия субъектов общения, а также совместной жизнедеятельности.

В условиях трансформации требований работодателей к уровню профессиональной подготовки специалистов перед системой высшего образования встает задача совершенствования образовательных технологий и моделей подготовки магистров, способных к оперативной профессиональной адаптации, трудовой мобильности, эффективной реализации своего индивидуально-личностного потенциала, профессиональному развитию в условиях реальной трудовой деятельности. Очевидно, что процессы формирования и развития научно-технического потенциала должны обеспечиваться кадрами, обладающими профессиональными научно-исследовательскими, управленческими и конфликтологическими компетенциями.

### **Цель исследования** *Aim of the research study*

Целью теоретического этапа исследования является обоснование и разработка организационных и методических рекомендаций, направленных на повышение уровня конфликтологической компетентности магистров, обучающихся по направлению «Управление

персоналом», работников и руководителей организаций различных сфер деятельности, а также формирование системы конфликтологического консультирования. Конфликтологическая компетентность, являясь важной составляющей профессиональной компетентности управленца, тесно связана с другими видами компетентности: социально-психологической, психолого-педагогической, социально-перцептивной, административно-правовой. Беседы и интервью с работодателями показали, что современной организации нужен специалист высококвалифицированный, способный к самооценке, готовый к исследовательской работе, конфликтоустойчивый, нацеленный на профессионально-личностное развитие. Для реализации профессиональной деятельности в конфликтной среде менеджер должен обладать высоким уровнем конфликтологической компетентности как способом жизнедеятельности в конфликтных ситуациях во взаимодействии с субъектами профессиональной деятельности в системе социально-трудовых отношений.

В исследовании были проведены экспертные опросы с целью оценки актуальности конфликтологической компетентности для профессиональной деятельности менеджера по управлению персоналом. Авторы применили методику К. О. Старовой (Старовой, 2005).

### **Вопросы исследования** *Research questions*

В исследовании авторы:

- анализируют психолого-педагогические условия формирования конфликтологической компетентности магистров, обучающихся по направлению «Управление персоналом», и формируют концепцию научно-методического и учебно-методического обеспечения курса «Управление конфликтами и стрессами в организации»;
- разрабатывают рекомендации по повышению уровня конфликтологической компетентности руководителей и работников организаций и создают методику проведения комплекса обучающихся (корпоративных) тренингов;
- разрабатывают методическое обеспечение (учебно-методические рекомендации и пособия, банк вариативных производственных конфликтологических задач и т.д.), используемое в учебном процессе вуза и в процессе конфликтологического консультирования работодателей.

## **Методы исследования Research methods**

В исследовании были проведены экспертные опросы с целью оценки актуальности конфликтологической компетентности для профессиональной деятельности менеджера по управлению персоналом (2013–2017 гг.). Данный метод был использован авторами при формировании учебно-методического обеспечения конфликтологической подготовки в вузе и системы конфликтологического консультирования в организации. В ходе опроса предусматривалось решение следующих методических задач:

- эмпирическое подтверждение значимости конфликтологических компетенций для эффективной управленческой деятельности менеджера по управлению персоналом;
- определение эффективных методов и организационных форм конфликтологической подготовки в вузе и системы конфликтологического консультирования в организации;
- формирование банка вариативных конфликтологических задач, отражающих специфику особенностей конфликтных ситуаций и профессиональных стрессов работников в современных организациях.

Объективно эмпирическое обоснование значимости конфликтологических компетенций для специалиста в области управления человеческими ресурсами предполагает анализ мнений трех групп респондентов:

- руководителей и менеджеров промышленных предприятий и организаций сферы услуг («внешняя оценка»);
- выпускников управленческих специальностей («внутренняя оценка»);
- магистров управленческих специальностей («внутренняя оценка»).

Репрезентативность экспертной выборки первой группы респондентов (37 руководителей и менеджеров промышленных предприятий и организаций сферы услуг) обеспечивалась различными направлениями деятельности исследуемых предприятий и организаций и значительным стажем работы большинства руководителей и менеджеров по управлению персоналом (82 % от общего числа респондентов работает руководителями свыше 10 лет). Вторую группу респондентов составили выпускники Самарского государственного технического университета и Самарского национального исследовательского университета имени академика С. П. Королева (направление подготовки – «Управление персоналом»).

Всего было опрошено 154 выпускника 2014–2017 годов, постоянно работающих после окончания университета.

В третью группу респондентов вошли магистры Самарского государственного технического университета и Самарского национального исследовательского университета имени академика С. П. Королева, обучающиеся по направлению подготовки «Управление персоналом». Число респондентов – 95 магистров первого и второго года обучения дневной и заочной форм обучения. Репрезентативность данной выборки обеспечивалась охватом магистров различных курсов и форм обучения. Таким образом, всего по трем группам в рамках данной части эксперимента было опрошено 289 респондентов. Исследование проводилось в форме анкетного опроса, предполагающего оценку необходимости компетенций в области управления конфликтами и стрессами для профессиональной деятельности менеджера по управлению персоналом.

В список предлагаемых для оценки компетенций, помимо указанных компетенций в таблице 1, вошли и другие, выбранные произвольно (компетенции в области управления кадровыми рисками, экономической безопасности, экономики управления персоналом организации, кадровых инноваций и т.д.). Данная постановка вопросов обеспечивает объективность получаемых данных.

Как видно из таблицы 1, важные с точки зрения темы исследования практические умения были высоко оценены респондентами (средний балл равен 4 или выше, более 2/3 респондентов оценили необходимость названных умений на 4 и 5). Анализ результатов опроса респондентов показывает, что наибольшие показатели с точки зрения значимости имеют компетенции в области диагностики организационных конфликтов, диагностики стресс-факторов, вызывающих повышение уровня профессионального стресса сотрудников, а также в области управления организационными конфликтами и профессиональными стрессами. С точки зрения всех групп респондентов, наиболее значимыми являются компетенции в области принципов и методов кадровой стратегии управления конфликтами и стрессами в организации.

Интересно, что из предлагаемых для оценки компетенций, выбранных произвольно, наименьшее значение по значимости у магистров получили компетенции в области экономики управления персоналом организации; у выпускников – в области управления кадровыми рисками; у работодателей – в области кадровых инноваций и т.д.

Таблица 1. Выявление значимости конфликтологической компетентности для профессиональной деятельности руководителей и работников промышленного предприятия (Калмыкова & Гагаринская, 2012)

*Table 1 Identification of the significance of conflictological competence for the professional activity of managers and employees in industrial organizations (Kalmykova & Gagarinaika, 2012)*

Типы компетенций	Магистры		Выпускники вузов		Руководители и менеджеры организаций	
	Средний балл	Поставили выше 3 баллов, %	Средний балл	Поставили выше 3 баллов, %	Средний балл	Поставили выше 3 баллов, %
Диагностика и картографирование конфликтных ситуаций	4,5	80,2	4,4	84,6	4,6	85,7
Диагностика стресс-факторов, вызывающих повышение уровня профессионального стресса сотрудников	4,7	77	4,6	76	4,7	85,3
Формирование кадровой стратегии управления конфликтами и стрессами в организации	4,8	85,2	4,6	83,5	4,4	87
Медиативная деятельность, направленная на урегулирование конфликтного взаимодействия	4,3	77,5	4,4	88	4,5	84,1
Методы профилактики коррупционного поведения работников организации	4,4	75,6	4,3	89	4,5	85,3
Организация обучающих тренингов, направленных на формирование благоприятного морально-психологического климата	4,3	85,1	4,2	82,5	4,3	84

Всем трем группам респондентов был задан вопрос: «Какими, с Вашей точки зрения, компетенциями в сфере управления конфликтами и стрессами в организации обязательно должен обладать менеджер по управлению персоналом?». В числе наиболее актуальных компетенций большинство магистров, выпускников и работодателей назвали: знание основ возникновения и разрешения трудовых споров и организационных конфликтов в трудовом коллективе; владение технологиями посреднической деятельности при решении конфликтных ситуаций; умения по предупреждению и профилактике профессионального стресса работников.

## Результаты

### *Results*

#### **Потенциал индивидуально-личностного развития менеджера** *Potential of individual and personal development of a manager*

Современный магистр по управлению персоналом должен быть подготовлен реализовывать управленческие задачи в условиях конфликтной профессиональной среды и своевременно разрабатывать стратегии управления конфликтами и стрессами, внедрять кадровые мероприятия по минимизации дисфункциональных последствий конфликтов. Исследование данной проблемы предполагает решение многих задач, одной из которых является формирование понятия потенциала индивидуально-личностного развития менеджера по управлению персоналом (таблица 2).

Конфликтологическая подготовка магистров (направление подготовки «Управление персоналом») должна быть направлена на формирование следующих компетенций:

- методы диагностики источников и причин возникновения конфликтов и природы функциональных проявлений конфликтных ситуаций;
- методы диагностики стресс-факторов, вызывающих повышение уровня профессионального стресса руководителей и персонала;
- стратегии профилактики деструктивных конфликтов и профессиональных стрессов работников организации;
- программы профилактики аддиктивного поведения персонала;
- программы профилактики коррупционного поведения персонала;
- принципы и методы медиативной деятельности в организации;
- кадровые мероприятия, направленные на профилактику социально-трудовых конфликтов в коллективе;
- тренинги, направленные на формирование конфликтологической компетентности персонала;
- нормативно-документационное обеспечение кадровой стратегии управления конфликтами и стрессами в организации.

Таблица 2. Потенциал индивидуально-личностного развития менеджера по управлению персоналом в процессе формирования конфликтологической компетентности (Калмыкова & Гагаринская, 2012)

Table 2 Potential of the individual and personal development of a HR manager within the formation of conflictological competence (Kalmykova & Gagarinskaia, 2012)

Структурный компонент	Функции	Критерий (ожидаемый результат)
Когнитивный	Формирование навыков анализа конфликтных и стрессовых ситуаций; усвоение знаний по теории и практике конфликт-менеджмента и стресс-менеджмента; реализация потенциала индивидуально-личностного развития в управленческой деятельности менеджера	Системное усвоение принципов и методов организационной конфликтологии и опыта конфликтологической деятельности в рамках активной кадровой политики организации
Мотивационный	Формирование системы ценностей и нравственных мотивов профессионального поведения; формирование мотивов достижения и делового общения; формирование позитивного отношения к конструктивным конфликтам, неприятие эмоциональных и коррупционных конфликтов	Развитие направленности личности менеджера по управлению персоналом на профессиональное саморазвитие и самоорганизацию в области конфликт-менеджмента и стресс-менеджмента
Эмоциональный	Формирование компетенций саморегуляции эмоционального состояния; развитие уверенности в себе; совершенствование умений психологической защиты и копинг-стратегий	Развитие направленности личности менеджера на развитие эмоциональной компетентности
Саморегуляция	Развитие навыков регуляции своих психических состояний; развитие навыков самоорганизации; формирование эффективного взаимодействия; умение критически осмысливать свое поведение, соотносить его с профессионально значимыми целями и действиями коллег; приобретение опыта решения конфликтных и профилактики стрессовых ситуаций	Развитие направленности личности менеджера на необходимость обладать специфическим набором социально-значимых качеств
Предметно-практический: управленческий	Развитие способности использовать методики управления конфликтами и стрессами и выбирать оптимальные стратегии поведения в конфликте и копинг-стратегии; развитие опыта конфликтологической деятельности	Развитие направленности личности менеджера по управлению персоналом на формирование конфликтологической компетентности
Волевой	Приобретение опыта оценочной деятельности: формирование и развитие навыков взаимоконтроля, самоконтроля, самокоррекции; развитие инициативы	Осмысление собственного потенциала профессионального развития

Уровень сформированности компонентов готовности к конструктивному разрешению конфликтов и профилактике профессионального стресса можно оценить в рамках проводимых тренингов, учебных занятий, в ходе устных опросов, решения вариативных конфликтологических задач. При разработке системы мониторинга уровня сформированности конфликтологической компетентности менеджеров по управлению персоналом необходимо выбрать показатели, удовлетворяющие целям и задачам исследования, исходя из общих функций стратегии управления конфликтами и стрессами в организации:

- 1) планирование – определение оперативных и стратегических целей управления конфликтами и стрессами; определение необходимых ресурсов для реализации данной стратегии; формирование концептуальной базы стратегии управления конфликтами и стрессами; формирование стратегических и тактических планов кадровых мероприятий;
- 2) мотивация – разработка системы мотивации персонала по формированию антиконфликтного поведения; формирование организационной культуры; создание обучающей среды по формированию конфликтологической компетентности руководителей и работников;
- 3) координация – анализ результатов психологической диагностики, отчетов, аналитических материалов работы конфликтной комиссии; проведение кадровых мероприятий стратегии управления конфликтами и стрессами; анкетирование и опрос работников в целях осуществления диагностики: источников и причин конфликтов и стрессов; уровня профессионального стресса; уровня конфликтности и т.д.;
- 4) контроль, учет и анализ – анализ выполнения всех программ и кадровых мероприятий стратегии; оценка социально-экономической эффективности стратегии управления конфликтами.

Пример анализа уровня сформированности предметно-практического компонента конфликтологической компетентности менеджеров по управлению персоналом представлен в таблице 3.

Таблица 3. Оценка уровня сформированности конфликтологической компетентности менеджеров (Кибанов и др., 2017)  
 Table 3 *Quality evaluation of managers' conflictological competence (Kibanov et al., 2017)*

<b>Структурный компонент</b>	
<b>Предметно-практический: управленческий</b>	
<i>Наименование показателей</i>	<i>Содержание показателей</i>
Мониторинг стратегии управления конфликтами и стрессами. Диагностика уровня конфликтности и стрессогенности организационной среды	<ul style="list-style-type: none"> <li>– диагностика существующих в организации методов, форм и элементов системы управления конфликтами и стрессами;</li> <li>– формирование методики диагностики потребностей работников в конфликтологическом консультировании и разработке программ профилактики конфликтов и стрессов;</li> <li>– выявление потребностей руководителей и работников в формировании стратегии управления конфликтами и стрессами;</li> <li>– осуществление стрессмониторинга и т.д.</li> </ul>
Формирование стратегии, целей и принципов активной кадровой политики организации в области управления конфликтами и стрессами	<ul style="list-style-type: none"> <li>– определение экономических, социальных целей стратегии;</li> <li>– анализ стратегии развития организации и стратегии управления человеческими ресурсами;</li> <li>– формулирование принципов и стратегических направлений конфликтологической деятельности;</li> <li>– формирование стратегии</li> </ul>
Определение содержания и структуры стратегии управления конфликтами и стрессами	<ul style="list-style-type: none"> <li>– анализ внутренних и внешних ресурсов стратегии;</li> <li>– определение задач и программ по разработке и внедрению стратегии управления конфликтами;</li> <li>– формирование модели конфликтологической компетентности и стресс-компетентности работников;</li> <li>– формирование профиля информационных карт профессионального стресса работников организации;</li> <li>– разработка программ профилактики и коррекции профессионального стресса и др.;</li> <li>– осуществление мониторинга стратегии</li> </ul>
Разработка системы мотивации персонала по формированию антиконфликтного поведения в трудовом коллективе	<ul style="list-style-type: none"> <li>– классификация мотивов отношения персонала к мероприятиям стратегии управления конфликтами;</li> <li>– разработка эффективной методики стимулирования персонала;</li> <li>– формирование конструктивной организационной культуры;</li> <li>– создание благоприятной образовательной среды по формированию конфликтологической компетентности и стресскомпетентности работников организации</li> </ul>

Разработка нормативного и документационного обеспечения стратегии управления конфликтами и стрессами Внедрение технологии управления конфликтами и стрессами	<ul style="list-style-type: none"> <li>– определение состава нормативно-регламентирующих документов стратегии;</li> <li>– создание конфликтной комиссии в организации;</li> <li>– введение должности конфликтменеджера;</li> <li>– разработка Положений: регламента работы конфликтной комиссии, этических карт для всех категорий работников, этического кодекса и др.</li> </ul>
Внедрение стратегии управления конфликтами и стрессами	<ul style="list-style-type: none"> <li>– внедрение кадровых мероприятий стратегии;</li> <li>– формирование структуры взаимодействия с руководителями структурных подразделений;</li> <li>– разработка системы информирования персонала;</li> <li>– анализ результатов функционирования стратегии;</li> <li>– анализ и диагностика и конфликтных зон</li> </ul>
Мониторинг эффективности стратегии управления конфликтами.	<ul style="list-style-type: none"> <li>– мониторинг стратегии управления конфликтами и стрессами;</li> <li>– оценка эффективности стратегии</li> </ul>

### **Методы обучения и конфликтологические задачи** *Teaching methods and conflictology objectives*

Исключительно важным в процессе обучения магистров основным принципам и методам конфликтменеджмента является формирование у них таких качеств, как системность, мобильность, креативность, гибкость мышления, способность диагностировать и формулировать конфликтологические проблемы в организации. Методы формирования конфликтологической компетентности должны способствовать развитию у магистров управленческих и специальных конфликтологических компетенций. Наиболее актуально проектирование образовательных технологий на базе интеграционных процессов учебно-образовательной вузовской системы, отраслевой науки, производства и бизнеса с обеспечением высокой согласованности действий на всех уровнях управления. Методика обучения конфликтологии должна решать задачи формирования потенциала профессионального развития менеджера в процессе ее освоения. Одновременное развитие названных групп умений в процессе формирования конфликтологической компетентности можно осуществить путем использования активных и интерактивных методов обучения. Развитие навыков системного анализа, выработка умения диагностировать и объективно оценивать конфликтную ситуацию и принимать управленческие решения, а также обучение эффективному внутригрупповому и межличностному взаимодействию реализуется посредством использования деловых игр, разбора конкретных ситуаций, групповых дискуссий, тренингов, что в свою очередь потребовало

мотивационной, методологической и экспертной готовности преподавателя вуза; сформированность ценностно-мотивационного, рефлексивного и оценочного компонентов в структуре методической компетентности репродуцировали рост компонентов в структуре конфликтологической компетентности. В ходе исследования были выявлены дополнительные прямые связи между: ценностно-мотивационным компонентом методической компетентности преподавателей и показателями эмоционального компонента конфликтологической компетентности обучающихся технологическим компонентом методической компетентности преподавателей и управленческим компонентом конфликтологической компетентности обучающихся.

Авторами разработан банк учебно-методических материалов, включающий в себя комплекс учебных вариативных конфликтологических задач, сформированных с учетом специфики профессиональной деятельности менеджеров по управлению персоналом. Система конфликтологических задач представлена девятью группами заданий: непосредственные источники и причины возникновения различных типов конфликтов в организации; метод картографического анализа конфликтного взаимодействия; функциональные направления конфликтов в организации; принципы технологии управления конфликтами и стрессами; методы управления конфликтами и стрессами в организации; источники и функциональные последствия профессионального стресса; копинг-стратегии поведения работников; управление стрессами на уровне подразделения и на уровне личности работника; документационное и нормативно-правовое обеспечение стратегии управления конфликтами и стрессами. В таблице 4 представлен фрагмент банка конфликтологических задач, используемых как в образовательном процессе, так и в процессе проведения различных обучающих тренингов на промышленных предприятиях и организациях.

Таблица 4. **Вариативные конфликтологические производственные задачи**  
(Калмыкова, 2014)

*Table 4 Variable industrial conflictological tasks (Kalmykova, 2014)*

<b>Конфликтологическая задача</b>	<b>Содержание конфликтологической задачи</b>	<b>Практическое значение решения задачи для организации</b>
Методы управления конфликтами и стрессами в организации	<p>Определение содержания технологии управления конфликтами и стрессами</p> <p><b>Примеры задач</b></p> <ol style="list-style-type: none"> <li>1. Охарактеризуйте перечень и структуру организационных мероприятий, направленных:               <ol style="list-style-type: none"> <li>а) на профилактику деструктивных конфликтов в организации;</li> <li>б) на профилактику профессионального стресса работников</li> </ol> </li> <li>2. Предложите свою классификацию:               <ol style="list-style-type: none"> <li>а) методов управления конфликтами и стрессами в организации;</li> <li>б) конструктивных функций конфликтов в организации</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Формирование конфликтологической компетентности и персонала организации.</li> <li>2. Разработка программ профилактики профессионального стресса.</li> </ol>
Источники и функциональные последствия профессионального стресса сотрудников. Копинг-стратегии поведения.	<p>Разработка системы мотивации персонала по формированию конструктивного трудового поведения.</p> <p><b>Примеры задач</b></p> <ol style="list-style-type: none"> <li>1. Покажите связи, которые существуют между:               <ol style="list-style-type: none"> <li>а) причинами возникновения организационных конфликтов и несовершенством системы управления персоналом, организационной структуры организации, кадровой политики организации;</li> <li>б) причинами повышения уровня профессионального стресса и несовершенством организации труда персонала</li> </ol> </li> <li>2. Раскройте особенности стратегии поведения в конфликте:               <ol style="list-style-type: none"> <li>а) сотрудничество;</li> <li>б) противостояние;</li> <li>в) уклонение;</li> </ol> </li> <li>3. Раскройте особенности этики регулирования конфликтов:               <ol style="list-style-type: none"> <li>а) психологом;</li> <li>б) руководителем;</li> <li>в) конфликтменеджером.</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Разработка методов стимулирования персонала к повышению уровня этики взаимоотношений.</li> <li>2. Создание благоприятной образовательной среды по формированию конфликтологической компетентности и всех категорий работников организации.</li> </ol>

В процессе формирования конфликтологической компетентности можно использовать четыре группы методов, соотнесенных с этапами и уровнями методики интерактивного обучения:

- методы создания положительной мотивации (учет личных учебных достижений, создание психологически комфортных условий обучения);
- методы организации интерактивной познавательной и практической деятельности магистра (обсуждения специальных и учебных видеозаписей, дискуссии, решение задач на основе анализа конкретных ситуаций, подготовка презентаций и докладов, научно-исследовательские проекты);
- рефлексивно-оценочные методы (анализ результатов контроля, взаимоконтроля и самоконтроля, диагностика учебных затруднений);
- методы развития личной образовательной среды обучения (привлечение личного или профессионального опыта магистра, привлечение личного биографического опыта работодателя, биографический метод, метод межпоколенческого обучения, практическая ориентация, работа с дополнительными источниками информации) (Сулимова, 2006). Одним из инструментов конфликтологической подготовки магистров является проведение различных обучающих тренингов, основными задачами которого являются формирование конфликтологической компетентности и повышение уровня стрессоустойчивости менеджеров по управлению персоналом и работников организации.

### **Заключение** *Conclusion*

В ходе проведенного исследования авторами:

- проанализированы психолого-педагогические и организационные условия формирования конфликтологической компетентности магистров, обучающихся по направлению «Управление персоналом»;
- сформированы методические рекомендации по повышению уровня конфликтологической компетентности руководителей и работников организации (комплекс обучающих тренингов);
- создано и апробировано учебно-методическое обеспечение, используемое в учебном процессе вуза и в процессе конфликтологического консультирования работодателей;

- разработаны вариативные профессиональные конфликтологические задачи, используемые как в образовательном процессе, так и в процессе проведения различных обучающих тренингов на промышленных предприятиях и организациях.

Вместе с тем существует ряд потенциальных проблем и рисков, связанных с реализацией методики формирования конфликтологической компетентности магистров, а именно:

- недостаточное участие работодателей в экспертных опросах на тему исследования;
- внедрение инновационных методов и технологий обучения, требуют наличие высокого уровня мотивационной, методологической и экспертной готовности преподавателей вуза и т.д.

### Summary

The paper deals with the core approaches to the formation of conflict competence of students, i.e. future HR managers; there have been actualized the challenges of formation of integrated characteristics that ensure constructive conflict activity of the subjects of the educational process in the organizational environment. Inclusion of the conflict resolution component in HR managers' professional training is predetermined by the requirements of the modern economy, i.e. it is vital to improve managers' professional training; to train managers, who will be aware of the methods essential to diagnose the causes of conflict and stress in the workplace, as well as of the conflict resolution strategies. The methodology for the conflict competence formation of managers appears to be vital for the transition to level-sensitive higher education, which assumes the initial multifaceted general professional training with subsequent specialization.

Research Objective: the rationale and development of methodological guidelines to improve conflict competence of master-students majoring in "HR management", employees and executives; the creation of conflict counseling system.

Research task:

- to provide theoretical grounds for objectives and content of HR managers conflict-resolution training based on the competence approach;
- to explain the concept of "HR manager individual and personal development potential";
- to prove the implementation technology for HR managers conflict-resolution training based on the competence approach;
- to form the educational and methodical support of the course as follows: "Conflict and Stress Management in the Organization".

Research Object: HR managers' professional training at the level of undergraduate and postgraduate education.

Research Subject: HR managers conflict competence formation.

The methodological basis for HR managers' conflict management competence creation is a conflict and environment approach that takes into account the functions of management in the work environment and conceptual ideas of new requirements for qualification and competence creation of adaptive specialists training.

Research methods: surveys have been conducted to assess the relevance of conflict competence for the professional activities of HR managers.

Research outcomes:

1. Psychological, pedagogical and organizational aspects of HR management master-student conflict competence formation have been analyzed.
2. Methodological recommendations to enhance the conflict competence level of the company's managers and employees (a set of trainings) have been formed.
3. Learning and teaching support material used at the educational process at the university and for employers conflict counseling has been developed and tried out.
4. A variety of professional conflict tasks, used at the educational process and for conducting various training sessions at industrial enterprises and organizations have been developed.

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# CONCEPTUAL MODEL IN INTEGRATED MARKETING COMMUNICATION

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**Abstract.** *Integrated marketing communications are developing, with IMC approaches to communication with consumers seeing further enhancements in the scientific literature. However, in order to reach the marketing targets, a variety of IMC tools may be used in combination when implementing marketing activities. Despite each IMC tool in itself being highly distinctive, they all depend on each other in the creation of product consumption value and the enhancement of economic, communicational and social benefits. Purpose of the paper: The goal of the research is to assess the integrated marketing communications used in the marketing strategy of Latvian food retail chains. Methodology/methods: The following scientific research methods are used in the research study: analytical, comparative, graphical, statistical, observatory and interrogative. The research focuses on the Latvian food retail sector, with leading specialists from all Latvian food retail chains polled. The object of the research is Latvian food retail chains, and the subject of the research is integrated marketing communication as a set of tools. Findings: The results of the research are of both theoretical and practical value, as it confirmed the hypothesis that a complex use of IMC promotes a long-term relationship among all stakeholders of the selling and buying process. The authors have collected and classified IMC tools and, based on the results of the research, drawn up a conceptual model of integrated marketing communications.*

**Keywords:** *food industry, food retail sector, integrated marketing communications, integrated marketing communication tools, conceptual integrated marketing communication model.*

## Introduction

The approaches proposed and discussed in scientific literature mostly reveal the philosophical aspect of the integrated marketing communication process, covering the communication process as such within IMC. However, while the existing models serve well for the understanding and studying of the process, none of the IMC approaches is directly applicable in practice, as there are no particular IMC tools provided which businesses could use in their daily work. The current theory of integrated marketing communication lacks concrete tools, classification, methods whereupon businesses could base their action plan for the promotion of marketing activities. This suggests that customer-oriented IMC require more detailed research to define tools that would help towards a precise and effective

communication with consumers. The goal of the research is to assess the integrated marketing communications used in the marketing strategy of Latvian food retail chains. In order to accomplish the goal, the following **objectives** were set out: to study scientific literature in the field of IMC, to collect, classify and develop IMC tools, to draw up an expert questionnaire, to conduct expert interviews, to aggregate and analyse data, and to develop a conceptual IMC model based on the results of the research and scientific literature.

The following scientific research methods are used in the study: analytical, comparative, graphical, statistical, observatory and interrogative. The research focuses on the Latvian food retail sector, with leading specialists from all Latvian food retail chains polled. The **object** of the research is Latvian food retail chains, and the **subject** of the research is integrated marketing communication as a set of tools.

### **Role and importance of integrating marketing communications and their tools**

The founder of the marketing theory Philip Kotler (Kotler, 2006) has defined marketing communications where essentially there exist the following types of marketing communications: advertising, sales promotion, public relations and publicity, direct marketing, personal selling, and events and experience. David Jobber (Jobber, 2007) lists nine types of marketing communications, as does Patrick De Pelsmacker (Pelsmacker, 2007). Sandra Moriarty (Moriarty, 2001), however, lists 11.

The theoretical defining of marketing communications is thus in a constant process of development. Justin Foxton (Foxton, 2008), for instance, points out that, with the market growing and changing, there emerge ever new tools and theories of marketing communications. Examples are product placement or PP, point-of-purchase, interactive marketing, e-communications, event marketing and others. While all these tools are considered unconventional marketing methods, each of them falls under the marketing communication types or elements defined by Philip Kotler (Kotler, 2006).

According to Indrė Rimkienė (Rimkienė, 2013), the IMC process is very similar to that of marketing communication, yet includes an approach of conveying one consistent message to the recipient through organisational promotional activities which may simultaneously encompass a broad range of media, including television, radio, magazines, the Internet, mobile phones, professional selling, social media.

The essence, role and importance of IMC is also addressed by Mike Reid (Reid, 2012) who presents IMC as a new philosophy of communication and a strategic managerial process for the creation and management of strong brands

short-term and long-term based upon nine categories with different communication channels: 1) advertising based media – television, radio, newspapers, magazines; 2) target and interactive advertising – e-mail, phone, printed advertisements etc.; 3) local and outdoor advertising – posters, films etc.; 4) points-of-sale advertising – a notice board, an advertisement in the shopping cart etc.; 5) promotions – various offers etc.; 6) proposals taking – product samples, coupons etc.; 7) private sales; 8) event marketing and sponsorship – sporting event sponsorship etc.; 9) public relations – a product or company review. Hence, the authors conclude that the IMC process begins with the identification of existing or potential customers and the forms and methods which communication programmes should be based on. According to Don Edward Schultz (Schultz, 2000), IMC represents a new way of looking at the entirety when we have seen just individual parts like advertising, public relations, sales promotion, employee communications etc.

In the course of development, IMC approaches are updated and directed towards consumer. Manfred Bruhn (Bruhn, 2017) and Stefanie Schnebelen (Schnebelen, 2017) emphasise that the existing IMC concepts do not discuss IMC in detail in the context of social media and IMC is treated as a new communication tool that enriches the range of communication measures. The scientific literature pays little attention to the fact that social media have structurally changed the communication market and that the traditional sender-recipient approach no longer works in IMC – senders and recipients cannot be clearly defined and may change infinitely.

Åke Finne and Christian Grönroos (Finne & Grönroos, 2017) describe the communication process as one where the company is the subject (active sender) and the customer is the object (passive recipient), and one which may be interfered by rumours, misunderstandings or misrepresentations.

Kristina Heinonen (Heinonen, 2013), Tore Strandvik (Strandvik, 2013) and Päivi Voima (Voima, 2013) argue that sometimes the company does not even take part in this communication process, as it may be beyond their visibility, beyond the planned messages. Anne Rindell (Rindell, 2010) and Tore Strandvik (Strandvik, 2010) opine that customers receive a lot of information from sources in their daily lives, whereas Anker, Moutinho, Sparks and Grönroos (Anker, Moutinho, Sparks, & Grönroos, 2015) admit that it may be difficult for businesses to find out what messages and sources are – i.e., to identify the interface points. An example of hidden message could be brand information used by competitors to change another brand's image in the perception of other customers.

The authors find that the scientific literature defines IMC in a variety of ways, e.g., as tools, elements, ways etc. IMC is developing and consumer-oriented IMC approaches are constantly revised and enhanced, mostly revealing the philosophical aspect of the process and covering the communication process as

such within IMC. However, the existing models only serve well for the understanding and studying of the process. None of the IMC approaches is directly applicable in practice, as there are no particular IMC tools provided which businesses could use in their daily work. The current theory of IMC lacks concrete tools, classification, methods whereupon businesses could base their action plan for the promotion of marketing activities. Customer-oriented IMC require more detailed research to define tools that would help towards a precise and effective communication with consumers. The consumer of nowadays requires well-aimed and detailed information with delving into the customer's wishes and opinion, the company has to cover all sensitive issues. The authors conclude that such IMC tools need to encompass processes, experience, actions etc., rather than just the company's goals and a superficial understanding on the IMC process.

Based on the above, the authors have collected integrated marketing communication tools (105) and classified them into 8 main groups: **1) management tools** (13) for running a marketing management system and marketing strategy within IMC; **2) product-related tools** (21) for building the company's supply; **3) price-related tools** (8) for setting the overall pricing policy and system based on the company's market positioning; **4) promotion-related tools** (18) for making information available to consumers within and beyond the shop premises; **5) digital promotion-related tools** (10) for communication beyond the shop premises using the vast options of current technologies; **6) staff professionalism- and selling-related tools** (7) for ensuring an effective personal selling; **7) corporate identity-related tools** (11) for building and strengthening the company's overall image; **8) geographic placement- and technology-related tools** (17) for making shopping more accessible and convenient (see Table 1).

Table 1 **Classification of integrated marketing communication tools**  
(source: IMC tools collected and classified by the authors)

No.	Integrated marketing communication tools
<b>1. Management tools</b>	
1.1.	Marketing communication management system
1.2.	Strategic planning of marketing communications
1.3.	Assessment of efficiency of marketing communications
1.4.	Brand management system
1.5.	Marketing and market research
1.6.	Shop positioning in the market (high-, low-quality assortment)
1.7.	In-house marketing department
1.8.	Qualified marketing specialists (incl. those of the marketing department)
1.9.	<i>Cooperation of the marketing department with other functional departments*</i>
1.10.	<i>Cooperation of the marketing department with the procurement department*</i>

1.11.	Customer loyalty programmes
1.12.	Customer satisfaction surveys (databases)
1.13.	<i>System and procedure of submission and a review of complaints*</i>
<b>2. Product-related tools</b>	
2.1.	Breadth of a product assortment
2.2.	Variety of goods in one product group
2.3.	<i>Units per product type on the shelf*</i>
2.4.	<i>Variety of pre-packaging per product type on the shelf*</i>
2.5.	<i>Protective product packaging*</i>
2.6.	Design and appeal of product packaging
2.7.	Product packaging with information on product application
2.8.	Appeal of product labels
2.9.	<i>Placement of labels on the product without covering original manufacturer information*</i>
2.10.	<i>Information about the product on labels*</i>
2.11.	<i>Information about product composition on marking*</i>
2.12.	<i>Information about product origin, the manufacturer country, the importer, weight, best before date etc. on marking*</i>
2.13.	Proportion of products marked with barcodes
2.14.	<i>High proportion of products with a short best before period*</i>
2.15.	<i>High proportion of products with a long best before period*</i>
2.16.	<i>Proportion of new product categories*</i>
2.17.	<i>Proportion of premium products*</i>
2.18.	<i>Proportion of affordable products*</i>
2.19.	Proportion of daily consumption products (bread, milk, meat etc.)
2.20.	Proportion of alcoholic products
2.21.	Proportion of household goods, incl. household chemical
<b>3. Price-related tools</b>	
3.1.	Pricing policy
3.2.	Retail chain's positioning in the market ("leader in low prices" etc.)
3.3.	Price level
3.4.	Discount system
3.5.	Sales promotion activities related to price changes
3.6.	One-off sales promotion activities for individual products or product groups (one-off discounts, coupons, gifts for purchase etc.)
3.7.	<i>High proportion of discounted products*</i>
3.8.	<i>Low proportion of discounted products*</i>
<b>4. Promotion-related tools</b>	
4.1.	Outdoor advertisements about the shop location (at the block, village, town, district etc.)
4.2.	Competitions, lotteries, coupons, souvenirs to promote product sales
4.3.	Sales promotion activities not related to price
4.4.	Location of products in the store
4.5.	Arrangement of products on shelves
4.6.	Arrangement of products in store premises

4.7.	Arrangement of products in the store in outer packaging (on palettes, in boxes etc.)
4.8.	<i>Regular repositioning of products on shelves*</i>
4.9.	Informational messages in the store about the location of product groups
4.10.	Informational messages at eye height about the location of products on shelves
4.11.	Visual messages about product discounts
4.12.	Online advertisements about product quality, composition, storage and application
4.13.	Advertisements in mass media (TV, radio, press etc.) about product quality, composition, storage and application
4.14.	Outdoor advertisements on product quality, composition, storage and application
4.15.	Advertisement stands (in stores, exhibitions) about product quality, composition, storage and application
4.16.	Special newspapers and catalogues by companies about products and their application, incl. information about product quality, composition, storage
4.17.	Salesperson consultations about product, composition and application
4.18.	In-store product degustations
<b>5. Digital promotion-related tools</b>	
5.1.	<i>Mobile app for convenient online shopping*</i>
5.2.	<i>Mobile app providing information about the shop and its products*</i>
5.3.	<i>Product information displayed on the barcode (application, pictures, website address etc.)*</i>
5.4.	<i>Barcode and QR code reading with smartphones (barcode scanner)*</i>
5.5.	Customer notification of discounts by SMS
5.6.	Customer notification of discounts by e-mail
5.7.	Company website design, ease of use, structure
5.8.	Company website providing information on the shop and its products
5.9.	Company website for convenient online shopping
5.10.	Option for consumers to receive information and follow the company on social media
<b>6. Staff professionalism- and selling-related tools</b>	
6.1.	Speed and quality of service
6.2.	Staff professionalism
6.3.	Staff education
6.4.	Staff training and qualification-raising
6.5.	<i>Employee motivation system (rewards for sales increase, customer appreciation etc.)*</i>
6.6.	Staff outfit, uniform
6.7.	Building of a customer database for direct marketing (address, phone number, e-mail etc.)
<b>7. Corporate identity-related tools</b>	
7.1.	Corporate culture (company's values, principles, philosophy etc.)
7.2.	Corporate strategy (company positioning strategy)
7.3.	Product manufacturer's corporate strategy
7.4.	Company brand promotion
7.5.	Company brand recognition

7.6.	Sponsorship and support for public events
7.7.	Charity initiatives and social responsibility
7.8.	<i>Corporate behaviour (public behaviour of top-level management, staff behaviour)*</i>
7.9.	<i>Corporate design system (single visual identity, its application, company website, social media, store layout, interior, staff uniforms, assortment, price level, market positioning, image etc.)*</i>
7.10.	Company's reputation
7.11.	Product manufacturer's reputation
<b>8. Geographic placement- and technology-related tools</b>	
8.1.	Shop location
8.2.	Warehouse location
8.3.	Proximity of a public transport stop
8.4.	Availability of parking space
8.5.	Proximity of other service providers (footwear repair, clothes cleaning, banking services etc.)
8.6.	<i>Free Internet access within shop premises*</i>
8.7.	Adapted entrance for disabled persons
8.8.	Adapted entrance for parents with a pram
8.9.	Storage of personal property in lockers
8.10.	Catering services offered by the shop
8.11.	External catering offered by the shop
8.12.	Self-service system offered by the shop
8.13.	<i>Call centre offered by the shop (for phone orders, additional service requests) *</i>
8.14.	<i>Online store</i>
8.15.	<i>Information centre*</i>
8.16.	<i>Food delivery*</i>
8.17.	Availability of take-away shopping bags and other packaging

*\*IMC tools developed by the authors*

**IMC management tools.** In the authors' opinion, the tools of this group serve as basis for the development, application and assessment of marketing strategy. The authors have classified and distinguish IMC management tools as the first group of tools because they believe that without a single marketing communication management system a company cannot work on IMC effectively. Within this group, the marketing department is tasked with the planning, implementation and efficiency assessment of marketing communications based on market and marketing research, and the authors have also pointed out the marketing department's cooperation with other functional departments, notably the procurement department. The authors see the procurement department as the one that selects the products to be put on sale not just by purchase price but also by quality, design, packaging and other criteria, which, in turn, are closely related to selling and marketing. Also included among IMC management tools are market

positioning and the brand management system, customer loyalty programmes, satisfaction surveys, complaint review procedure and its system overall.

**IMC product-related tools.** The authors find the essence of a product to be related to the creation of a product value. IMC product-related tools are a key component of communication. A product is an amalgamation of its consumption value, quality, design, marking, packaging, presentation etc. Hence, the key tools featured under the group of IMC product-related tools are the breadth of a product assortment, variety in one product group, the variety of pre-packaging, protective product packaging, appealing design, incl. the appeal and information of the label, the proportion of products with a short and long best before period etc.

**IMC price-related tools.** Selling extends beyond the pricing policy itself – in communication with consumers it needs to be supplemented with such IMC tools as sales promotion activities related to price changes, the company's general price level and discount system, as well as the proportion of discounted products. Another key IMC price-related tool is one-off sales promotion activities, such as discounts, coupons, gifts for purchase etc., as well as a high or low proportion of discounted products depending on market positioning and overall marketing strategy. Price changes is one of the reasons why consumers sometimes pay attention to new products that have the same composition, features, quality functions etc. as products purchased previously. The authors concede that discounts may be a contributory factor to drawing consumers' attention to a specific product on the shelf or to promoting new products.

**IMC promotion-related tools.** The authors find that IMC promotion-related tools also include such tools as outdoor advertisements about the shop location; competitions, lotteries, coupons, souvenirs; sales promotion activities not related to price; the location of products in the store; directions to the product location, as well as the arrangement of products in the store; online advertisements about product quality, composition, storage and application; advertisements in mass media; special newspapers and catalogues by companies about products and their application, incl. information on product quality, composition, storage; salesperson consultations about the product, composition and application, in-store degustations etc. The essence of the IMC promotion tools proposed by the authors is accessibility.

**IMC digital promotion-related tools.** With the development of e-commerce and technologies and consumers having vast options of communication, businesses, too, have vast options to communicate with consumers. This is why the authors have made digital promotion tools a separate group featuring mobile apps for convenient online shopping; product information displayed on the barcode; barcode and QR code reading with smartphones; customer notification by SMS and e-mail; company website design, ease of use,

structure; the option for consumers to receive information and follow the company on social media.

**IMC staff professionalism- and selling-related tools**, in the authors' view, covers such core elements as speed and quality of service, staff education and professionalism (practical experience and skills combined with talent and right character), regular staff training and qualification-raising. In order for businesses to run a perfect selling process, it is crucial to have a staff motivation system implemented through various motivational programmes – rewards for sales increase or meeting sales plans, customer appreciation etc. Not only the professional capabilities, skills and education, but also their appearance, uniform, speech etc. matters and are key marketing communication tools for raising the sales volumes.

**IMC corporate identity-related tools** are ones that describe the corporate culture and strategy as an integral part and include company brand promotion and recognition, sponsorship and support for public events, charity initiatives, social responsibility. With the quest for a flawless identity, the authors have also added the corporate design system as a tool. Single visual identity, its application, the company website, social media, store layout, the interior, staff uniforms, the assortment, the price level, market positioning, the image and other factors are basic conditions in a corporate design system serving as basis for the reputation of the company and of the manufacturer of the products it offers and are therefore specifically highlighted by the authors.

**IMC geographic placement- and technology-related tools.** This group includes tools pertaining to the location and its capabilities to make the selling process more convenient and accessible to customers and quicker and more economical to provide. A particular emphasis is placed on the location of a shop and warehouse, which affects the cost of product selling and the providability of supply. As concerns the customer-oriented approach, the authors have included such tools as proximity of a public transport stop, availability of parking space, an adapted entrance for disabled persons and parents with a pram, proximity of other service providers (footwear repair, clothes cleaning, pharmacy, banking and postal services etc.), free Internet access and storage of personal property in lockers, catering services, a self-service shopping system, a call centre, an online shop, delivery services and, lastly, availability of take-away shopping bags.

In brief, the authors conclude that, in order to achieve marketing targets and implement marketing activities, IMC should be done using concrete, detailed, customer-oriented IMC tools conducive to the consumption value, as collected and classified by the authors.

A well-aimed communication makes it possible to achieve the goals of marketing activities, reach the target audience, and influence the buyers' behaviour in the market. However, at each particular stage of buyer behaviour the

application of IMC tools yields more or less benefits – economic, communicational and social, hence the use of IMC tools on their merits with an integration among each other would contribute to reaching the company's specific goals in respect of buyer behaviour – generating a need, providing information to consumers for them to assess alternatives, to make a buying decision, and to buy and use the product, thus fostering a long-term relationship among the stakeholders of the buying and selling process.

### **Study of use of integrated marketing communications**

In order to assess IMC tools, the authors put forward a hypothesis that a complex use of IMC fosters a long-term relationship among all the stakeholders of the buying and selling process. Accordingly, in order to confirm or reject the hypothesis, the authors conducted research on the use of IMC at Latvian food retail chains. An expert questionnaire was drawn up, and leading specialists from food retail chains were polled. The expert poll was held in 2017. The MS Excel software was used for data aggregation and analysis. The purpose of the expert poll was to find out the IMC applied in the marketing strategy by Latvian food retail chains.

The experts were asked to rate IMC tools applied in marketing strategies and their impact upon demand at retail chains by the following scale:

- N* – the company does not use the marketing communication in question
- 1* – the marketing communication in question reduces demand
- 0* – the marketing communication in question does not affect demand
- 1* – the marketing communication in question slightly increases demand
- 2* – the marketing communication in question substantially increases demand.

In Figure 1 the authors have summarised the expert ratings to illustrate the importance of each group of IMC tools in the marketing strategy of the retail chains.

The results of the expert poll identify 1) the group of IMC price-related tools, 2) the group of IMC staff professionalism- and selling-related tools, and 3) the group of IMC corporate identity-related tools as the ones deemed by experts as most influential in terms of increasing demand in the marketing communication with consumers applied by retail chains. Only then follows the group of IMC management tools and the group of IMC product-related tools, suggesting that the companies have not prioritised a systemic approach in their marketing communication with consumers. The three lowest rated are the group of IMC promotion-related tools, the group of IMC geographic placement- and technology-related tools, and the group of IMC digital promotion-related tools. The authors conclude that IMC digital promotion is a relatively new method of

marketing communications, and the tools of this group are little used or not used at all by the businesses. Nevertheless, the companies that use these tools in their marketing strategy have found them demand-increasing. Still, the majority of the retail chains do not use the said tools in their marketing communications with consumers. The authors encourage businesses to incorporate digital IMC tools in their marketing communication management system, given the development of technologies, the extensive possibilities of communication with consumers (incl. masses, based on the “anytime anywhere” principle).

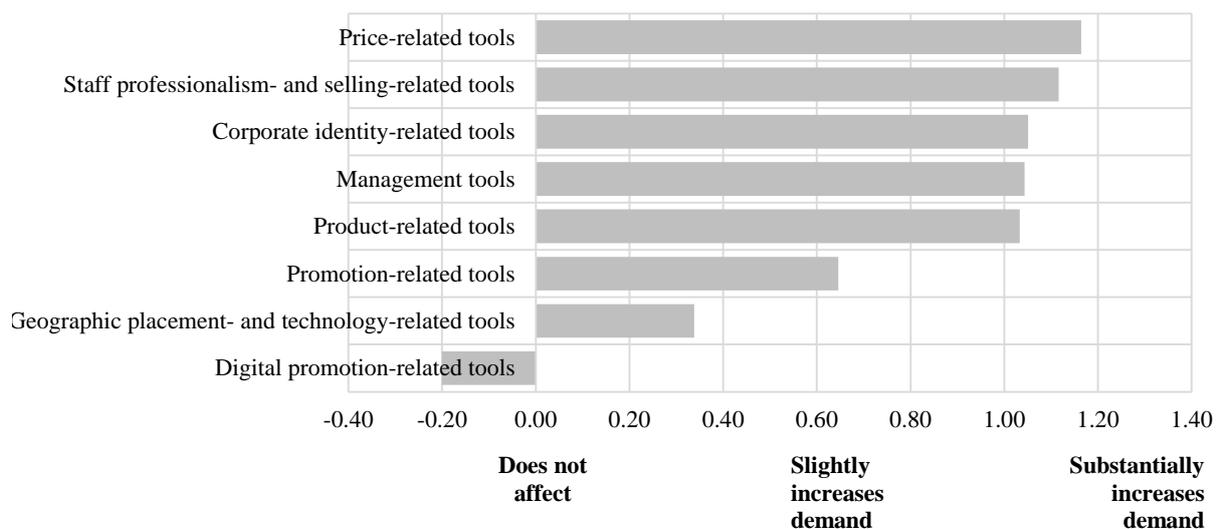


Fig. 1. Impact of IMC tool groups upon demand, a summary of expert ratings (arithmetic mean) (source: Figure developed by the authors)

In Figure 2 the authors have picked the most popular demand-increasing IMC tools from each group applied by Latvian food retail chains in their marketing strategy.

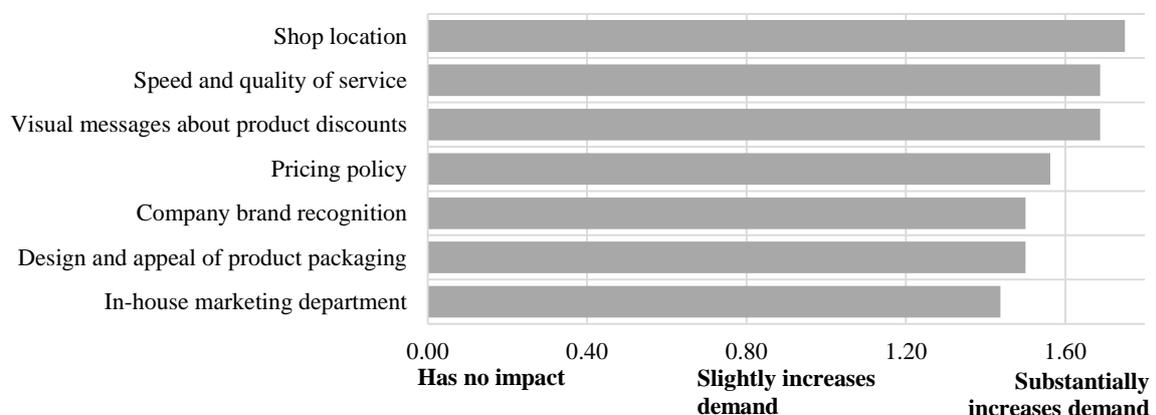


Fig. 2. Most popular demand-increasing IMC tools, average expert ratings (source: Figure developed by the authors)

Figure 2 identifies the shop location as one of the main demand-increasing tools. The authors concur with the expert opinion and add that the shop location definitely correlates with such IMC tools as proximity of a public transport stop, availability of parking space, and proximity of other service providers. Depending on these factors, retail chains acquire loyal long-term customers who return to the shop and make repeated purchases.

The authors agree with the experts on that speed and quality of service is a major demand-increasing factor and a precondition of competition. Businesses need to realise that staff professionalism (incl. speed and quality of service) depends on the level of staff education.

The authors also agree with the experts on that pricing policy as a price-related IMC tool affects demand because the level of prices substantially affects the company's market position, competitive prospects, attractable audience, and overall sales figures etc. The authors conclude that an appropriate pricing policy may yield not only immediate economic benefits, but also a long-term effect – loyal buyers, repeated purchases etc.

As concerns company brand recognition, the authors concur with the expert opinion and find that a key condition in building, raising and promoting a company's brand is the company itself – the body of its values, principles, philosophy etc., including behaviour in the market. Hence, the authors believe that it is also the company's and product manufacturer's reputation that matters in the brand recognition and promotion process. Reputation makes identity, while identity succeeds if there are positive associations. In the authors' opinion, a single systemic approach to building the corporate identity is possible with all IMC tools, but brand recognition stands out as a corporate identity-related IMC tool with an effect upon demand.

The presence of a marketing department, in the authors' view, is one of the key factors in the development or improvement of the overall marketing strategy. Nowadays the major Latvian food retail chains outsource their marketing activities to marketing and advertising agencies. Hence, marketing activities foreseen in the marketing strategy may be implemented for specific short-term projects with short-term goals and corresponding gains or losses, but a systemic approach by integrating and combining IMC activities long-term to achieve better sales figures is not possible with outsourcing. The authors recommend for Latvian food retail chains to budget for an in-house marketing department, including qualified marketing specialists. Such an approach would facilitate not only a systemic approach to marketing activities aimed at better sales figures, but also integrated action with such IMC management tools as cooperation between the marketing department and the procurement department that would help the company make its offer more competitive and not just a campaigned customer-oriented IMC approach, but also the planning, implementation and performance

assessment of IMC based on market research and accordingly consumer demand, thus fostering the further business development and the long-term relationship among all the stakeholders of the buying and selling process.

Based on the results of the expert poll, the authors have developed a conceptual model to be applied by businesses in a marketing strategy for their further development (see Figure 3).

The authors have drawn up a conceptual IMC model consisting of six levels of communication – with the company’s marketing strategy in the centre or the 1st level, followed by the marketing mix (4P – product, price, place, promotion) in the 2nd level, and the types of marketing communications (advertising, public relations, personal selling, direct marketing and sales promotion), through which marketing activities are implemented using various communication channels, in the 3rd level. The IMC tools, shown in the 4th level, can help create the product consumption value and directly influence the buyers’ behaviour in the market (arising of need, information searching, buying decision, buying, product usage), presented in the 5th level.

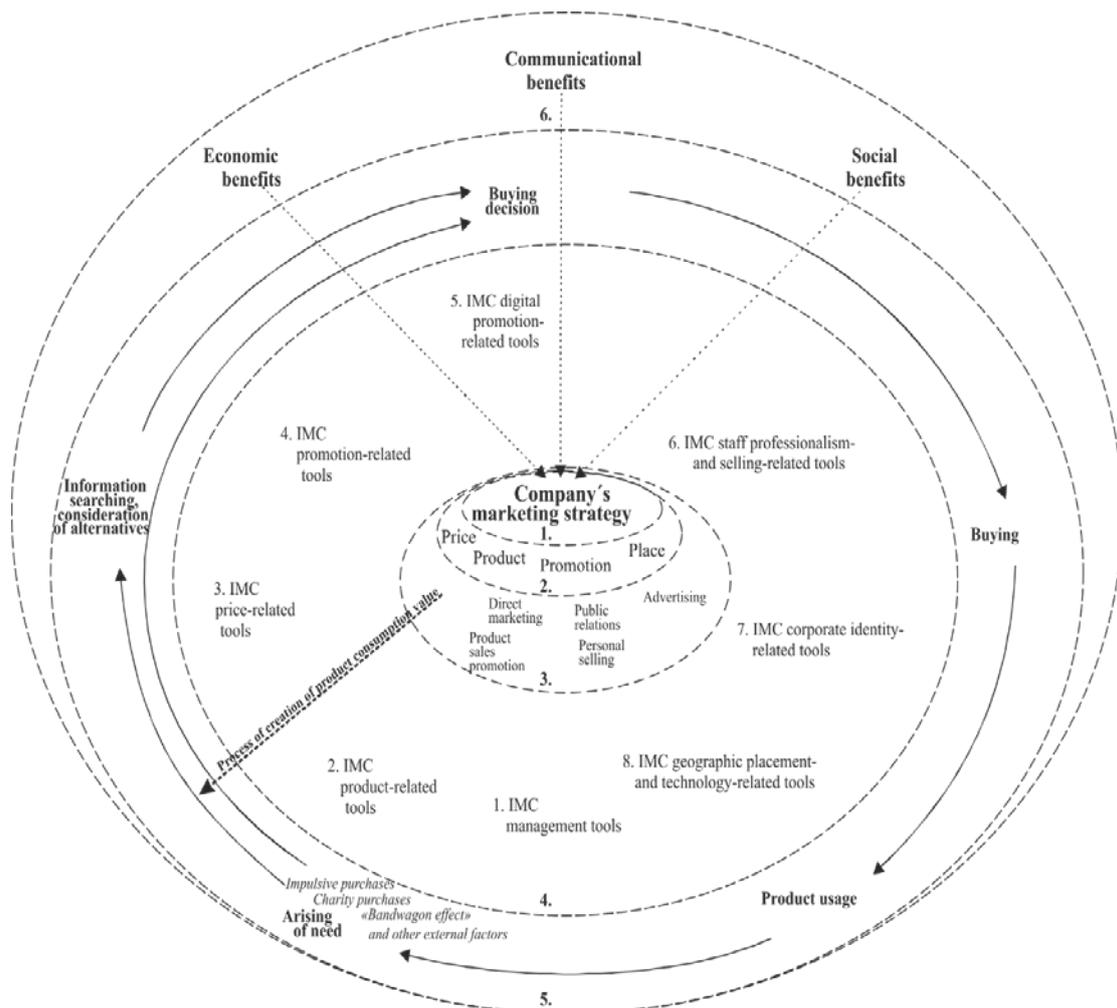


Fig. 3. Conceptual IMC model (source: model developed by the authors)

A successful implementation of the IMC process yields benefits – **1) economic**, measured in money, for businesses – increased sales volumes, incl. an increased number of buyers, repeated purchases etc.; for consumers – the product consumption value (functions, gains from usage, information) for the given price. Businesses can weigh their economic benefits by making calculations, for instance: the ratio between the company's market share and the share of marketing communication costs in the industry, the company's marketing communication costs against a 1 % market share, the additional turnover gained from the implementation of marketing communication activities, the profit from the implementation of marketing communications against the costs of marketing communications etc. A variety of methods, internal data, industry, data, grouping, comparison etc. may be used for these purposes; **2) social** – a satisfied consumer, corporate social responsibility put into practice, the company's image, reputation, associations, participation in charity events etc. Social benefits are measured using social media research, sponsorship and its analysis, surveys etc.; **3) communicational** – brand loyalty, a high level of awareness and competence, the attraction of new buyers, the number of repeated purchases etc., measured using such methods as polling, expertise, information collection, data processing, aggregation and analysis, observation, focus groups etc.

The authors particularly stress that the economic, communicational or social benefit of the IMC process to the business, the consumer, or the general public, as shown in the 6th level, may be deemed achieved if the use of IMC tools has influenced the buyer's behaviour at such stages as arising of need or information searching and consideration of alternatives. It is these stages of buyer behaviour that the need for the product arises and the product consumption value is created (not necessarily related to economic benefits only, but also to awareness, information, deliberate choice, advantages of usage etc.), resulting in buyers taking the buying decision. They may also make impulsive purchases driven by various surrounding incentives or external factors (such as charity purposes), in which case the buyer takes the buying decision skipping the stage of information searching and consideration of alternatives and the IMC goal of creating the product consumption value is not accomplished because consumers may buy products without necessity, based on the "bandwagon effect", and not actually use them. They may also have insufficient product information, normally obtained at the stage of information collection and consideration of alternatives. Hence, a repeated purchase and product usage is more unlikely. The authors point out that a long-term relationship between the company and the consumer requires feedback, loyalty to the product, its brand and brand values, which provide the company with foreseeable revenues from regular customers and their repeated purchases, thus also affecting the company's development, assortment planning, provision of supply etc. It may therefore be concluded that the complex

implementation of integrated marketing communications in the market creates a long-term relationship between all three stakeholders and a favourable environment for the further growth of business.

### **Conclusions and Proposals**

1. The use of IMC constantly evolves and the opportunities brought by this process are increasingly topical for small and large businesses alike. The IMC models presented in the literature enable to understand the IMC process, yet there is a lack of guidelines, classification of concrete tools, and methods by which businesses could in practice systematically plan, set up and apply IMC and optimise the processes thereof.
2. There is not enough research on customer-oriented IMC that would not only define tools for a precise and effective communication with consumers, but also provide a single model encompassing processes, experience, actions and benefits.
3. At each stage of buyer behaviour, the application of IMC tools yields more or less benefits, so businesses, in order to reach specific targets and influence the buyers' behaviour in the market, need to use IMC tools in a complex manner, integrating them among each other.
4. In order to reach the IMC goals – economic, communicational and social benefits – businesses may apply and integrate IMC tools classified in 8 groups: management tools, product-related tools, price-related tools, promotion-related tools, digital promotion-related tools, staff professionalism- and selling-related tools, corporate identity-related tools, and geographic placement- and technology-related tools.
5. Demand at Latvian food retail chains is substantially affected by the following IMC tools: pricing policy, speed and quality of service, company brand recognition, the shop location, design and appeal of product packaging, visual messages about product discounts, an in-house marketing department.
6. The objectives set out for the research study have been fulfilled and the goal has been accomplished. The theoretical and practical research and analysis confirms the initial hypothesis that a complex use of IMC tools fosters a long-term relationship among all the stakeholders involved in the buying and selling process.
7. In order to ensure a systemic approach to the management of IMC, businesses should set up a marketing department and have it cooperate with other functional departments, notably the procurement department.
8. When implementing IMC, one should take into account the current trends of development of digital marketing – the Internet as a marketing

communication environment; digital promotion based on vast options of communication among consumers; the increased role of direct marketing in the creation of a loyalty system; the link between marketing communications and stages of buyer behaviour that would enable businesses to reach their development targets.

9. When implementing IMC, one should not focus merely on increasing the sales volumes, but – in view of growth targets and economic, social and communicational benefits – also on the stages of buyer behaviour that generate a long-term relationship among the stakeholders of the buying and selling process.

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# STUDENT EMPLOYABILITY AND COMMUNICATION DURING THE JOB RECRUITMENT PROCESS: THE OPINIONS OF STUDENTS AND EMPLOYERS

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**Abstract.** *The Career Centre of the University of Latvia undertook a comprehensive study regarding the issues of student employability and mutual communication with employers during the recruitment process. The study was conducted in two parts – 923 students from various higher education institutions in Latvia were surveyed during May-June 2015. The survey was used to inquire the current employment situation of the students of various study disciplines, determine the most popular types and choices of students in search for jobs and traineeship places, study the communication of the employers and given feedback to job seekers. The survey results outline the problems in mutual communication between the employers and employees and giving and receiving of feedback, as well as an explanation of the reasons for refusal of the job. In continuation of the study 84 employers were surveyed in spring 2017 regarding the experience of their company/institution in regard to employment of students, as well as communication with students as job seekers in the recruitment process. The outcome of the study show that employers are seeking students for a job position through job advertisement portals, but they try to recruit them also through social networks; in general they rate students as convincing during interviews, but also having excessive ambitions, expectations and not always an adequate appraisal of their own skills. The employers explain the problems noted by the students in regard to the employer communication during recruitment by being too busy, lack of time and a high number of applications per competition.*

**Keywords:** *communication, employability, feedback in job search, human resource management, personnel recruitment.*

## Introduction

A shortage of personnel in many industries of the national economy has been one of the most pressing issues for the economy and business over the last years. This situation induces employers to adopt a more active and creative approach to looking for new employees, which goes so far as to involve contracting students at the initial stages of their studies. However, the competition for numerous specific vacancies remains rather high, and job applicants have to struggle to prove themselves as the best experts to fill the proposed vacancy. Even though employers are much interested in contracting the best students for their

companies, opinions expressed by students through university and college career centres make it clear that mutual communication in the course of personnel selection procedures is not always successful – it is not uncommon for new applicants to receive no answers regarding the results of job interviews, explanations for denial or replies to their applications. Considering the results of organisation culture studies, positions of human resource managers in respect of job interviewing, the experience of university and college career centre consultants and the findings made in the course of consulting students in their search of on-the-job training and employment opportunities, as well as the general applicability of the issue of youth employment in Latvia and Europe, researchers of the Career Centre of the University of Latvia have carried out a two-stage study in 2015 and 2017, having surveyed students about their relevant experience in looking for practical training and employment opportunities and communicating with employers and studied the employers' experience as pertains to interviewing and selecting students to fill the job vacancies in their companies.

### **Method and Participants**

The study was carried out in two stages. In 2015, an online survey was arranged in order to summarise answers from 923 students (78 % women, 22 % men) from different higher education institutions. The most represented educational institutions were the University of Latvia (65 % respondents), Riga Stradiņš University (11.3 %), Vidzeme University of Applied Sciences (9 %), Riga Technical University (4.4 %), etc. The survey audience mostly consisted of the students studying social sciences (N=209, 23 %), management and economics (N=182, 20 %), healthcare and sports (N=127, 14 %), engineering sciences (N=117, 13 %), humanitarian sciences (N=93, 10 %), education and culture (N=69, 7.5 %), natural sciences (N=60, 6.5 %) and other disciplines (a total of 7.5 %). Most of the students reported that they were full-time (43.8 %) or part-time employees (23.9 %), whereas 5.5 % respondents reported that they were undergoing on-site practical training at the moment. The survey included questions regarding student employment, vacancy selection and the employee selection procedures, with an emphasis on questions regarding communication with employers and the provision of post-interview feedback. The second stage of the study, implemented in 2017, was an online survey of 84 employers, who were asked to provide their opinions regarding the experience of their company / institution with student employment, and the communication with students as job seekers in the process of personnel selection. The survey pool was mostly comprised of companies operating in the domains of service provision / trade (25 %), finance (14.3 %), banking (10.7 %), and a share of 9.5 % consisted of IT companies, government institutions and production enterprises.

## **Results and discussion**

### **Vacancy proposal and choice**

In order for a company to find the most appropriate employee and ensure successful organisation of the personnel selection process, it is essential to identify the optimal way to draw and assess adequate candidates (Boitmane, 2006). Employers have to keep in mind that the young people currently entering the labour market are the so-called Generation Y, characterised by their own thinking paradigm, their own values, ethical criteria, special features of perception and communication (Daliba, 2017). These young people are oriented towards rapid learning of new skills and abilities, ceaseless change, diversity in work, elasticity and a knack for new technologies (Dawn & Thomas, 2013), which is an important factor to be taken into consideration while selecting the methods for addressing employees and communicating with them. The study also involves a comparison of methods employed by companies for finding and attracting their future student employees and those used by students themselves to look for jobs. The employers pointed out that students mostly looked for jobs using job seeking portals (90.5 % did that frequently or occasionally), following personal recommendations from their friends or relatives (companies said that 72 % of students did that quite often), as well as through good contact within companies established during their on-the-job training (64.3 %) – see Fig. 1. These opinions perfectly match the replies provided by the surveyed students – 77 % respondents stated that they looked for jobs using job seeking ads, personal recommendations and social networks. The students also tended to be active in terms of their own initiative – both the employers and the students said that they showed their own interest in employment opportunities with specific companies. Statistical data and comments obtained through student surveys identify the initiative of job seekers themselves as a crucial factor in finding a job, e.g. personal contact with a company (*“I just went to the institution I wanted to work for and asked them if they needed an employee”*, *“I was sending my CV to different companies and succeeded eventually”*, etc.), proving oneself as a good trainee (*“I was offered a specific position upon completion of my on-site training”*), as well as creative and professional self-presentation, mostly through social networks (*“Employers contacted me through LinkedIn”*, *“I’ve carried out my individual campaign through social media”*). It is to be noted here that the students did not use the databases provided by university and college career centres too often – about 58 % respondents stated that they never used these portals at all, and just 20.4 % used those frequently or occasionally. This trend could be due to the fact that career support systems in different higher educational institutions are developed to considerably different extents (Šmitiņa, 2011).

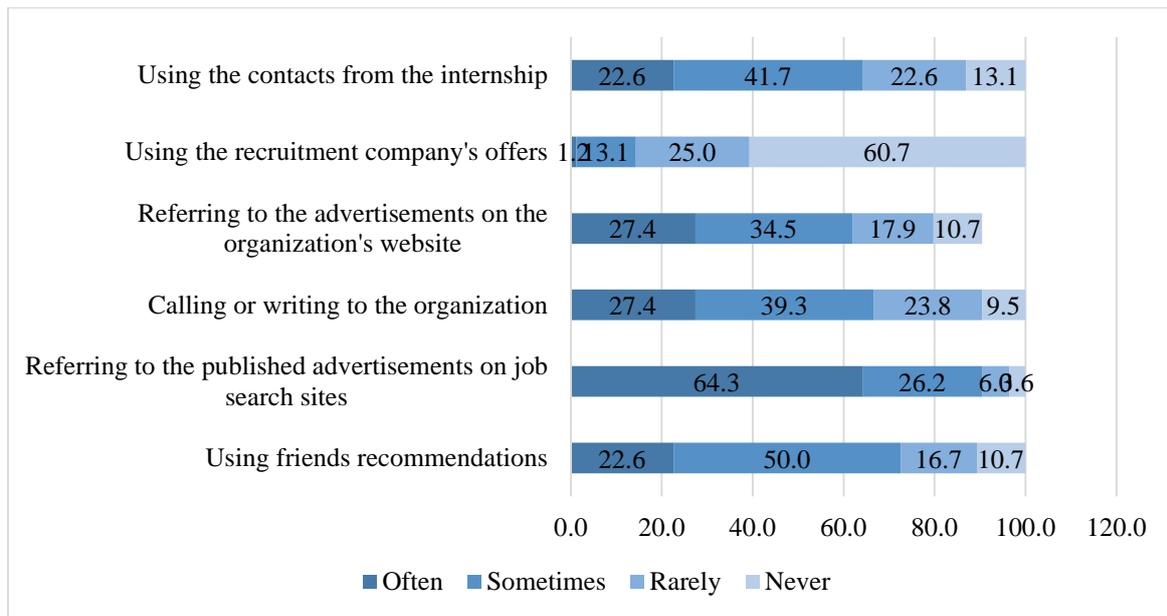


Figure 1. **Most popular methods used by students to find a job in your organization: employer opinions, % (N=84, created by the author)**

Results of the study indicate that employers mostly adhere to the classic personnel selections scheme, publishing their vacancies at tried-and-true job seeking portals in order to address their potential employees (Joshi, 2013). One could infer, however, that employers tend to develop a more formidable idea of social media as an important and potent tool for finding ideal employees, though not without a certain degree of cautious criticism towards social networks – generally, companies do publish advertisements on social media themselves, yet the proposals published by young people themselves are not analysed that scrupulously and do not get enough attention in general: 20 % employers used social media to see opinions about potential employees, 28 % company representatives said they used those for the assessment of an employee's personality, whereas 30 % used social networks to assess the interests and hobbies of a potential employee. Similar trends have been confirmed by a number of other studies, which goes to show that employers mostly use social networks to see if the information provided by an applicant matches the data available online and assess the ability of an applicant to present his/her personality through social media (Davidson et al., 2012). It stands to mention here that both workforce experts and theoretical studies emphasize the trend for more active use of new technologies to draw employees – it is the ability of a company to adjust itself to technological development and develop a detailed understanding of an employee's needs that can be the decisive factor in the competition for qualified personnel (Archana et al., 2014). The students did point out that finding job proposals adequate to one's abilities and preferences was in no way an easy task – only

24.7 % found it easy, with another 33.1 % agreeing with this statement to a lesser extent; 40 % students stated that the demand for young specialists was insufficient in their domains of interest, with another 26 % agreeing with this opinion in part (see Fig. 2). According to the obtained feedback, finding a job in the appropriate domain was, by comparison, most easy for those studying engineering sciences (45 % completely agreed / agreed). On the other hand, 58 % humanitarian students, 49 % social students and 47 % management and economics students disagreed with this statement. Engineering science students also were less inclined to agree with the opinion that the proposed remuneration level was inadequate to their requirements (21 %). Even though most students claimed that they did select vacancies very diligently, 38 % businesses reported that application documents were often inadequate to the vacancy or submitted rather carelessly. The aspect to be mentioned here is that the employees pointed out that CV and motivation letters were only important at the initial stage of selection (71 %), so the crucial factors for a student's further career were his/her performance at job interviews and demonstration of his/her skills through the completion of test assignments. Several employer opinions provided by answering open-ended questions reflected a certain degree of new applicants' negligence as pertains to the preparation of documents – *“Very weak CVs, copy-paste motivation letters, an abundance of grammar errors, inappropriate selfies and terrible impressions from social media investigations. Receiving an application of proper quality is an infrequent piece of luck, and yet it still does not mean that the candidate is going to prove appropriate.”*

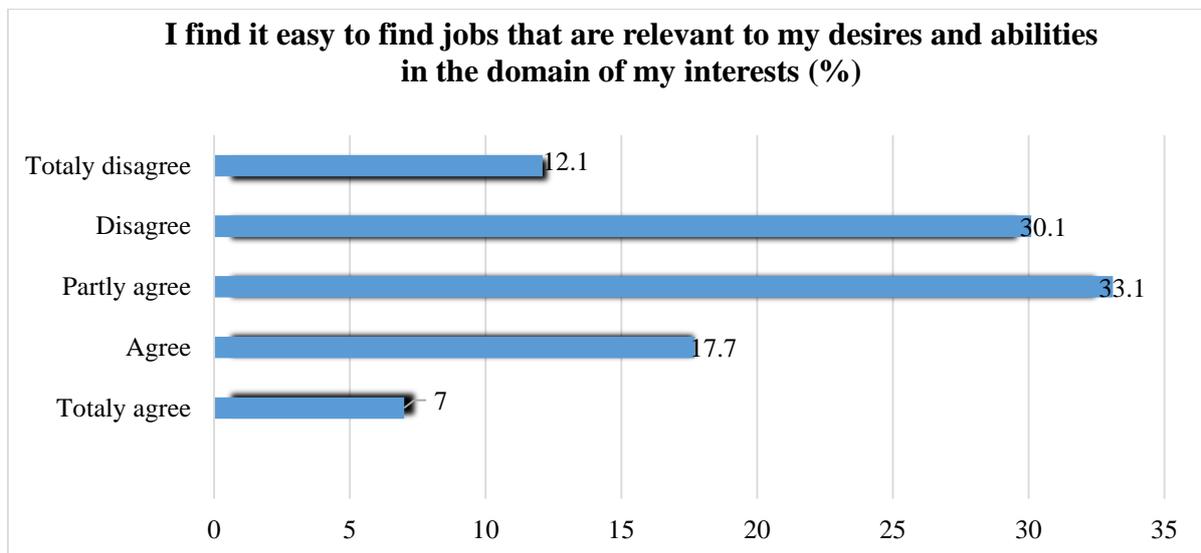


Figure 2. Chances of finding appropriate job proposals in the domain of interest: student opinions, % (N=923, created by the author)

### Communication and feedback in a job interview

Within the boundaries of the study, the employers were also asked to assess students' self-presentation skills at job interviews (Fig. 3). In general, the employers did assess students' self-expression at job interviews in a rather acclamatory and positive manner – almost 50 % employers said that the students behaved in a convincing manner at interviews, ~70 % employers rated the students' mode of dress as appropriate, 92 % companies confirm that the students arrived on time, 44 % agreed that the students premeditated the potential questions rather diligently, but only 15.4 % employers would agree that the students tended to comprehend and study information about the company they wanted to work for. As to the students, they did state in their replies that they prepared for interviews with special diligence, considered the potential questions that could be asked and learnt the essential information about their potential employers before interviews – 59.6 % students agreed/completely agreed with this statement, and another 28.4 % agreed therewith in part. This could show that students do take their job interviews seriously, but, on the other hand, these answers could be a case of wishful thinking.

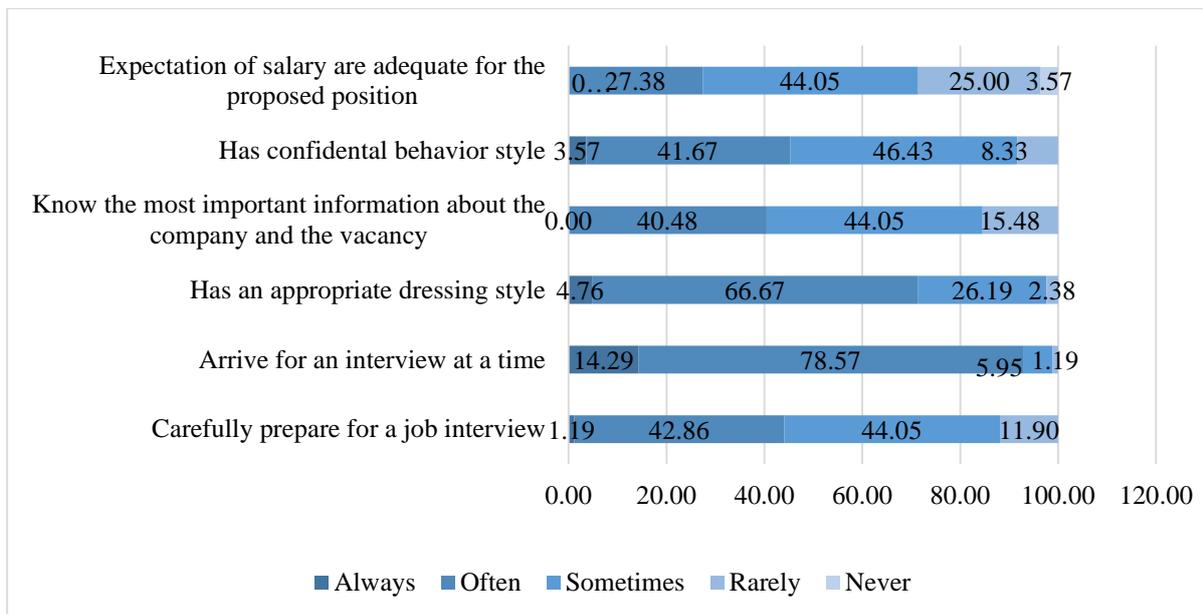


Figure 3. **Students' self-presentation at job interviews: employer opinions, %** (N=84, created by the author)

The employers' responses to open-ended questions also contained more critical comments regarding students' readiness for job interviews, such as this one – *“Different students come to do their practical training or respond to job advertisements. Some students come to interviews 100 % sure that they do meet*

all job requirements, but have no idea on the company's field of operations or the current developments therein. Another frequently mentioned issue was that students often had groundless ambitions regarding their job or remuneration – “Students are willing and inquisitive, but their own demands are made without studying the current market situation”, “The general impression is that students wish to get a job in their domain at once and have respectively higher salaries.” Another aspect identified as an essential difficulty for young job seekers in particular was the problem of disproportion between desired and actual remuneration – most students agreed (58 %) or partly agreed (30.4 %) that the requirements set for job applicants were rather high, whereas the proposed remuneration mostly failed to meet such requirements (Figure 4). The students of social and humanitarian sciences, as well as healthcare and sports, were the most sceptical in respect of the disproportion between requirements and remunerations. However, in the employers' opinion, about one third of young applicants sought remunerations too high to be adequate to the proposed vacancies. This goes to show that both sides tend to look at the issue of remuneration from their own standpoints – employers not always offer adequate salaries, whereas students as employees tend to have unrealistic ideas and expectations as pertains to remuneration

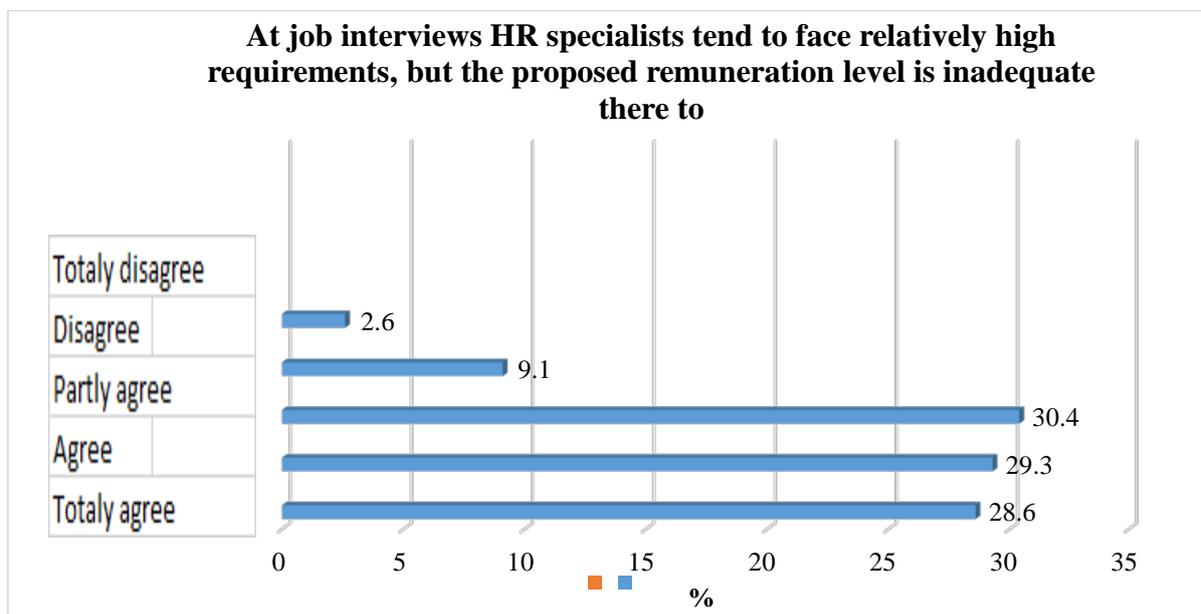


Figure 4. **The issue of requirements and remuneration: student opinions, %**  
(N=923, created by the author)

The study shows that the students' experience with job interviews was greatly diverse – almost 40 % respondents said that there were job-unrelated and personal questions asked at interviews (27 % never had such experience), 15 % had to face

aggressive communication on part of the interviewer (54.7 % – never), 19.2 % students often or sometimes had the feeling that they were lied to regarding the course or results of the personnel selection procedure (52 % – never), 36 % students also stated that interviewers often or sometimes promised that they would provide a response about the results, but failed to do it afterwards. Comments show that interviewers sometimes stated additional requirements that were not mentioned in the job advertisement – this is often associated with language skills, for example: *“Even though the job advertisement does not require any knowledge of Russian, the interview was in Russian”, “It was stated at the interview that knowledge of Russian was required, even though it was not mentioned anywhere”*. Applicants are also selected by nationality – *“It was unpleasant to hear that people of Russian nationality would be preferred”*. The students also remembered cases of unprofessional behaviour on part of interviewers, for instance, *“The employer behaves too familiarly”, “Improperly dressed interviewer”, “Setting up confusing situations, flirting on part of the employer and negligence in the questions asked at the interview”, “Minding other business in parallel”, etc.* The students pointed out that some interviews featured overly complicated tasks that had nothing to do with the proposed employment, e.g., *“I do not understand those interviews that feature several selection stages and require dealing with lots of tasks in order to pass a stage. This could only be justified in case of an adequate position and remuneration.”* Human resource management experts point out that the provision of feedback regarding an applicant's self-presentation at an interview, results of interviews and subsequent selection stages is of special importance within the process of communication between employers and employees. It is assumed that timely provision of feedback helps a job applicant feel more confident at subsequent selection stages and provides an insight into the culture of an organisation and the mode of communication in general (Manuel L., 2015). However, experts of Latvian university and college career centres mention that students often complain about the way companies provide or fail to provide such feedback. Roughly one third of the students surveyed within the boundaries of the study (36.5 %) stated that they always or often received information regarding the further selection procedure or final decision after the initial submission of documents to the employer, 24.3 % students received such information occasionally, whereas 27 % students never received such information or only received it on very rare occasions. At this stage of the selection process, feedback mostly consists of just a standard message confirming receipt of documents. A more positive picture as pertains to feedback from employers can be observed after the first job interview (Figure 5) – over a half (53 %) students said that they always or often received further instructions regarding the subsequent stages of the selection process. Such information was provided after

the final interview to 46 % respondents. It should be noted here, however, that there was a number of respondents who said that they did not receive such feedback at all or received it very rarely, even after the final interview – that is, 16 % of all the students participating in the study.

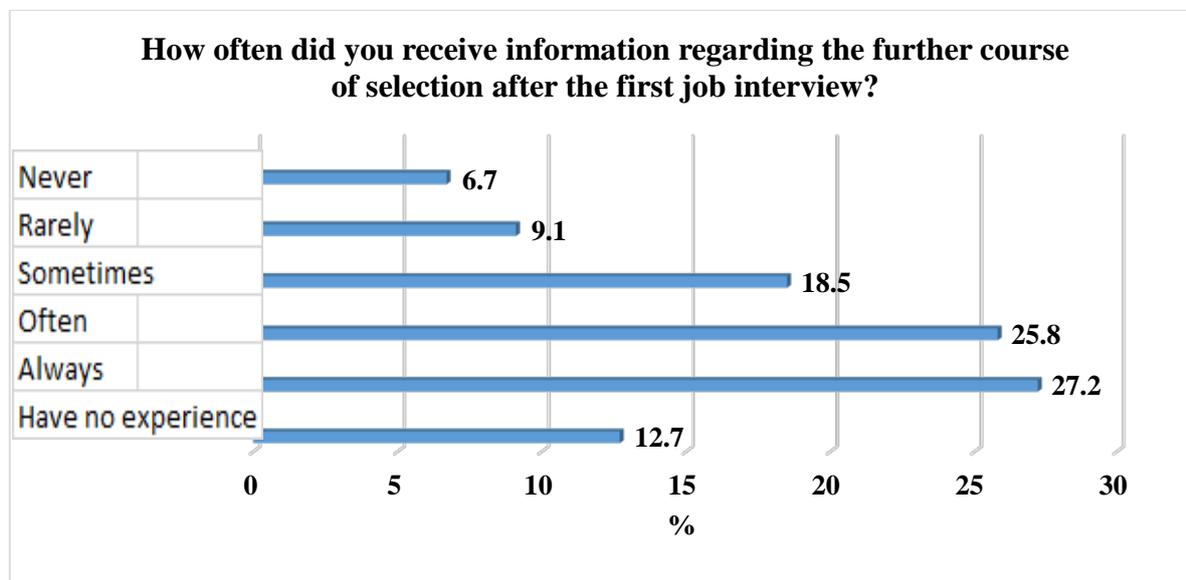


Figure 5. Receipt of feedback after the first job interview: student opinion, % (N= 923, created by the author)

Comments on feedback reflect both the positive examples of feedback and negative students' experience and feelings. Many students said that feedback to applicants was provided during selection already – *“Personally focused denial, with a (later fulfilled) promise to offer a job within a different project that was better suited for me”*, *“It was made clear at once whether there was a chance to get the job or not”*, etc. Sometimes, job applicants have to act at their own initiative in order to know the selection results – *“Usually, I had to call and ask about the results myself”*. Most respondents said that feedback was of a great importance when seeking a job; 82.5 % agreed with the statement that an employer's explanations for denial could help a job seeker understand and analyse his/her mistakes in the process of looking for employment, as well as identify the skills that required improvement. Almost a half of the audience, i.e. 48 % respondents, agreed that this could also help overcome the disappointment caused by denial (with another 31 % respondents partly agreeing with that). Apart from that, most job seekers agreed that a substantiated denial from an employer would help them prepare themselves better for future contests and gain a more positive outlook on future career prospects in general. Only 10 % of the respondents thought that such feedback would not give them anything and would therefore be unnecessary.

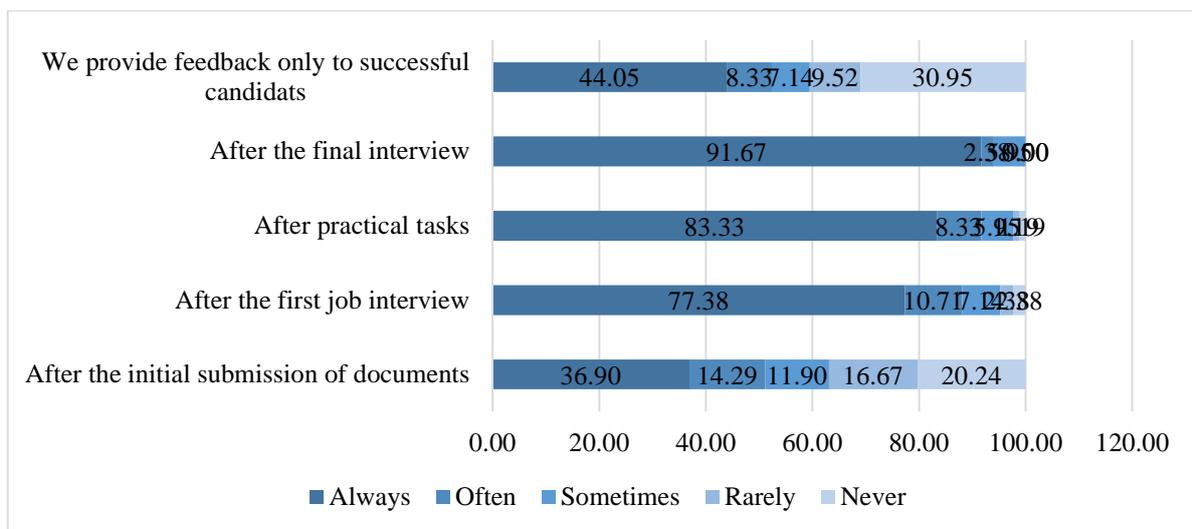


Figure 6. **Feedback provision frequency: employer opinion, %**  
(N=84, created by the author)

The employers themselves pointed out that they did provide feedback regarding interviews to applicants in 92 % of the cases. Feedback was also provided in 83 % of the cases after the completion of practical tasks. Contrary to the students' opinion, 87 % employers said that they always or often provided feedback after the first job interview. It is much less common for employers to provide feedback after the initial receipt of documents – only a half of the employers did it often or always (Figure 6). Most commonly, the employers provided feedback in the form of a letter or a call confirming that the respective applicant was hired. The most frequently mentioned reasons for leaving job applicants with no reply, as specified by the employers in the respective open-ended question, were the shortage of time or busyness with daily activities, too many applications to reply to, errors in the process of communicating with an applicant (“*Sometimes e-mail addresses and phone numbers are specified incorrectly, an e-mail could remain as an unsent draft due to human error*”), as well as an applicant's own non-compliance and responsibility for the correctness of the selection procedure (“*The applicant's abilities, knowledge and experience are totally inappropriate for the proposed position*”). In some situations, the decision was made during the interview already (“*If we both understand during the conversation that we will be unable to cooperate in the future*”). Answers provided to the open-ended question regarding the improvement of communication with student job seekers showed that many employers had a very positive experience and outlook on future prospects – (“*We would gladly have students working with us. Key recommendation: if you are interested in the IT industry and strive to do something for real, it is not the official work experience that matters, but rather the fact that you have been doing something in practice.*”).

The employers' advice was to treat each other with respect. *“The main thing is to behave honestly and respectfully, and have all communication based on these core principles”*. It was also recommended to adhere to the boundaries of interviews both at an interview and in the provision of feedback, as well as to improve the electronic environment. *“I would recommend that companies should develop a section at their websites where applicants could view their “status” in the course of selection themselves. Names and surnames of applicants could be replaced with certain ID codes only known to the employer and the respective applicant.”*, *“Implement a system that would notify applicants as the selection procedure progresses. This, however, requires investments.”*

### Conclusions

1. Both students and employers use similar channels to find a job/employee. Traditional methods, such as job ad portals, recommendations of friends/relatives, activity and initiative of job applicants remain the most popular channels for seeking employment. In the meantime, however, self-promotion through social media keeps growing ever more relevant due to the diverse use of social networks by students for proposing themselves on the labour market. At that, employers retain a more cautious attitude towards seeking employees through social media and mainly use these to assess the personality, hobbies and interests of a potential new employee after the receipt of application documents. Resources of higher education institutions, such as career days or faculty recommendations, are used comparatively less frequently.
2. The most essential difficulty encountered in the process of job seeking, as reported by the students, was that job advertisements required several years of experience. Another major problem reported was the imbalance between the amounts of remuneration and the requirements set by employers, especially as pertains to students who studied social and humanitarian sciences and healthcare/sports. However, businesses stated that new applicants' expectations of high salaries were not always justified and appropriate to their abilities.
3. Most students had no negative experience with interviews – neither aggression on part of the interviewer, nor lies about the selection procedure. However, about 1/4 of the surveyed students had to face the need to answer personal questions not related to their potential job, as well as their interviewers' failure to communicate the results of the selection procedure, even though they promised to do so.
4. Most of the participants pointed out that feedback was of essential importance within the employment seeking process; it could help one realise

and analyse the aspects that they would need to improve in their progress towards finding a job, overcome the disappointment caused by denial and gain a better idea of the results. Besides, it would be much indicative of the company itself, its values and culture.

5. Only a half of the students who participated in the study received feedback, i.e., denial or instructions for the further selection procedure, from the potential employers after the first job interview. Even after the final interview, many respondents stated that they seldom received any feedback. Usually, letters of denial received from employers did not explain the reasons for denial; by and large, explanations for denial were formal and did not necessarily reflect the true reasons. The employers explained their failure to provide feedback with a shortage of time, busyness and large numbers of applications for vacancies.

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## COMPETITIVE EDUCATION AS A SIGNIFICANT FACTOR OF A NATIONAL ECONOMIC GROWTH

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**Abstract.** *In order to ensure sustainable economic growth in the country, a knowledge-based economy must be implemented in the country, in which one of the essential factors is educated human resources, globally competitive and able to quickly respond to changes in the structure of the national economy. Researches carried out in the world suggests that technological developments will require a fifth of the workers to change their job in the coming decades. In this case, acquisition of knowledge, skills and competences will not necessarily require a long-term training process, but on the contrary it will have to be fast and of high-quality in order to respond to changes in the labor market. With the growth of global competition, with the increase in interaction between education and sustainable national growth, it is necessary to ensure the functioning of a competitive education system. As education and its quality are one of the most important conditions for solving global problems in today`s world, the aim of the research is to analyze the features of competitive education, to demonstrate its impact on the growth of national economy branches and to demonstrate how their effective interaction can ensure the country`s sustainable economic growth. The research analyzes the main indicators characterizing the education system in Latvia – the number of education institutions, the number of teachers in the educational institutions, their quality, the number of students and the financing from the state budget for education in the period from 2014 to 2016. Certain features of competitive education and their impact on sustainable economic growth of the country, the main results of the implementation of competitive education are summarized and the possible relationship between competitive education and the country`s economic growth is reflected. In the research, the following methods, generally recognized in the economy, have been used: document analysis, comparison, classification, and statistical analysis methods. As a result of the research, the authors will determine the factors influencing the competitiveness of education, as well as develop recommendations to be introduced in order to implement competitive education in Latvia in line with the development trends of the national economy sectors, to prepare knowledgeable and globally competitive human resources that would promote the long-term national economic growth.*

**Keywords:** *economic growth; competitive education; competitive human resources; economic development; national economic growth.*

## **Introduction**

One of the preconditions for economic development of a country is high-quality human resources, the creation of which is diversified and influenced by various factors. Economic growth of Latvia depends to a large extent on the ability to produce and market competitive products and services in the national, European Union and global markets, which, in turn, depends on the resources available in the country and on their quality as well as on the country's economic policy. The economic growth strategy and policy needs to be selected by countries based on their factor - the quality and availability of natural resources, human resources, capital, technology and information. In order to ensure a sustainable economic growth in the country, a knowledge-based national economy must be implemented in the country, in which one of the essential factors is educated human resources, globally competitive and able to quickly respond to changes in the structure of the national economy. It results from researches carried out in the world that technological development will require a fifth of the workers to change their work in the coming decades. In this case, acquisition of knowledge, skills and competences will not necessarily require a long-term training process, but on the contrary it will have to be fast and qualitative in order to respond to changes in the labor market. The preparation of such resources requires an effective-functioning and competitive education system that is in close interaction with the processes taking place in the national economy. As education and its quality are one of the most important conditions for solving global problems in today's world, the aim of the research is to analyze the features of competitive education, to demonstrate its impact on the growth of national economy branches and to demonstrate how their effective interaction can ensure the country's sustainable economic growth. Education as one of the most important sectors of the national economy is an integral part of society's life, which must be closely interrelated with the development of market, science, technology, production and information technologies. Sustainable development of Latvia is based on raising the productivity of human, economic, social, and natural, including location and space, capital in response to the challenges of global trends. It is important to not reduce the value of the human capital base and to increase its productivity, as the number of people is decreasing and the population is aging (Auers & Gubins, 2017), on the basis of a competitive, efficiently functioning education system that can meet the demands of national economy and labour market today and in the future.

In the research, the following methods, generally recognized in the economy, have been used: document analysis, comparison, classification, and statistical analysis methods.

### **Analysis of the Main Indicators of the Latvian Education System**

To ensure the long-term national economic growth and the implementation of a knowledge-based national economy, an effective functioning and competitive education system that is in close interaction with the processes taking place in the national economy is required. Offering education that is appropriate for interests of the state and the whole society, the pre-school education, basic education, secondary education and higher education are included in the Latvian education system. (Academic Education Center, 2015). In order to promote the transparency and portability of the education system and facilitate transnational mobility of the population, the Latvian education system operates in the European Qualifications Framework, which is a unified eight-level European reference system and covers all the types of education: vocational, general and academic education, as well as all the levels of education: basic, secondary and higher education, as well as continuing education, and all the forms of education: formal, non-formal, and daily education.(National Coordination Point, 2015). Any type of education is essential and its acquisition could have positive or negative manifestation in the future. The higher education and vocational education are of particular importance for the national economic development and ensuring the economic growth. In order to qualitatively acquire a certain profession, the previous knowledge and preparation, which is usually acquired at elementary school or secondary school, plays an important role, thus the whole education system in general plays an important role in the national economic development and growth. With the growth of global competition, with the increasing interaction between education and a sustainable national growth, it is necessary to ensure the functioning of a competitive education system. The main indicators characterising the Latvian education system are summarized in Table 1.

**Table 1 The Main Indicators Characterizing the Latvian Education System, 2014-2016**  
(LR CSB, 2018)

<b>Serial no.</b>	<b>School year</b>	<b>The number of educational institutions</b>	<b>The number of pedagogues at educational institutions</b>	<b>The number of students at educational institutions</b>	<b>Expenditure from the State budget on education, million (EUR)</b>
1	2	3	4	5	6
1	2014/2015	947	31 578	325 422	1403,8
2	2015/2016	923	31 331	325 577	1435,2
3	2016/2017	899	31 420	326 829	2277,2

Table 2 summarizes the number of educational institutions in the period of time from 2014 to 2016.

**Table 2 The Number of Educational Institutions in Latvia, 2014-2016 (LR CSB, 2018)**

<b>Serial no.</b>	<b>School year</b>	<b>General-education schools</b>	<b>Vocational education institutions</b>	<b>Higher education institutions and colleges</b>	<b>Total</b>
1	2	3	4	5	6
1	2014/2015	824	63	60	947
2	2015/2016	811	54	58	923
3	2016/2017	790	51	58	899

Analysing data of the Central Statistical Office of Latvia, in the period of time from 2014 to 2016, the largest portion of ~87 % of the Latvian education system is taken by general-education schools, and only 7 % - by vocational education schools and 6 % - by higher education institutions and colleges, which prepare professionals appropriate for the needs of specific national economy branches. It is these professionals who play an important role in the national economy development and in ensuring a sustainable national economy growth. According to the authors, general-education schools have too much of a portion in the education system, which reduces the possibility of efficiently ensuring the demand of the labour market and national economy branches for professionals of certain professions, which, according to the medium and long-term forecasts of the labour market of the Ministry of Economics in the European Union and Latvia until 2030, are expected in fields related to advanced industry, material sciences, electronics, ICT and biotechnology, as well as to various commercial services, trade, and activities of administrative and servicing departments. Table 3 summarizes the number of pedagogues at Latvian educational institutions in the period of time from 2014 to 2016.

**Table 3 The number of pedagogues at educational institutions in Latvia, 2014-2016 (LR CSB, 2018)**

<b>Serial no.</b>	<b>School year</b>	<b>General-education schools</b>	<b>Vocational education institutions</b>	<b>Higher education institutions and colleges</b>	<b>Total</b>
1	2	3	4	5	6
1	2014/2015	23 038	2796	4867	25 834
2	2015/2016	22 980	2838	4910	30 728
3	2016/2017	22 754	2751	5206	30 711

The largest number of pedagogues at Latvian educational institutions, in the period of time from 2014 to 2016, ~74 % is at general-education schools, ~16 % - at higher education institutions and colleges, and only ~11 % - at vocational education institutions, who are not only vocational teachers, but also general

education subject teachers and other pedagogical staff – methodologists, psychologists, librarians, etc. Based on the statistics, participating in various seminars and conferences on the education and education system in Latvia, as well as after discussions with the representatives of the Latvian vocational education system, the authors conclude that the vocational education system, which is a prerequisite for the development of the national economy branches and economic growth, is lacking in long term vocational training teachers, and particularly in technical specialties that is a topical issue in the entire vocational education system. Table 4 summarizes the number of students at Latvian educational institutions in period of time from 2014 to 2016.

**Table 4 The Number of Students at Educational Institutions in Latvia, 2014-2016**  
(LR CSB, 2018)

<b>Serial no.</b>	<b>School year</b>	<b>General-education schools</b>	<b>Vocational education institutions</b>	<b>Higher education institutions and colleges</b>	<b>Total</b>
1	2	3	4	5	6
1	2014/2015	209 686	29 855	85 881	325 422
2	2015/2016	213 357	27 938	84 282	325 577
3	2016/2017	214 965	28 950	82 914	326 829

Analyzing the number of students at Latvian educational institutions in the period of time from 2014 to 2016, in all periods, the largest number, i.e., ~ 62 % acquires education at general-education schools, ~ 27 % - at higher-education institutions and colleges, and only ~ 9 % at vocational education institutions. According to the educational policy developed by the Ministry of Education and Science of the Republic of Latvia, one of the goals of the educational policy is to implement competitive vocational education and to promote its attractiveness by increasing the proportion of students who, after the acquisition of basic education, continue their studies in vocational education programs. In the period of time from 2014 to 2016, this goal was not achieved – only a small proportion of students who had acquired general education went to study at vocational and higher education institutions. Table 5 summarizes expenditure from the State budget for financing the education system in the period of time from 2014 to 2016.

Expenditure from the State budget on education in 2016 increased by about 40 %, as in order to increase the efficiency of pedagogues` work and motivation, new rules for teachers` wages are introduced, whose aim is to make the remuneration of teachers more competitive in the country. In 2016, Latvia spends on education 6 % of the GDP, which is above the EU average of 4.9 % of the GDP. The United Nations, as the driving force behind educational development goals, believe that education shall be placed the first in terms of the financial

distribution in the country. Expenditure from Latvia's general budget for 2016 according to government functions are reflected in Figure 1.

Table 5 Expenditure from the State Budget on Education in Latvia, 2014-2016(EUR), (LR FM, 2018)

Serial no.	Year	Total expenditure on education, million EUR	Governmental expenditure on education, % of gross domestic product
1	2	3	4
1	2014	1403.8	5,2
2	2015	1435,2	5,3
3	2016	2277,2	6

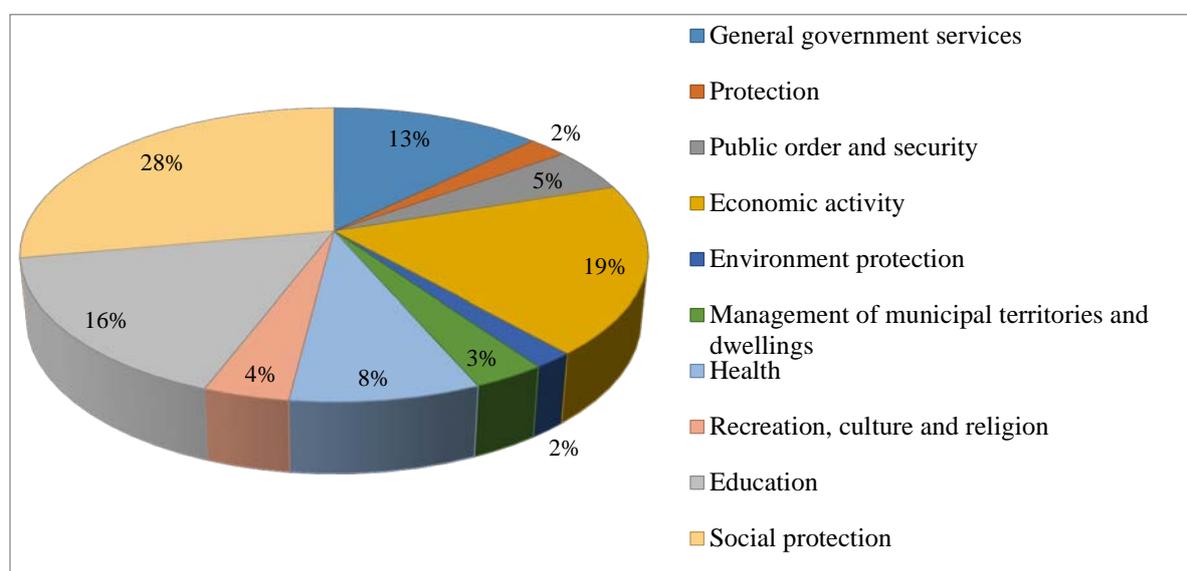


Figure 1. Expenditures from Latvia's general budget, in 2016, % (LR FM, 2018)

When analysing the expenditure according to the government functions, it is evident that the proportion of expenditure from the general budget on education is 16.2 %, which takes the third place behind the expenditure for ensuring social protection and economic activities. Generally, this is a good indicator, and although spending on education is not in the first place, it exceeds the EU average by 10.3 %. Consequently, the issue on the effectiveness of the use of these funds is being raised. The authors conclude that in order to ensure the effective functioning of the education system, it is necessary to have a high-quality education policy, adequate funding, educational institutions appropriately equipped for modern requirements and technologies, professional,

highly-qualified pedagogues, and motivated students with effective retraining opportunities. These are the essential conditions for building and implementing competitive education.

### **Features and Effects of Competitive Education on a Sustainable Economic Growth**

Competitive education is based on an efficiently functioning educational system that can meet the demands of the national economy branches and labour market today and in the future. By a general definition, competitiveness is the ability of a company, industry or government to successfully market their products or services. By applying this definition to education, in the authors` view, the implementation of competitive education leads to the effective integration of trained professionals into the labour market. This means that the implementation of effective educations leads to the elimination of labour market disproportions, more efficient use of governmental and EU funds directed to the education system, stimulates the long-term development of national economy branches, which results in increased production of goods and services, increasing the GDP and ensuring the long-term economic growth. The authors show the key features of competitive education in Figure 2.

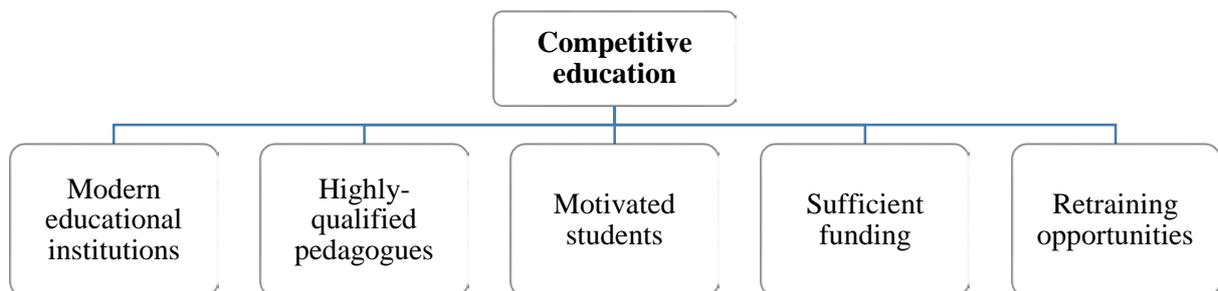


Figure 2. **Key Features of Competitive Education** (made by the authors, 2018)

Competitive education is essential not only in the preparation of high-quality and knowledgeable human resources, but also at company and national level as one of the key factors for ensuring the sustainable national economic growth and competitiveness. Table 6 summarizes the main results of the implementation of competitive education.

**Table 6 The Main Results of the Implementation of Competitive Education**  
(made by the authors, 2018)

<b>At the level of households</b>	<b>At the level of companies</b>	<b>At the national level</b>
Intellectual investment in the future; Competitive salary options; Higher mobility and competitiveness in the labor market; Higher socioeconomic security level; Higher growth opportunities; Higher self-assessment; Higher quality of life.	More efficient staff development and retraining of employees; Higher company`s productivity and resource efficiency; Higher business competitiveness; Higher social responsibility; Higher values; Higher inner culture.	The educational sector is an important national economy branch; Increased tax revenue in the State budget; More effective opportunities for the implementation of employment policies; Higher level of the society`s culture; Safer public environment; Higher technological adaptation to labor market requirements.

The most important of the forecasted labor market development risk factors up to 2030 is the imbalance in labour power supply and demand, which inhibits the economic growth, that is, an increase in production over a certain period of time, and the flow of skilled labour power to other countries (Ministry of Economics of Latvia, 2016) The possible relationship between competitive education and the national economic growth is shown in Figure 3.



**Figure 3. The relationship between the implementation of competitive education and the national economic growth** (made by the authors, 2018)

As a result of competitive education, in the long-term, adequate, qualitative and competitive human resources are being prepared in the country that contributes to increasing the productivity and competitiveness of companies. As a result, the companies increase the ability to sell goods and services in the local, EU and global markets. GDP increases over a certain period of time and the national economic growth will be achieved.

### **Discussion**

- The acquisition of education, qualification or retraining in line with requirements of the national economy branches should be carried out efficiently and in a short period of time in order to be able to respond quickly to labour market changes that could prevent disproportion in the education and labour market.;
- Particular attention should be paid to the education of adults and employed persons, involving them in the project of the specific support object “To improve the professional competence of the employed people” of the Operational Program 8.4.1 “Growth and Employment” that would enable more effective integration into the labor market;
- The state employment policy, the inclusion of older people in the labour market needs to be improved, which would stimulate the acquisition of education in the fields of labour shortages, and would limit the acquisition of education in specialties where the supply of human resources exceeds the demand;
- The national employment policy should be improved that would stimulate the acquisition of education in specialties where a lack of labour power is observed and limit the acquisition of education in specialties where the supply of human resources exceeds demand;
- Changes in the education system need to be introduced – only those students who intend to enter higher education institutions should study mainly in secondary schools; more students should be directed to vocational education institutions, in which it is possible to simultaneously get the secondary education and profession;
- The competitiveness, attractiveness and prestige of the profession of teacher should be promoted in society. It is necessary to ensure that the profession of teacher is acquired by the best graduates as it is in Finland, where one of the most effective educational system in the world is functioning;
- The development of a favourable socio-economic environment should be promoted and a competitive wage system should be set up in the country, which would reduce skilled labour migration to other countries and regions.

### **Conclusions**

Upon analysing competitive education as a factor determining the national economic growth, the following main conclusions are made:

- The implementation of competitive education requires an effective education policy, adequate funding, educational institutions appropriately equipped according to modern requirements and technologies, highly qualified

- pedagogues, motivated students, and retraining opportunities in a short period of time;
- The education offer must be in line with the national economy needs that would prevent disproportion in the labour market and stimulate the economic growth;
  - General-education schools have a large portion in the education system that reduces the possibility of effectively ensuring the demand of the labour market and national economy branches for professionals of certain professions;
  - In the education sector, especially in engineering, there is insufficient number of pedagogues and, despite the measures taken at national level, no effective solution has yet been found;
  - As a result of the implementation of competitive education, the adequate, qualitative, and competitive human resources are being prepared in the country in long term that contributes to increasing the productivity and competitiveness of companies, as a result of which the GDP increases over a certain period of time and the national economic growth is achieved.

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## VIETĒJO UZŅĒMĒJU IESPĒJAS UN ŠĶĒRŠĻI PIEDALĪTIES PĀRTIKAS PUBLISKAJOS IEPIRKUMOS RĒZEKNES NOVADĀ

### *Opportunities and Barriers for Local Entrepreneurs to Participate in Public Food Procurement in Rezekne Municipality*

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**Abstract.** *In recent years both in the world and in Latvia, food consumption as close to the production site as possible or local food has been increasingly discussed among scientists and the general public. According to a number of authors, the demand for local products increases, and localness is one the most latest trends in the global food market. Local food systems, in which the production, processing, sale and consumption of food products occurs within relatively small distances, make a significant positive effect on the local economy.*

*The paper is based on the implementation results for the research grant "Opportunities for the Green Public Procurement of Food by Municipal Institutions in Rezekne Municipality".*

*The research aim is to identify the opinions of local entrepreneurs on their opportunities for and barriers to participating in public food procurement in Rezekne municipality.*

*Research methods used: monographic, descriptive, analysis, synthesis, statistical (data grouping, cross-table analysis, averages) and a sociological research method – a pilot survey of local food production, processing and sale enterprises.*

*The pilot survey of entrepreneurs showed that the enterprises which rated their readiness to participate in municipal public procurement tenders as very low and low justified this fact by their inability to supply the required quantity and assortment of products throughout the whole period specified, the lack of knowledge of green public procurement and the short period for paperwork, which could be classified as the lack of motivation for their participation in GPP.*

*The survey questionnaires included a question aiming to identify the enterprises' ratings of the key barriers to participating in public food procurement. The respondents rated the following barriers at five or as very significant: too low purchase prices on products, an insufficiently broad assortment of the products, an inability to supply the necessary quantity of the products, an inability to ensure regular deliveries of the products and a too long distance to deliver the products.*

**Keywords:** *entrepreneurs, local food, public procurement.*

## Ievads *Introduction*

Gan pasaulē, gan Latvijā pēdējos gados arvien vairāk zinātnieku starpā un sabiedrībā rodas diskusijas par pārtikas patēriņu maksimāli tuvu tā ražošanas vietai jeb par vietējo pārtiku. Pētnieks Knight (Knight, 2011) norāda, ka dažādu autoru pētījumi parāda, ka pieprasījums pēc vietējiem produktiem pieaug, pieprasījums parāda, ka „vietējais” ir viena no aktuālākajām tendencēm pasaules pārtikas tirgū.

Patērētāju prasības uzskata par vienu no galvenajiem dzinējspēkiem, kas veicina videi draudzīgu produktu patēriņu (Hall, 2000; de Bakker et al., 2002), un pēdējās desmitgades laikā palielināta uzmanība ir pievērsta publiskajam iepirkumam, kura ir kļuvusi par svarīgu šo patērētāju prasību veicinātāju.

Vietējās pārtikas sistēmas atbalsta vietējo ekonomiku. Pārtikas iepirkšana no vietējiem zemniekiem pozitīvi ietekmē apkārtējo uzņēmējdarbību, vienlaikus sniedzot ievērojamu ienākumu avotu vietējiem zemniekiem, tādējādi saglabājot dzīvotspēju daudzām mazām, vietējām lauku saimniecībām (Brown & Miller, 2008). Atšķirībā no lielajām rūpnieciskajām saimniecībām, mazas ģimenes saimniecības daudz labprātāk tērē savus līdzekļus par vietējiem produktiem (piemēram, sēklas, lauksaimniecības preces, u.c.); turklāt, pārtika, kas audzēta, pārstrādāta un piegādāta vietēji, (piemēram, vietējām skolām), rada darbavietas un tādējādi stimulē vietējo ekonomiku (Halweil, 2002). Paaugstināta vietējā ekonomiskā aktivitāte un darbavietas rada lielākus nodokļu ieņēmumus un spēcīgāku ekonomisko bāzi, lai atbalstītu citus uzņēmumus un saistītās institūcijas. Vietējās pārtikas atbalsta sistēma ir vietējam pārtikas ražotājam un vietējam iedzīvotājam abpusēji izdevīga sabiedriskā vienošanās, kuras rezultātā iedzīvotājs iegūst viņam vēlamas kvalitātes pārtiku, kas tiek saražota savā teritorijā, komersants iegūst finanšu/nefinanšu investīcijas, kas viņam palīdz uzturēt un attīstīt savu uzņēmējdarbību, vietējā sabiedrība iegūst mazāku atkarību no ārējiem procesiem, kurus tā nevar ietekmēt, tādā veidā radot ilgtspējīgāku kopienas attīstību (Latvijas Lauku foruma..., 2012).

Tādējādi zaļā publiskā iepirkuma (ZPI) ieviešanai pārtikas produktu iepirkumos ir svarīga loma jaunu iespēju veidošanā mazajiem ražotājiem, kuri pārāk bieži tiek atstumti, pat izslēgti no globālajām pārtikas sistēmām (Morgan, 2007).

Eiropā, neatkarīgais Jaunās ekonomikas institūts (New Economics Foundation) Londonā veica izpēti par iepirkšanās paradumu ekonomiskajām ietekmēm, salīdzinot iepirkšanos lielveikalā ar kopienas atbalstītas lauksaimniecības sistēmu, kā, piemēram, zemnieku produkcijas izmantošanu skolu ēdināšanā. Izvērtējuma secinājumos atklājās, ka, izvēloties vietējo

produkciju, vietējā ekonomikā paliek vismaz divkārt liels naudas līdzekļu apjoms (Brown et al., 2013).

Pētījuma mērķis ir noskaidrot vietējo uzņēmēju viedokli par iespējām un šķēršļiem piedalīties pārtikas publiskajos iepirkumos Rēzeknes novadā.

Pētījuma metodes: monogrāfiski aprakstošā metode, analīze, sintēzes, statistikas metode (datu grupēšana, krustojumu tabulu analīze, vidējais rādītājs) socioloģiskā pētījuma metode – vietējo pārtikas ražošanas/pārstrādes/tirdzniecības uzņēmumu pilotaptauja.

Pētījuma datu apstrādei izmantoti sociālo zinātņu statistikas paketes SPSS (Statistical Package for the Social Science), un Microsoft Excel analīzes rīki.

### **Pētījuma rezultāti**

#### ***Research results***

Pasaulē un arī Latvijā ir veikti pētījumi (Krivašonoka & Siliņa, 2015; Krivašonoka & Zvirbule 2016; Zvaigzne, Kotane, & Krivašonoka, 2017) par to, kā ZPI ieviešana sekmē vietējā reģiona attīstību. ZPI ir instruments, kas tiešā veidā stimulē un nodrošina vietējās produkcijas noieta apjomu palielināšanos.

Eiropas reģionu komiteja ir sniegusi perspektīvo atzinumu par ‘Vietējo lauksaimniecību un pārtikas ražošanu’, kurā minēts, ka vietējās pārtikas ražošanas sistēmas ir viens no līdzekļiem, kas sekmē vietējā potenciāla attīstību un uzlabo mazāk pazīstamu un nereti novārtā atstātu teritoriju ekonomisko aktivitāti (Latvijas Lauku foruma..., 2012).

2015. gadā tika veikts pētījums Tukuma novadā par to, kādi ir pašvaldības ieguvumi, ja tiek ieviests ZPI, respektīvi, ko pašvaldība iegūst, ja iepirkuma uzvarētāju izvēlas nevis piemērojot zemāko cenu, bet saimnieciski izdevīgākā piedāvājuma kritērijus, kas iever gan bioloģiski ražotas produkcijas īpatsvara noteikšanu iepirkumā, gan attālumu no ražotāja līdz gala patērētājam, gan arī sezonālā ievērošanu. Veiktais pētījums parādīja, ka pašvaldībai, iepērkot vietējo produkciju, ir gan sociāli, gan ekonomiski ieguvumi. Veiktie aprēķini parādīja, ka tad, ja vietējie ražotāji ar pašražotu pārtiku apgādātu desmit pašvaldību iestādes, tad tikai Iedzīvotāju ienākuma nodoklis pašvaldības budžetā palielinātos par vairāk kā 80 000 EUR gadā, kas ir būtisks papildinājums ikvienas pašvaldības budžetam (Korpa et al., 2015).

Autoru veiktā pētījuma ietvaros bija nepieciešams noskaidrot vietējo uzņēmēju viedokli par iespējām un šķēršļiem piedalīties pārtikas publiskajos iepirkumos Rēzeknes novadā, tāpēc tika veikta uzņēmēju pilotaptauja. Aptaujas anketa tika izplatīta visiem uzņēmumiem, kas ir piedalījušies pārtikas publiskajos iepirkumos Rēzeknes novada pašvaldībā pēdējos piecos gados un kuriem publiski ir pieejami e-pasti aptaujas anketas izsūtīšanai, kā arī citiem uzņēmumiem, kas ražo/audzē/pārstrādā pārtikas produktus vai nodarbojas ar

pārtikas produkcijas tirdzniecību konkrētajā teritorijā. Aptauja notika laika periodā no 2017. gada septembra līdz decembrim. Uzņēmēju atsaucība nebija liela, tika iesniegtas tikai 15 analīzei derīgas anketas. Aptauju būtu nepieciešams turpināt, lai pētījuma dati būtu reprezentatīvi.

Lielāko daļu aptaujāto uzņēmumu veidoja uzņēmumi, kuri strādā pārtikas tirdzniecības jomā, attiecīgi, pārtikas mazumtirdzniecību par savu darbības jomu bija norādījuši 9 uzņēmumi un pārtikas vairumtirdzniecību 8 uzņēmumi. Tā kā respondenti varēja norādīt vairākas darbības jomas, tad vairāku aptaujāto uzņēmumu darbība ir saistīta tieši ar šīm abām tirdzniecības jomām. Salīdzinoši mazāku daļu veidoja respondenti, kuri ir saistīti ar pārtikas ražošanu, attiecīgi, ar primārās pārtikas ražošanu nodarbojas 3 uzņēmumi un ar pārtikas apstrādi 2 uzņēmumi. Aptaujāto uzņēmumu apkopotās atbildes uz jautājumu „Vai ražojat pārtikas produkciju?” liecina, ka ar pārtikas ražošanu ir saistīti 5 respondenti, 4 no tiem pārtiku ražo integrēti, 1 – konvencionāli. Pārējo aptaujāto uzņēmumu darbība ir saistīta ar pārtikas produktu tirdzniecību. Aptaujas anketā bija iekļauts jautājums par uzņēmumu galvenajiem pārtikas produkcijas realizācijas veidiem. Aptaujas rezultāti parāda, ka uzņēmumi izmanto dažādus produktu realizācijas veidus: tiešā pārdošana produkta gala patērētājiem (20 atbildes), produktu pārdošana starpniekiem (16 atbildes), produktu pārdošana pārstrādes uzņēmumiem (5 atbildes); 3 atbildēs tika minēts, ka uzņēmumi ir startējuši pašvaldības pārtikas iepirkumos, tātad savu produkciju ir realizējuši pašvaldību iestāžu vajadzībām.

Kopumā var secināt, ka aptaujātajiem uzņēmumiem trūkst pieredzes pašvaldības publiskajos pārtikas iepirkumos. Jo 73 % uzņēmēju ir atbildējuši, ka tiem šādas pieredzes nav. 27 % respondentu, kuriem ir pieredze iepirkumos, atbildējuši, ka tā ir liela vienam no tiem pat 7 gadus. Viens no respondentiem atbildēja, ka nodarbojas ar gaļas produktu piegādi ne tikai Rēzeknē, bet Daugavpilī, Ludzā un Aglonā. Taču pozitīvi ir vērtējams fakts, ka sniedzot pašnovērtējumu 5 punktu sistēmā, kā proporcionāli lielāko sniegto atbilžu daļu - 5 punktus, augstāko novērtējumu jeb augstu gatavības pakāpi startēt pašvaldību publiskajā pārtikas iepirkumā ir atzīmējuši 33 % aptaujāto uzņēmumu, kā otrs labākais rezultāts ir atzīmējami 3 punkti, kas apliecina vidēju gatavības pakāpi un to savā pašvērtējumā ir apliecinājuši 27 % aptaujāto uzņēmumu.

Aptaujātie respondenti savu viedokli pašvērtējumā pamato ar to, ka:

- spēj saražot pārtikas produktus augstā kvalitātē un pietiekamā apjomā;
- tiem ir liela darbības pieredze un pieredze publiskajos iepirkumos.

Savukārt uzņēmumi, kuri savu pašnovērtējumu ir atzīmējuši ar 1 un 2 punktiem, novērtējot savu gatavību kā ļoti zemu un zemu, savu pašvērtējumu pamato ar to, ka:

- nespēj nodrošināt apjomu;

- vai nespēj nodrošināt produkciju visu noteikto periodu;
- trūkst zināšanu par ZPI;
- trūkst laika dokumentu sagatavošanai, ko var klasificēt arī kā motivācijas trūkumu dalībai ZPI.

Atbildot uz jautājumu par vietējā ražotāja izredzēm uzvarēt pašvaldību publiskajos pārtikas iepirkumos, aptaujātie uzņēmumi nav pārāk optimistiski. 33 % aptaujāto uzņēmumu vietējo ražotāju izredzes uzvarēt pašvaldību publiskajos pārtikas iepirkumos vērtē kā mazas un 27 % kā vidējas. To var skaidrot ar to, ka uzņēmumi nav pārliecināti, ka ir iespējams uzvarēt iepirkumos konkurencē ar lielajiem Latvijas pārtikas ražotājiem.

Pētnieks Teilors norāda, ka lielām firmām ir būtiskas izmaksu mazināšanas priekšrocības un tās ir spējīgas sadalīt kopīgās izmaksas uz vairākiem līgumiem, un mazās firmas nevar izturēt šo konkurenci vienkārši samazinot savas izmaksas (Taylor, 2005).

Atbildot uz jautājumu par vietējo pārstrādes uzņēmumu izredzēm uzvarēt pašvaldību publiskajos pārtikas iepirkumos, 53 % aptaujāto uzņēmumu vietējo pārstrādes uzņēmumu izredzes uzvarēt pašvaldību publiskajos pārtikas iepirkumos vērtē kā vidējas, tātad kā labākas, salīdzinājumā ar vietējā ražotāja izredzēm, uzvarēt. Aptaujāto uzņēmumu (66 %) viedoklis par lauksaimniecības kooperatīvu izredzēm uzvarēt pašvaldību publiskajos pārtikas iepirkumos ir novērtētas kā diezgan lielas. Šādu vērtējumu var skaidrot ar to, ka iespējams lauksaimniecības kooperatīvi spēs bez problēmām izpildīt pašvaldību publisko pārtikas iepirkumu kritērijus attiecībā uz apjomu, kas bieži vien izrādās problemātisks vietējam ražotājam. Sniedzot savu vērtējumu par vairumtirdzniecības uzņēmumu izredzēm uzvarēt pašvaldību publiskajos pārtikas iepirkumos, 67 % aptaujāto uzņēmumu tās vērtē ar 5 punktiem jeb kā lielas izredzes. Aptaujāto uzņēmumu viedoklis sakrīt ar pašreizējo situāciju iepirkumu jomā, ka pašvaldību publiskajos pārtikas iepirkumos galvenokārt uzvar vairumtirdzniecības bāzes un lielie Latvijas pārtikas ražotāji.

Flins un citi pētnieki norāda, ka lielās firmas piesakās uz valsts iepirkumiem biežāk un biežāk arī uzvar šajos publisko iepirkumu konkursos (Flynn & Davis, 2016; Flynn et al., 2015).

1. tabulā var redzēt aptaujāto uzņēmumu vidējo novērtējumu par iespējam uzvarēt publiskajos pārtikas iepirkumos, kur vietējam ražotājam ir viszemākais vidējais novērtējums - 2,93, bet vairumtirdzniecības uzņēmumam ir visaugstākais - 4,53.

1. tab. Aptaujāto uzņēmumu novērtējums 5 punktu sistēmā (1 - ļoti mazas izredzes un 5 - lielas izredzes) par iespējām uzvarēt pašvaldību publiskajos pārtikas iepirkumos, (n=15), (autoru izveidota)

Table 1 Surveyed enterprises' ratings of opportunities to win in public food procurement tenders by local governments (on a five-point scale: 1 – the smallest chance and 5 – the greatest chance), (n=15), (authors' construction)

Uzņēmuma veids	Vidējais novērtējums	Moda
Vietējam ražotājam	2,93	2
Vietējam pārstrādes uzņēmumam	3,13	3
Lauksaimniecības kooperatīvam	4,20	4
Vairumtirdzniecības uzņēmumam	4,53	5

Apkopojot aptaujāto uzņēmumu pašnovērtējumu par savu informētības līmeni pašvaldību publisko pārtikas iepirkumos var secināt, ka

- 33 % nav informēti un tik pat liela daļa ir to, kas ir ļoti maz informēti par iepirkuma izsludināšanu,
- 40 % ir maz zināšanu par nepieciešamajiem dokumentiem un to sagatavošanu.

2. tab. Aptaujāto uzņēmumu pašnovērtējums par savu informētības līmeni pašvaldību publisko pārtikas iepirkumos, (n=15), (autoru izveidota)

Table 2 Surveyed enterprises' self-assessment of their awareness of public food procurement tenders by local governments, (n=15), (authors' construction)

Novērtējamais kritērijs		Ļoti labi informēts	Kopumā informēts, bet nepārzinu detaļas	Kaut ko zinu, bet ne ļoti daudz	Neesmu informēts	Atbilžu skaits/ % kopā
Iepirkuma izsludināšana	skaits	3	2	5	5	15
	%	20,1	13,3	33,3	33,3	100
Zināšanas par nepieciešamajiem dokumentiem un to sagatavošanu	skaits	4	3	6	2	15
	%	26,7	20	40	13,3	100
Institūciju (PVD, VID) prasības	skaits	10	2	2	1	15
	%	66,7	13,3	13,3	6,7	100
Līgumsaistību izpildes nosacījumi (informācija par piegādēm u.c.)	skaits	3	6	5	1	15
	%	20	40	33,3	6,7	100

Savukārt kā pozitīvi vērtējams kritērijs ir tas, ka 66,7 % aptaujāto uzņēmumu ir ļoti labi informēti par institūciju (PVD, VID) prasībām. 40 % aptaujāto uzņēmumu kopumā ir informēti, bet nepārzina detaļas un 33 % ļoti maz zina attiecībā uz līgumsaistību izpildes nosacījumiem (informācija par piegādēm u.c.) (sk. 2. tabulu).

Var secināt, ka uzņēmējiem būtu svarīgi paaugstināt informētības un zināšanu līmeni pašvaldību publisko pārtikas iepirkumu jomā, īpaši par iepirkumu izsludināšanu, nepieciešamajiem dokumentiem un to sagatavošanu, kā arī attiecībā uz līgumsaistības izpildes nosacījumiem.

Aptaujas anketā bija iekļauts arī jautājums ar mērķi noskaidrot uzņēmumu vērtējumu attiecībā uz galvenajiem šķēršļiem pārtikas publiskajos iepirkumos.

Ar 5 punktiem jeb kā ļoti svarīgi šķēršļi respondentu atbildēs tika novērtēti tādi šķēršļi kā:

- pārāk zemas produktu iepirkumu cenas;
- nepietiekami plašs produkcijas sortiments;
- nevar nodrošināt pietiekamu produkcijas apjomu;
- nespēj nodrošināt regulāras produkcijas piegādes;
- pārāk liels produkcijas piegādes attālums.

Ar 4 punktiem jeb kā svarīgi tika novērtēti tādi šķēršļi kā:

- produkcijas piegādes pieprasījums ir neatbilstošs sezonālībai,
- neinformētība un zināšanu trūkums par iepirkumu, tā procedūru un nepieciešamajiem dokumentiem;
- nespēja nodrošināt nemainīgu produkcijas kvalitāti visa gada garumā;
- iepirkums tiek izsludināts, kad dārzeņi jau ir iesēti/ iestādīti (līdz ar to neatbilst iepirkuma pieprasījumam).

Tātad var secināt, ka kā būtiskākos šķēršļus dalībai pašvaldību publiskajos pārtikas iepirkumos uzņēmumi vērtē iepirkuma izpildes nosacījumus jeb tādus kritērijus kā: produkcijas cena, sortiments, apjoms, piegādes regularitāte un attālums.

Aptaujas anketā bija iekļauts arī jautājums, vai aptaujātie uzņēmumi būtu gatavi sadarboties ar citiem ražotājiem, lai startētu pašvaldību publiskajos pārtikas iepirkumos. Apkopotie rezultāti parādā, ka 87 % aptaujāto uzņēmumu apstiprina savu vēlmi sadarboties ar citiem ražotājiem. Tas apliecina uzņēmumu izpratni, ka sadarbība ar citiem uzņēmumiem mazinātu tādu šķēršļu esamību dalībai pašvaldību publiskajos pārtikas iepirkumos kā:

- produkcijas sortimenta nodrošināšana;
- produkcijas apjoms;
- regulāras produkcijas piegādes;
- produkcijas piegādes attālums.

Tie uzņēmumi (13 %), kuri snieguši negatīvu atbildi sadarbībai, lai startētu pašvaldību publiskajos pārtikas iepirkumos ar citiem uzņēmumiem, pamatojuši to, ka viņiem šobrīd ir labi tā kā ir, vai, ka nav tādas intereses.

### **Secinājumi un priekšlikumi** *Conclusions and Proposals*

1. Pētījuma ietvaros veiktajā uzņēmēju pilotaptaujā, uzņēmumi, kuri savu gatavību startēt pašvaldības publiskajos iepirkumos novērtēja, kā ļoti zemu un zemu, pamatoja to ar nespēju nodrošināt apjomu, produkciju visu noteikto periodu, zināšanu trūkumu par ZPI, laiku dokumentu sagatavošanai, ko var klasificēt arī kā motivācijas trūkumu dalībai ZPI.
2. Uzņēmumi kā ļoti svarīgus šķēršļus ir norādījuši: pārāk zemas produktu iepirkumu cenas, nepietiekami plašs produkcijas sortiments, nevar nodrošināt pietiekamu produkcijas apjomu, nespēj nodrošināt regulāras produkcijas piegādes, pārāk liels produkcijas piegādes attālums.
3. Rēzeknes novada uzņēmējiem ieteicams apmeklēt informatīvos un izglītojošos bezmaksas seminārus par ZPI, ko organizē Vides aizsardzības un reģionālās attīstības ministrija.
4. Rēzeknes novada vietējiem uzņēmējiem ieteicams izmantot iespējas konsultēties ar Rēzeknes novada Izglītības-uzņēmējdarbības kontaktpunktu speciālistiem par sev nesaprotamiem jautājumiem saistībā ar savas produkcijas noieta attīstīšanu, izskatīt sadarbības un kooperācijas iespējas ar citiem uzņēmumiem produkcijas apjoma nodrošināšanai publiskajos iepirkumos.

### **Summary**

Research studies have been conducted in the world and in Latvia too on how the introduction of green public procurement (GPP) contributes to the development of a local area. GPP is an instrument that directly stimulates and ensures increases in local product sales.

The European Committee of the Regions has released a prospective statement on local agricultural and food production that refers to local food production systems as one of the means that contribute to local potential and economic activity in less known and often backward territories.

The research aim is to identify the opinions of local entrepreneurs on their opportunities for and barriers to participating in public food procurement in Rēzekne municipality.

The pilot survey of entrepreneurs done within the present research showed that the enterprises which rated their readiness to participate in municipal public procurement tenders as very low and low justified this fact by their inability to supply the required quantity and assortment of products throughout the whole period specified, the lack of knowledge of GPP and the short period for paperwork, which could be classified as the lack of motivation for their participation in GPP.

The enterprises referred to the following barriers as very significant: too low purchase prices on products, an insufficiently broad assortment of the products, an inability to supply the necessary quantity of the products, an inability to ensure regular deliveries of the products and a too long distance to deliver the products.

Enterprises located in Rezekne municipality are advised to visit free-of-charge informative and educational seminars on GPP held by the Ministry of Environmental Protection and Regional Development as well as to consult with specialists of Rezekne municipality education and entrepreneurship contact centres about unclear matters in relation to increasing their sales and to consider opportunities for collaboration and cooperation with other enterprises with the purpose of making joint bids in public procurement tenders.



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# SITUĀCIJAS IZPĒTE UN PROGNOZES PAR NEPIECIEŠAMO PĀRTIKAS APJOMU PAŠVALDĪBAS IESTĀŽU AUDZĒKŅIEM / KLIENTIEM RĒZEKNES NOVADĀ

## *Identification and Projection of the Quantity of Food to be Supplied to Municipal Institution Students / Customers in Rezekne Municipality*

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**Abstract.** *Regardless of food market globalisation, in recent years a topical matter has been food consumption as close to the production site as possible or local food. Research studies conducted in the world and in Latvia too show that the introduction of green public procurement contributes to the development of a local area and directly promotes and ensures increases in local product sales, thereby stimulating the purchase of local food to supply customers and students of municipal institutions with food. The authors believe that a timely examination of the situation and a projection of the required amount of food for customers/students of municipal institutions are essential prerequisites for local enterprises in Rezekne municipality to plan and develop their businesses. The paper is based on the implementation results of the research grant "Opportunities for the Green Public Procurement of Food by Municipal Institutions in Rezekne Municipality". The research aim is to identify and project the quantity of food to be supplied to municipal institution customers/students in Rezekne municipality. The research results indicate that the demand for food to be supplied through public procurement by Rezekne municipality municipal institutions might remain the same in the nearest future. Holding public food procurement tenders in future, the local authorities of Rezekne municipality have to split any large amount of procured food into smaller ones, thus giving an opportunity for local small enterprises to participate in the tenders. Research methods used: monographic, descriptive, analysis, synthesis, data grouping, statistical analysis and a sociological method – a survey of municipality/parish administration representatives.*

**Keywords:** *local food products, green public procurement, municipal institutions.*

## **Ievads**

### ***Introduction***

Pārtikas tirgu globalizēšanās ir palielinājusi vajadzību daudziem patērētājiem un citām pārtikas piegādes ķēdē iesaistītām pusēm sīkāk izpētīt pārtikas izcelsmi, kvalitāti, veselīgumu un arī tās ražošanas ētikas aspektus un ilgtspēju. Vietējās pārtikas piegādes ķēdes bieži uzskata par salīdzinoši ilgtspējīgām (Lehtinen, 2012). Pēdējos gados gan pasaulē, gan Latvijā arvien vairāk zinātnieku starpā un sabiedrībā rodas diskusijas par pārtikas patēriņu maksimāli tuvu tā ražošanas vietai jeb par vietējo pārtiku.

Naits (Knight, 2013) norāda, ka “vietējais” ir komplekss jēdziens, kas ietver sevī dažādas vietējās pārtikas koncepcijas: vietējā pārtika noteiktā ģeogrāfiskajā teritorijā; “vietējais” ir ticis pārvērsts par pretstatu industriālajai jeb korporatīvajai lauksaimniecībai kā alternatīva kustība, un “vietējais” var tikt definēts kā sociālās attiecības, galvenokārt starp patērētāju un ražotāju. Nijaki un Vorels (Nijaki & Worrel, 2012) secina, ka zaļo vietējo ekonomisko attīstību var veicināt, ja apvieno publiskā iepirkuma programmas, kas agrāk lika uzsvāru vienīgi vai nu ekonomiskās attīstības, vai vides saglabāšanas mērķiem. Publisko iepirkumu var izmantot kā nozīmīgu instrumentu, lai sasniegtu gan ekonomiskus, gan vides aizsardzības mērķus, un arī kā vietējās varas galveno politikas un plānošanas instrumentu zaļās ekonomikas veicināšanai.

Zaļais publiskais iepirkums (ZPI) ir svarīgs instruments vides politikas mērķu sasniegšanā attiecībā uz klimata pārmaiņām, resursu izmantošanu un ilgtspējīgu patēriņu un ražošanu — jo īpaši ievērojot, cik nozīmīgi ir publiskā sektora izdevumi par precēm un pakalpojumiem Eiropā (Zaļais iepirkums. Rokasgrāmata..., 2016). ZPI var definēt kā paņēmieni, kas ļauj samazināt nopirkto produktu radīto ietekmi uz vidi visā to dzīves ciklā, stimulējot ražotājus ieviest videi draudzīgus produktu dizainus un ražošanas tehnoloģijas caur publiskiem iepirkumiem. Šādā veidā, ZPI tiek atzīts par efektīvu veidu, lai attīstītu iespējas zaļajām piegādēm un tirgiem (Zhu et al., 2013).

Vietējās pārtikas sistēmas atbalsta vietējo un reģionālo ekonomiku un īsās pārtikas piegādes ķēdes palielina mijiedarbību starp patērētājiem un ražotājiem (Tikkanen, 2014). Uz procesu balstītās pieejas, kas veicina vietējo ekonomisko attīstību, saistījās ar vairāku pašvaldību mēģinājumiem pārliecināt galvenos darbuzņēmējus nodrošināt pasūtījumu iespējas MVU kā otrā vai trešā līmeņa piegādātājiem. Uz produktu balstītās pieejas, kas veicina vietējo ekonomisko attīstību, ir galvenokārt novērojamas pārtikas iepirkumos skolām un sociālas aprūpes iestādēm (Preuss, 2009). Ēdināšanai skolās ir pievērsta īpaša uzmanība, apspriežot publisko iepirkumu, jo šie pakalpojumi ir svarīgāki nekā citi sabiedriskie ēdināšanas pakalpojumi: skolas jau ilgstoši uzskata par atbildības

jomu, kas saistīta ar intelektuālo attīstību un skolēnu, līdz ar to nākamo paaudžu, sociālo un fizisko labklājību. (Truninger et al., 2014).

Pasaulē un arī Latvijā veiktie pētījumi (Krivašonoka & Siliņa, 2015; Krivašonoka & Zvirbule 2016; Zvaigzne, Kotane, & Krivašonoka, 2017) liecina, ka zaļā publiskā iepirkuma (ZPI) ieviešana sekmē vietējā reģiona attīstību, tiešā veidā stimulē un nodrošina vietējās produkcijas noieta apjomu palielināšanos.

Amerikāņu pētnieki (Izumi et al., 2000) secināja, ka fermeri pārdeva savu produkciju skolām divu galveno cēloņu dēļ: dažādot savas mārketinga stratēģijas un palielināt ieguvumus sabiedrībai bez jebkādas starpniecības. Zinātnieki (Soares et al., 2017) pētīja pārtikas produktu iegādi pēc jauno iepirkumu kritēriju ieviešanas skolu pārtikas programmās un secināja, ka palielinājās veselīgās pārtikas daudzveidība un daudzums pašvaldības skolās, jo palielinājās ieteicamo produktu iegāde (augļi, pākšaugi, dārzeņi u.c.) un samazinājās kontrolēto produktu iegāde (gaļa ar augstu tauku saturu, pārtika ar paaugstinātu cukura saturu u.c.). Botkins un Roe (Botkin & Roe, 2018) uzskata, ka, lai arī tiek bieži runāts par vietējo lauksaimnieku potenciālajiem ieguvumiem, palielinoties pieprasījumam pēc to produktiem, reti tiek diskutēts par to, ka skolu iespēja iegūt vietējo pārtiku ir atkarīga no lauksaimnieku piedāvājuma.

Autori uzskata, ka savlaicīga situācijas izpēte un prognozes par nepieciešamo pārtikas apjomu pašvaldības iestāžu audzēkņiem/klientiem ir svarīgs un būtisks nosacījums Rēzeknes novada vietējo uzņēmumu darbības plānošanai un attīstībai.

**Pētījuma mērķis:** izpētīt situāciju un izstrādāt prognozes par nepieciešamo pārtikas apjomu pašvaldības iestāžu klientiem/ audzēkņiem Rēzeknes novadā.

**Pētījuma uzdevumi:**

1. Izpētīt Rēzeknes novada pašvaldības iestāžu klientu/ audzēkņu dinamiku un izstrādāt to skaita izmaiņu prognozes;
2. Novērtēt 2017. gada Rēzeknes novada pašvaldības pārtikas produktu iepirkumu aktivitāti un Rēzeknes novada pašvaldībā/pārvaldēs nepieciešamo pārtikas produktu apjomu (t) pa pārtikas produktu grupām gadam.

**Pielietotās pētījuma metodes:** monogrāfiski aprakstošā metode, analīze, sintēzes, statistikas metode, socioloģiskā pētījuma metode – vietējās pašvaldības/pārvalžu pārstāvju aptauja. Pētījums veikts pamatojoties uz zinātnieku publikācijām, Centrālās Statistikas pārvaldes (CSP) un Rēzeknes novada pašvaldības datiem, Rēzeknes novada Izglītības pārvaldes un Veco ļaužu pansionāta nepublicēto informāciju, Rēzeknes novada pašvaldības/pārvalžu pārstāvju aptaujas rezultātiem un citiem informāciju avotiem.

## **Pētījuma metodoloģija** *Research methodology*

Pētījuma gaitā tika apkopota Rēzeknes novada mājas lapā publiski pieejamā informācija par izglītības un sociālajām iestādēm novadā, CSP datubāzes informācija par dzimušo skaitu un dzimstības koeficientus uz 1000 iedzīvotājiem Rēzeknes novadā, Rēzeknes novada pašvaldības Izglītības pārvaldes un Veco ļaužu pansionāta nepublicētie dati par izglītojamo skaitu izglītības iestādēs un ilglaicīgajā sociālajā aprūpē esošo iedzīvotāju skaitu.

Pētījuma ietvaros tika analizēta vietējās pašvaldības/pārvalžu pārstāvju aptaujas, kura tika veikta ar mērķi noskaidrot viņu viedokli par ZPI izmantošanas iespējām un šķēršļiem pārtikas publiskajos iepirkumos Rēzeknes novadā. Viens no aptaujas anketas jautājumiem bija par nepieciešamo pārtikas produktu apjomu (t) pa pārtikas produktu grupām gadam. Aptaujā piedalījās Rēzeknes novada pašvaldība un Rēzeknes novada pagastu pārvaldes. Rēzeknes novadu veido 25 pagasti jeb administratīvas pagastu pārvaldes, no tiem 2 pagasta pārvaldes ir kāda cita pagasta pārvaldes struktūrvienības un 3 pagastos nav ne skolas ne bērnudārza, tātad nav nepieciešamības īstenot ZPI. Vienas pagasta pārvaldes pārstāvis, nepaskaidrojot iemeslu, pētījumā piedalīties atteicās. Pētījuma respondentu kopu veido 20 respondenti, t.sk. Rēzeknes novada pašvaldība un 19 Rēzeknes novada pagastu pārvaldes. Aptaujas anketas tika izplatītas elektroniskā formā. Aptauja tika veikta 2017. gada oktobrī.

Pētījuma datu apstrādei izmantotas sociālo zinātņu statistikas paketes SPSS (Statistical Package for the Social Sciences) un Microsoft Excel analīzes rīki.

## **Pētījuma rezultāti** *Research results*

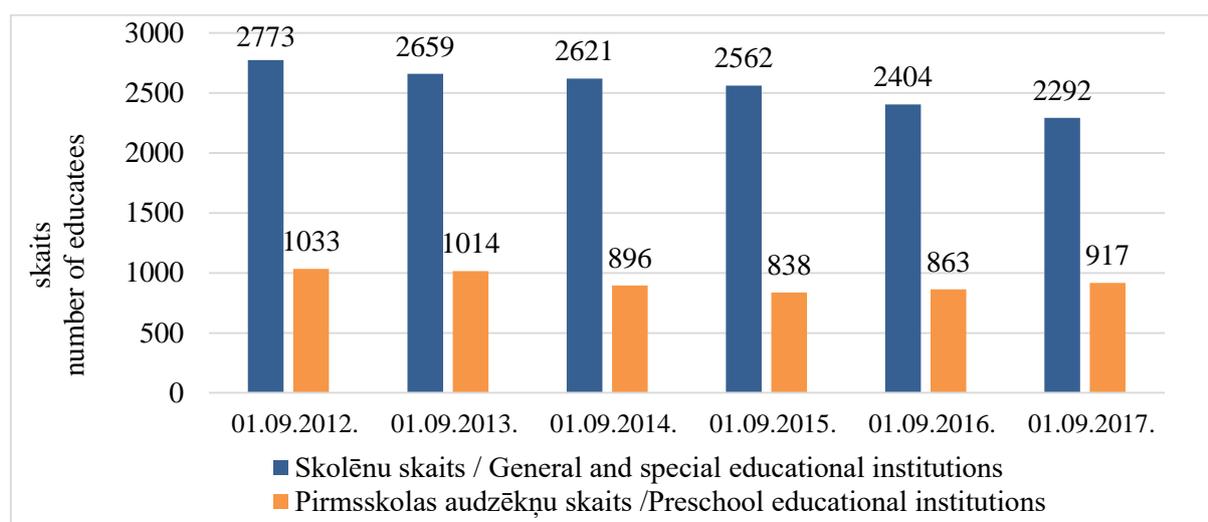
ZPI ir aktuāli Rēzeknes novada pašvaldībām, kurās tiek sniegti ēdināšanas pakalpojumi pašvaldības izglītības un/vai sociālās aprūpes iestādēs.

Rēzeknes novada administratīvajā teritorijā ietilpst 25 pagasti 2524 km<sup>2</sup> kopplatībā. Šajā teritorijā darbojas četrdesmit izglītības iestādes un to struktūrvienības, kas nodrošina iespēju saņemt pirmsskolas, vispārējo, speciālo, profesionālo, profesionālās ievirzes un interešu izglītību, un kas ir potenciālie zaļā pārtikas produktu publisko iepirkumu pasūtītāji Rēzeknes novadā. Uz 2017.gada beigām to skaitā ietilpst: 16 vispārīzglītojošās skolas: 7 pamatskolas, 6 vidusskolas, 3 internātpamatskolas; četru skolu struktūrvienības; 17 pirmsskolas izglītības iestādes; 1 bērnu un jauniešu sporta skola; 1 bērnu mūzikas skola Maltā; 1 bērnu mākslas skola Nautrēnos (Ludzas filiāle) (Izglītība, 2017).

Aprūpi un sociālo rehabilitāciju pensijas vecuma personām un cilvēkiem ar invaliditāti Rēzeknes novadā nodrošina Rēzeknes novada veco ļaužu pansionāts

Stručānos, kas uz 2017. gada beigām var nodrošināt pastāvīgu dzīves vietu 50 personām. Pansionātam ir filiāle Pilcenē, kas var izmitināt 26 iemītniekus.

Atbilstoši Rēzeknes novada pašvaldības Izglītības pārvaldes sniegtajai informācijai par Rēzeknes novada izglītojamo skaitu vispārīzglītojošās, speciālajās un pirmsskolas izglītības iestādēs uz mācību gada sākumu par periodu no 2012. gada līdz 2017. gadam (sk. 1. attēlu), skolēnu skaitam piemīt samazināšanās tendence, un pēdējo sešu gadu laikā to skaits uz pirmo septembri ir samazinājies par 17,3 % jeb par 481 skolnieku.

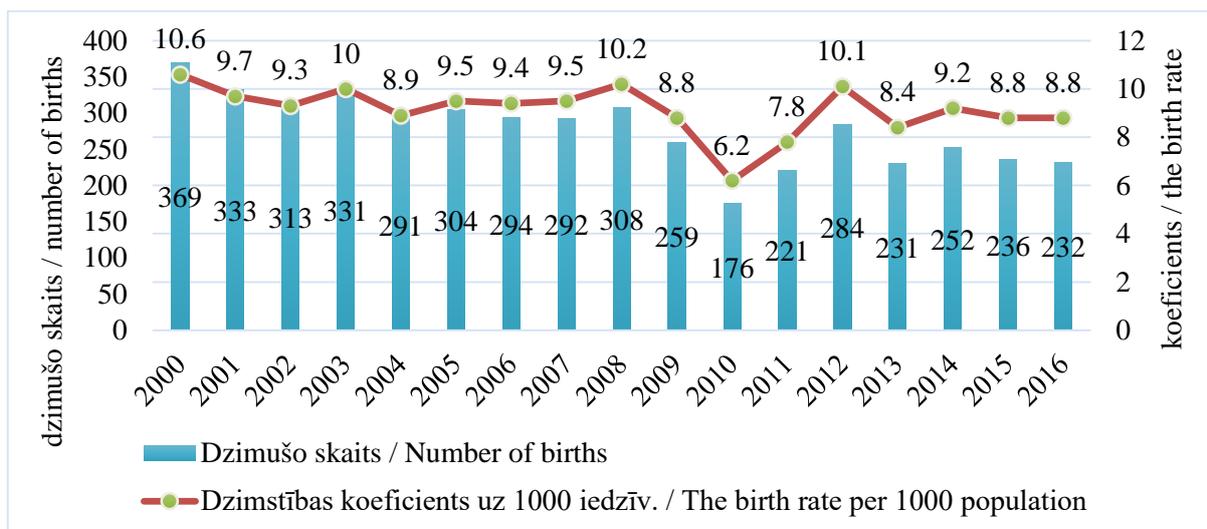


1. att. **Izglītojamo skaits vispārīzglītojošās, speciālajās un pirmsskolas izglītības iestādēs Rēzeknes novadā 2012.-2017. mācību gada sākumā**, (autoru izveidots pēc Rēzeknes novada Izglītības pārvaldes..., 2017)

*Fig. 1. Number of educatees at general, special and preschool educational institutions in Rēzekne municipality in the period 2012-2017 at the beginning of the school year (authors' construction based on Rēzeknes novada Izglītības pārvaldes..., 2017)*

Pirmsskolas audzēkņu skaita izmaiņas laika periodā 01.09.2012. līdz 01.09.2017. arī negatīvi tendētas, pieauguma temps ir 11,2 % un kopējās absolūtās izmaiņas ir -116 audzēkņi. Jāatzīmē, ka skaita samazināšanās tendence saglabājās līdz 2015. gadam, un nākamajos divos gados vērojams neliels audzēkņu skaita pieaugums par 3 % un par 6 % attiecīgi 2016. un 2017. gadā.

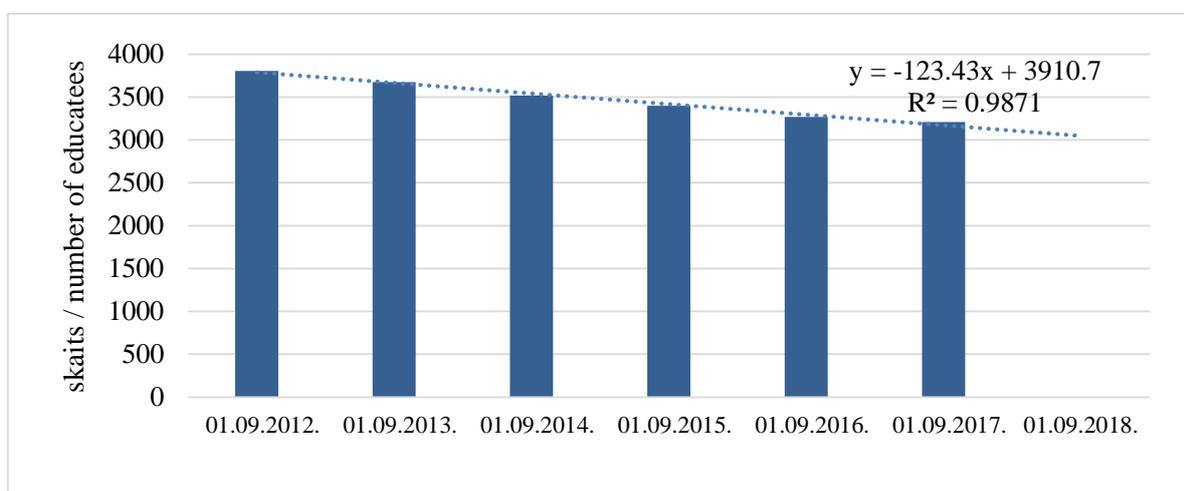
Vērtējot kopējo dzimušo skaitu un dzimstības koeficientu uz 1000 iedzīvotājiem Rēzeknes novadā (sk. 2. attēlu), var redzēt, ka, neskatoties uz 2010.-2012. gadu perioda dzimstības straujo pieaugumu, kad dzimstības koeficients uz 1000 novada iedzīvotājiem palielinājās no 6,2 līdz 10,1 un dzimušo skaits palielinājās par 61 %, pēdējo četru gadu periodā attīstības tempi ir būtiski palēninājušies. Tādējādi var pieņemt, ka Rēzeknes novada pirmsskolas izglītības iestāžu audzēkņu un skolēnu skaita tendence tuvākajos periodos būtiski nemainīsies.



2. att. Dzimušo skaits un dzimstības koeficients uz 1000 iedzīvotājiem Rēzeknes novadā 2000.-2016. g. (autoru izveidots pēc CSP datubāze, 2017)

Fig. 2. Number of births and the birth rate per 1000 population in Rezekne municipality in the period 2000-2016 (authors' construction based on CSP datubāze, 2017)

3. attēla dati liecina, ka kopējo izglītojamo skaitu Rēzeknes novada izglītības iestādēs var aprakstīt ar lineārā trenda funkciju ( $R^2=0,9871$ ) un kopējā skaita prognoze nākamajam gadam varētu samazināties par 123,43 absolūtajām vienībām un sastādīt nepilnus 3086 izglītojamus.



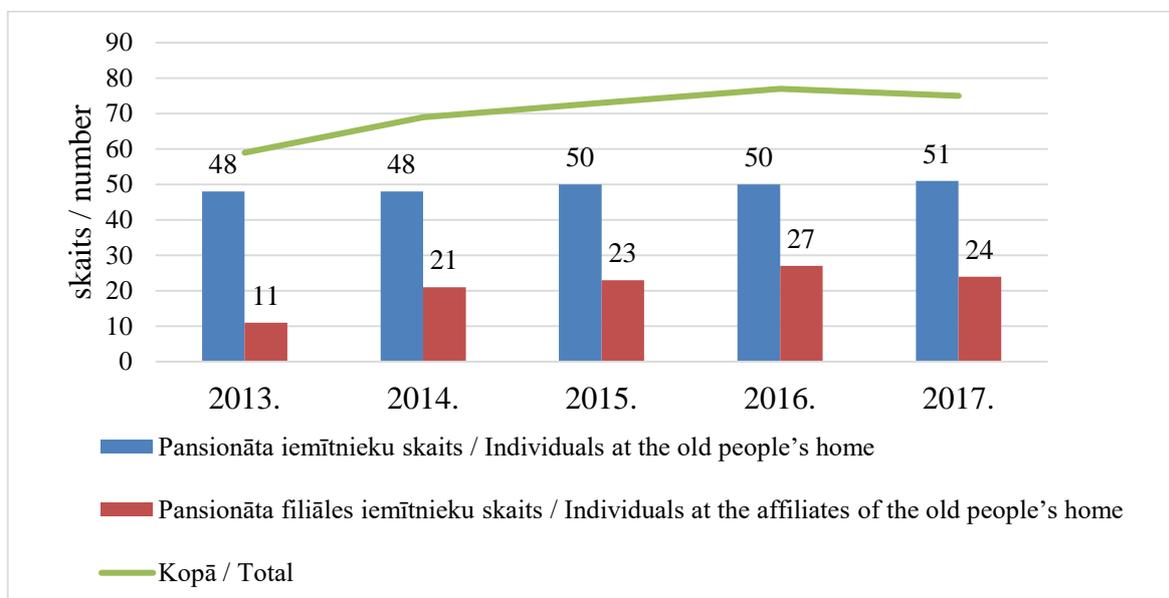
3. att. Izglītojamo skaits vispārizglītojošās, speciālajās un pirmsskolas izglītības iestādēs Rēzeknes novadā 2012.-2017. mācību gada sākumā un trenda funkcija ar nākamā perioda prognozi

(autoru izveidots pēc Rēzeknes novada Izglītības pārvaldes ..., 2017)

Fig. 3. Number of educatees at general, special and preschool educational institutions in Rezekne municipality in the period 2012-2017 at the beginning of the school year and the trendline for the next period

(authors' construction based on Rēzeknes novada Izglītības pārvaldes ..., 2017)

Ilglaicīgajā sociālajā aprūpē esošo iedzīvotāju kopējais skaits Rēzeknes novadā 2013.-2017. gadā ir tendēts uz pieaugumu, bet pieauguma tempi ir minimāli (sk. 4. attēlu), kas ļauj izdarīt pieņēmumu, nākošajā gadā ilglaicīgajā sociālajā aprūpē esošo iedzīvotāju skaita izmaiņas nebūs būtiskas pārtikas produktu iepirkumu nepieciešamo apjomu noteikšanā.



4. att. Rēzeknes novada veco ļaužu pansionāta un tā filiāles iemītnieku skaits 2013.-2017. gadā (autoru izveidots pēc Rēzeknes novada Veco ļaužu...,2017)

Fig. 4. Number of individuals at the old people's home and its affiliates in Rezekne municipality in the period 2013-2017 (authors' construction based on Rēzeknes novada Veco ļaužu..., 2017)

Vērtējot 2017. gada Rēzeknes novada pašvaldību pārtikas produktu iepirkumu aktivitāti, var secināt, ka kopā tika īstenoti desmit iepirkumi (Iepirkuma līgumi, 2017). Vidējais iepirkuma līguma īstenošanas laiks bija viens gads. Kopējais iepirkuma apjoms tiek sadalīts lielākajās pārtikas produktu grupās, ar mērķi veicināt mazo uzņēmēju un lauku ražotāju iesaistīšanos iepirkuma konkursos: piens un piena produkti; gaļa un gaļas izstrādājumi; zivis un zivju produkti; maize un maizes izstrādājumi, konditoreja; dārzeņi, augļi un ogas un pārējie pārtikas produkti. Piena un piena produktu grupā lielākais pieprasījums bija pēc svaiga piena, kopējais izsludinātais iepirkuma piena daudzums 2017. gadā bija 20735 litri. 2017. gadā tika novērots arī liels pieprasījums pēc gaļas un gaļas produkcijas. Lielākās iepirkuma pozīcijas ir "cūkgaļas lāpstiņa" 5090 kg un atdesēti vistas šķiņķi 4320 kg. Savukārt vismazākais pieprasījums ir pēc gatavās produkcijas, piemēram, galerta un aknu pastētes, 30 kg un 90 kg attiecīgi.

Veicot iepirkuma nolikumu izpēti, tika konstatēts, ka maizes, maizes izstrādājumu un konditorejas preču grupā lielākās iepirkuma pozīcijas 2017. gadā

bija kviešu un formas maize (vēlamais iepirkuma kopapjoms tika uzrādīts 17585 kg apmērā), kā arī tāda gatavā produkcija kā dažāda veida smalkmaizītes, kūciņas, pīrādziņi, vafeles u.c. Vismazākais pieprasījums bija uz tortēm (10 kg). 2017. gadā Rēzeknes novada pašvaldības atklātajos iepirkumos aktīvi iepirka dārzeņus un augļus, piemēram, kartupeļi tika izsludināti iepirkumam 56000 kg apjomā, savukārt, burkāni, bietes un sīpoli ir nākošās lielākās pozīcijas. Prioritāte tika dota Latvijā audzētajai produkcijai. Vismazākie iepirkumu apjomi tika sludināti garšvielām, riekstiem un sēkliņām, žāvētiem augļiem un medum.

Vērtējot Rēzeknes novada pašvaldības/pārvalžu sniegtās atbildes uz aptaujas anketas jautājumu par nepieciešamo pārtikas produktu apjomu (t) pa pārtikas produktu grupām gadam (1. tabula) var secināt, ka Rēzeknes novada pašvaldībā/pārvaldēs lielāko īpatsvaru sastāda pārtikas produktu apjoms pa produktu grupām gadam līdz 5 tonnām: 90 % no respondentiem to atzīmēja pie piena produktiem, maizes un tās izstrādājumiem un gaļas un gaļas produktiem.

1. tab. Nepieciešamais pārtikas produktu apjoms (t) pa pārtikas produktu grupām gadam Rēzeknes novada pašvaldībā/pārvaldēs (n=20), (autoru izveidota pēc pašvaldības/pārvalžu pārstāvju aptaujas rezultātiem)

Table 1 Annual amount of food (t) required for Rēzekne municipality local government/parish administrations (n=20) by food group (authors' construction based on the survey of municipality/parish administration representatives)

	Dārzeņi un augļi		Piena produkti		Maize un tās izstrādājumi		Gaļa un gaļas produkti	
	Skaitis	%	Skaitis	%	Skaitis	%	Skaitis	%
līdz 5 t	10	50,0	18	90,0	18	90,0	18	90,0
6-10 t	3	15,0	-	-	2	10,0	1	5,0
11-15 t	4	20,0	2	10,0	-	-	1	5,0
16-20 t	1	5,0	-	-	-	-	-	-
21-25 t	1	5,0	-	-	-	-	-	-
36-40 t	1	5,0	-	-	-	-	-	-
Kopā:	20	100,0	20	100,0	20	100,0	20	100,0

Vietējās pārtikas produkcijas realizācijas apjoma palielināšanā būtiska loma ir sabiedriskajam sektoram, kad pašvaldību publiskajos pārtikas produkcijas iepirkumos tiek palielināta vietējā teritorijā ražotās produkcijas daļa. ZPI ir instruments, kas tiešā veidā stimulē un nodrošina vietējās produkcijas realizācijas apjomu palielināšanos.

Neskatoties uz to, ka statistiskā informācija par Rēzeknes novada izglītojamo skaitu un sociālajā aprūpē esošo iedzīvotāju skaitu bija ierobežota, pēc veiktās izpētes var secināt, ka tuvākajā perspektīvā Rēzeknes novada pašvaldību iestāžu pieprasījums pēc pārtikas produkcijas, kas tiks iegādāta publiskajos iepirkumos, varētu saglabāties pašreizējā līmenī.

## **Secinājumi** **Conclusions**

Rēzeknes novadā ZPI īsteno pašvaldības, kurās tiek sniegti ēdināšanas pakalpojumi pašvaldības izglītības iestādēm un to struktūrvienībām un/vai sociālās aprūpes iestādēm. Rēzeknes novadā uz 2017. gada beigām darbojās 40 izglītības iestādes un to struktūrvienības un Rēzeknes novada veco ļaužu pansionāts Stružānos ar filiāli Pilcenē. Izglītojamo skaita izmaiņas izglītības iestādēs Rēzeknes novadā 2012.-2017. gadā un Rēzeknes novada veco ļaužu pansionāta un tā filiāles iemītnieku skaita izmaiņas 2013.-2017. gadā liecina, ka tuvākajā perspektīvā Rēzeknes novada pašvaldību iestāžu pieprasījums pēc pārtikas produkcijas publiskajos iepirkumos varētu saglabāties pašreizējā līmenī.

2017. gada Rēzeknes novada pašvaldībā tika īstenoti desmit iepirkumi, vidējais iepirkuma līguma īstenošanas laiks bija viens gads. Kopējais iepirkuma apjoms tiek sadalīts lielākajās pārtikas produktu grupās, ar mērķi veicināt mazo uzņēmēju un lauku ražotāju iesaistīšanos iepirkuma konkursos. Rēzeknes novada pašvaldībā/pārvaldēs lielāko īpatsvaru sastāda pārtikas produktu apjoms pa produktu grupām gadam līdz 5 tonnām. Rēzeknes novada pašvaldībām, turpmāk rīkojot publiskos pārtikas produkcijas iepirkumus, ieteicams sadalīt lielākās pārtikas produkcijas iepirkumu pozīcijas mazākās iepirkumu daļās, dodot iespēju tajos piedalīties vietējiem mazajiem uzņēmumiem.

### **Summary**

Regardless of food market globalisation, in recent years a topical matter has been food consumption as close to the production site as possible or local food. Research studies conducted in the world and in Latvia too show that the introduction of green public procurement contributes to the development of a local area and directly promotes and ensures increases in local product sales, thereby stimulating the purchase of local food to supply customers and students of municipal institutions with food. The research aim is to identify and project the quantity of food to be supplied to municipal institution customers/students in Rezekne municipality.

In Rezekne municipality, GPP is used by the local authorities of those territorial units where catering services are provided to municipal educational institutions and their constituent units and/or social care institutions. Changes in the number of educatees at educational institutions in Rezekne municipality in the period 2012-2017 and in the number of individuals at the old people's home and its affiliates in Rezekne municipality in the period 2013-2017 indicate that the demand for food by municipal institutions in Rezekne municipality at public food procurement tenders could remain the same over the next years.

In 2017, the local authorities of Rezekne municipality carried out 10 public tenders, and the average length of procurement contracts was one year. The food procured was categorised by major food group with the purpose of promoting the participation of small businesses and rural producers in public tenders. Most of the food annually procured by Rezekne municipality local government/parish administrations makes up less than five tonnes in each food group.

Holding public food procurement tenders in future, the local authorities of Rēzekne municipality have to split any large amount of procured food into smaller ones, thus giving an opportunity for local small enterprises to participate in the tenders



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# VALDĪBAS BUDŽETA IZDEVUMU PLĀNOŠANAS METOŽU IZVĒRTĒJUMS

## *Evaluation of Government Expenditure Planning Methods*

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**Abstract.** *The topicality of the research problem is justified by the fact that each country's sustainable development is affected by the government's policies. One of its main components is a fiscal or budgetary policy. Traditionally, it is defined as the money required for making a revenue and expenditure policy that is needed to ensure the government's functioning, but the economic interpretation says it is the economy regulation system through taxes and government spending.*

*In the finance theory and practice, great attention is paid to the part of expenses, saying that the most efficient budget reforms are possible in the area of government expenses. It is emphasized that the diminishing of state expenses is possible already in the process of budget planning by increasing the reliability of users of budget funds. The state's finance practice offers several models reflecting problems in the sphere of planning budget expenses. The aim of the research – to evaluate methods of planning government budget expenses used in the state's finance practice and identify the figures of their efficiency, their problems and suggesting possible solutions.*

**Keywords:** *budgeting, budget process, budgetary policy, budget reform, government expenses.*

### **Ievads**

#### ***Introduction***

Pētījuma tēmas izvēle un aktualitāte ir pamatojama ar faktu, ka ikvienas valsts ilgtspējīgu attīstību ietekmē valdības īstenotā politika. Viena no galvenajām tās sastāvdaļām ir fiskālā jeb budžeta politika. Tradicionāli tā tiek definēta kā valdības darbības nodrošināšanai nepieciešamo naudas līdzekļu ieņēmumu un izdevumu veidošanas politika. Bet, ekonomiskajā interpretācijā tā ir ekonomikas regulēšanas sistēma ar nodokļu un valdības izdevumu starpniecību. Tiek uzsvērts, ka tā ir cieši saistīta ar valsts lomu sabiedrības ienākumu pārdalē, nosakot valsts budžeta īpatsvaru iekšzemes kopproduktā, definējot mērķus kopējai nodokļu slodzei, budžeta izdevumiem, pieļaujamā deficīta, valdības parāda apjomam un struktūrai.

Pēdējās desmitgades raksturojās ar zīmīgām sociālās un ekonomiskās attīstības svārstībām pasaulē un it īpaši Eiropā, kas neapšaubāmi ir ietekmējis valstu attīstības procesus. Sarežģītie ģeopolitiskie apstākļi, iedzīvotāju migrācija,

ekonomiskās attīstības palēnināšanās Eiropā un citās pasaules valstīs norāda uz to, ka līdzšinējā valdību pieņemtā politika vairs nav efektīva.

Arī Latvijā ir samilzušas vairākas problēmas: sabiedrības noslāņošanās, emigrācija, nesakārtotā izglītības un veselības aprūpes sistēma, ēnu ekonomika, smagnējā valsts pārvalde – tas viss norāda uz to, ka līdzšinējā fiskālā politika nedod gaidīto rezultātu. Lai veidotu efektīvu fiskālo politiku nepieciešams noskaidrot kādi ir būtiskākie to ietekmējošie faktori, vai tiem ir objektīvs vai subjektīvs raksturs, kā arī kādi fiskālie riski var apdraudēt atsevišķu valsts finanšu rādītāju izpildi.

Tā kā valdības budžetu veido divas daļas – ieņēmumi un izdevumi, tad budžeta plānošanā svarīgi ir noteikt primāro, ņemot vērā eventuālās sekas. Ja budžetu sastāda, izejot no ieņēmumiem, tātad, no iespējām, tad parasti, pastāvot mērenai nodokļu sistēmai, tiek ierobežots gan budžeta deficīts, gan arī valsts parāds. Problēmu rada tas, ka, plānojot budžetu, izejot no ieņēmumiem, ilgtermiņā netiek apmierinātas arvien lielākas sabiedrības vajadzības. To var atrisināt, veidojot budžetu par primāro izvirzot izdevumus. Bet, šajā situācijā jārēķinās ar saspringtu nodokļu sistēmu, kā arī budžeta deficīta un valsts parāda palielināšanos. Tātad, var secināt, ka budžeta plānošana bāzējas uz konkrētiem lēmumiem, kurus ietekmē dažādi faktori – ekonomiskie, politiskie, budžetu organizatoriskie.

Pētījuma mērķis – izvērtēt valsts finanšu praksē pastāvošās valdības budžeta izdevumu plānošanas metodes, aktualizējot to potenciālo ietekmi uz fiskālo procesu efektivitāti.

Pētījumā izmantota monogrāfiskā metode, loģiski konstruktīvā metode, analīzes metode, viedokļu un koncepciju salīdzināšanas metode.

### **Budžeta plānošanas aspektu izvērtējums** *Assessment of the aspects of budget planning*

Izvērtējot valdības budžeta veidošanā praktizētās pieejas, var secināt, ka viens no svarīgākajiem valsts finanšu plānošanu ietekmējošiem elementiem tiek akcentēts budžeta veidošanas metode. Var piekrist apgalvojumam, ka tieši tās izvēle ir saistīta ar budžeta veidotāju centieniem, ko viņi gatavi iekļaut budžeta procesā un kādu vēlamu rezultātu tajā iegūt.

Veicot pieejas valdības budžeta veidošanās kontekstā, var apgalvot, ka budžeta izdevumus ietekmē to plānošanas un izlietošanas metodes izvēle.

Ekonomiskajā literatūrā ir akcentētas dažādas valdības budžeta veidošanas metodes: kopsummas, izdevumu pozīciju, izpildes, programmu budžeta formēšana. Autore veikusi to izvērtējumu, norādot uz pozitīvo un trūkumiem. (skat. 1.-3. tabulu)

1. tab. **Kopsummas, izdevumu pozīciju un izpildes budžeta veidošanas metožu  
izvērtējums**

*Table 1 Evaluation of the lump sum, line-item, performance budgeting methods  
(Rubin, 1997; Nice, 2002; Grizzle, 2008; Grossbard, 1990; Mikesell, 2006; Lu, 2007)*

Poziitīvie aspekti	Trūkumi
<p><b>Metode - Kopsummas budžeta veidošana (lump sum budgeting)</b>  <i>Metodes būtība - naudas līdzekļu izlietošana tiek plānota pa vispārīgām pozīcijām (aizsardzība, sociālā nodrošināšana u.c.)</i></p>	
<ul style="list-style-type: none"> <li>▪ visvienkāršākais budžeta plānošanas veids</li> <li>▪ viegla veidošanas, administrēšanas, kontroles un izpratnes forma</li> <li>▪ galvenā uzmanība ir fokusēta uz prioritārajiem jautājumiem</li> <li>▪ pastāv minimāls iespējamo konfliktu risks, jo nenotiek diskusijas par specifiskajām programmām</li> </ul>	<ul style="list-style-type: none"> <li>▪ detalizētas informācijas trūkums par programmām, to darbībām, sniegtajiem pakalpojumiem</li> <li>▪ neparedz izmaksu un potenciālo rezultātu izvērtējumu</li> <li>▪ ignorē budžeta politikas iespējamās alternatīvas</li> </ul>
<p><b>Metode - Izdevumu pozīciju budžeta veidošana (line-item)</b>  <i>Metodes būtība - finanšu plānošana atbilstoši iestāžu izdevumu pozīcijām, pārnesot esošos izdevumus uz nākošo gadu un tiem pieskaitot vienreizējo pasākumu izmaksas un prognozēto inflāciju</i></p>	
<ul style="list-style-type: none"> <li>▪ tiek nodrošināts detalizēts izdevumu veidošanas un atskaitīšanās mehānisms</li> </ul>	<ul style="list-style-type: none"> <li>▪ neaktualizē informācijas par iestāžu darbību nepieciešamību</li> <li>▪ netiek definēti iestāžu darbības mērķi un izvērtēta to īstenošana</li> <li>▪ budžeta veidošana notiek vienam finansiālajam gadam, nenodrošinot finanšu resursu sadalījumu ilgākam laika posmam.</li> <li>▪ netiek veikta programmu darbības salīdzināšana,</li> <li>▪ metodei ir raksturīga plānoto izdevumu bāzes paplašināšana,</li> <li>▪ veicina valsts pārvaldes izdevumu pastāvīgu palielināšanos</li> <li>▪ apgrūtināts finanšu menedžments, jo nav iespējams pilnīgi izvērtēt izdevumus, to lietderīgumu programmu darbības aspektā ilgākā laika posmā.</li> <li>▪ veicina neproduktīvo izdevumu veidošanos</li> <li>▪ nenodrošina budžeta izdevumu un ieņēmumu pieauguma tendences izvērtēšanu</li> </ul>
<p><b>Metode - Izpildes budžeta veidošana (performance budgeting)</b>  <i>Metodes būtība - izdevumu pozīciju budžeta plānošanā, papildus vērtējot informāciju par iestāžu darbību; bāzēta uz iepriekšējās darbības pieredzi</i></p>	
<ul style="list-style-type: none"> <li>▪ tiek izvērtētas darba izmaksas un atbilstošie finanšu resursi</li> </ul>	<ul style="list-style-type: none"> <li>▪ nepieciešams liels informācijas apjoms</li> <li>▪ darbietilpīga metode</li> </ul>

Pozitīvie aspekti	Trūkumi
<ul style="list-style-type: none"> <li>▪ galvenā uzmanību fokusējas uz iestāžu darbību,</li> <li>▪ izdevumu izvērtēšana atbilstoši iegūtajam rezultātam</li> <li>▪ atspoguļo evolūciju budžeta izmantošanā</li> <li>▪ prasa detalizētu informāciju</li> <li>▪ nodrošina dažādu valdības līmeņu vajadzības</li> <li>▪ veicina iestāžu darbības efektivitātes uzlabošanu</li> <li>▪ nodrošina valsts budžeta sistēmas zemāko līmeņu vajadzības</li> </ul>	<ul style="list-style-type: none"> <li>▪ problemētiska iestāžu darbības rezultātu izvērtēšana</li> <li>▪ lielāka politisko konfliktu iespēja</li> <li>▪ trūkst konkrēto izdevumu pozīciju pamatojuma</li> <li>▪ tiek ignorētas alternatīvas labākajai izvēlei</li> <li>▪ sistēma kopumā nav orientēta uz ilgtermiņa problēmu risinājumu</li> </ul>

Jāuzsver, ka *kopsummas budžeta* veidošanas teorētiski praktiskajā izvērtējumā būtiskās diskusijas notiek par atskaites punktu – vai tas ir:

- kopējā izdevumu summa, kas tiek sadalīta pa noteiktajām pozīcijām
- definēti konkrēti izdevumu posteņi, kuri vēlāk tiek summēti.

Savukārt *izdevumu pozīciju budžetu* tradicionāli sauc par „pieaugošu” budžetu. Pamatojoties uz atskaites un kontroles īstenošanas vieglumu, valstu budžetu veidošanas praksē tā ir viena no populārākajām metodēm. Autores uzmanību piesaistīja S. Grosbard (*S. I. Grossbard*) viedoklis, ka šāds budžeta veidošanas veids ir sekas īstermiņa domāšanai un tendencēm atlikt budžeta ieņēmumu un izdevumu daļas pieauguma izvērtēšanu uz vēlāku laika periodu. (Grossbard, 1990)

*Izpildes budžeta veidošana* tiek nosaukta kā vadības pieeja budžeta veidošanai:

- sistēmas darbībā tiek izvirzīti 4 izvērtēšanas elementi: rezultāts, izmaksas, piepūle, darbības apjoms
- veidojās kā pārejas posms no tradicionālās izdevumu pozīciju budžeta formēšanas uz plānveida pieeju programmu un iestāžu darbības efektivitātes kontrolei.

Izvērtējot *programmu budžeta* veidošanu, jāakcentē šādi problēmjaucājumi:

- problemātika metodes interpretācijā- bieži tā tiek kļūdaini attiecināta uz izpildes budžeta veidošanu un budžeta plānošanas un programmēšanas sistēmu
- programmu darbības rezultātu analīzes problemātika kvalitatīvās izvērtēšanas kontekstā.

2. tab. **Programmu budžeta un plānošanas, programmēšanas budžeta veidošanas metožu izvērtējums**

*Table 2 Evaluation of the programme, planning – programming budgeting system methods (Schick, 1990; Rubin, 1997; Nice, 2002; Grizzle, 2008; Grossbard, 1990; Mikesell, 2006)*

Pozitīvie aspekti	Trūkumi
<p><b>Metode- Programmu budžeta sastādīšana</b>  <i>Metodes būtība -paredz budžeta izdevumu sadali pa funkcionālajiem virzieniem, kuri apkopoti darbības programmās</i></p>	
<ul style="list-style-type: none"> <li>▪ sistematizē budžeta izdevumus pa programmām atbilstoši valdības darbības funkcionālajiem virzieniem</li> <li>▪ bāzējas uz darbības rezultātiem</li> <li>▪ nodrošina ekonomisku finanšu resursu pārdali</li> <li>▪ virzīta uz ilgtermiņa plānošanu, darbības izvērtēšanu, tāpat, ilgstošu perspektīvu nodrošina ilgtspējīgumu</li> <li>▪ būtiska uzmanība pievērsta izvirzītajiem mērķiem un gala rezultātiem</li> <li>▪ nodrošina bāzi budžeta izdevumu izvērtēšanai ilgtermiņā</li> <li>▪ izvirza nepieciešamību izvērtēt programmas īstenošanas rezultātus un sekas</li> <li>▪ akcentē plānošanas procedūru nozīmi fiskālo</li> <li>▪ lēmumu veidošanā</li> <li>▪ fokusē uzmanību uz nospraustajiem mērķiem un prioritātēm</li> <li>▪ pastāv iespēja nodrošināt ierēdņu un amatpersonu atbildību sabiedrības priekšā</li> </ul>	<ul style="list-style-type: none"> <li>▪ veicina būtiskas izmaiņas citās sfērās: ekonomiskajā, politiskajā, sociālajā</li> <li>▪ tendēta uz centralizēto koordināciju, jo programmu darbības analīze un lēmumu pieņemšana notiek tikai vadošajos līmeņos</li> <li>▪ programmu mērķu, darbības izvērtēšana, to kvantitatīvā analīze ir paredzēta ilgtermiņā</li> <li>▪ programmu vērtēšana un alternatīvu stratēģiju izvirzīšana ir darbietilpīgs process,</li> <li>▪ izraisa lielus konfliktus budžeta procesā</li> <li>▪ analīzei nepieciešamā informācija ir ļoti apjomīga un arī novēlota</li> <li>▪ fiskālās politikas lēmumu pieņemšanas process ir neelastīgs, sabiedrības iesaistīšanas iespējas tajā ir minimālas</li> <li>▪ galvenā kritika - nav iespējams nodrošināt uz rezultātu vērsta budžeta plānošanu</li> </ul>
<p><b>Metode – Plānošanas, programmēšanas budžeta veidošanas sistēma ( <i>planning – programming – budgeting system: PPBS</i>)</b>  <i>Metodes būtība – valsts finanšu politikas un budžeta procesa konverģence</i></p>	
<ul style="list-style-type: none"> <li>▪ nodrošina valsts politikas plānošanas, programmu izstrādes, budžetu veidošanas integrāciju</li> <li>▪ orientēta uz lēmumu racionālu veidošanu (tiek formulēti mērķi un uzdevumi; identificētas mērķu sasniegšanas alternatīvas; labākās alternatīvas izvēle; pasākumu programmas mērķu sasniegšanai izvirzīšana)</li> </ul>	<p>iekšējie – problemātiskas mērķu un to īstenošanas pasākumu noteikšanas procedūras; tendence uz centralizāciju lēmumu pieņemšanā, mazinot iniciatīvas zemākajos vadības līmeņos</p> <p>ārējie – negatīvi ietekmē komunikācijas iespējas starp administratīvām vienībām, jo katrai veidojas sava konkrēta shēma noteikto mērķu un uzdevumu īstenošanā</p> <p>orientācija uz alternatīvu analīzi ievieš nenoteiktību sistēmas dalībnieku vidū, zūd iepriekšējo budžeta sistēmu stabilitāte</p>

Plānošanas, programmēšanas budžeta sistēmas ieviešanai priekšnosacījumus veidoja Dž. M. Keinsa ekonomiskās teorijas plaša izplatība 20. gs. otrajā pusē. Raksturojot šādu pieeju valsts budžeta veidošanai, A. Vildavskis (A. Wildavsky) apgalvoja, ka budžeta process PPBS kontekstā ir cieši saistīts ar politiku, bet, būtiskākā politikas formulēšanas un īstenošanas problēma – trūkst saprotamības par sasniedzamajiem mērķiem (Wildavsky, 1969, 1992)

Ar mērķi detalizēti pārskatīt visu valdības iestāžu finanses tiek piedāvāts izmantot „0” budžeta veidošanas principus.

3. tab. „0” budžeta veidošanas metodes izvērtējums  
 Table 3 Evaluation of the zero-based budgeting method  
 (Pyhrr, 1973; Nice, 2002; Grizzle, 2008; Mikesell, 2006)

Pozitīvie aspekti	Trūkumi
Metode - „0” budžeta veidošana (zero-based budgeting) Metodes būtība – katrai budžeta programmai un budžeta iestādei izdevumu plānošana notiek no tā saucamā „0” punkta, ņemot vērā rezultātus, kas programmai un iestādei jānodrošina	
<ul style="list-style-type: none"> <li>▪ finanšu līdzekļi tiek piešķirti nevadoties no iepriekšējā gada finansējuma</li> <li>▪ nodrošina objektivitāti dažādu programmu darbības izvērtēšanai atbilstoši sekojošai shēmai:</li> <li>▪ administratīvajā līmenī tiek identificētas izvērtēšanas vienības (programmu vai to organizacionālo aspektu kontekstā)</li> <li>▪ tiek pieņemti lēmumi to darbības analīzei, izvirzot prioritātes un nodrošinot alternatīvu izvērtējumu dotajā līmenī</li> <li>▪ tiek noteikts metodei pakļautais funkcionālās darbības virziens</li> <li>▪ tiek izstrādāti atbilstošie finanšu pieprasījumi</li> <li>▪ veicina budžeta plānošanas pilnveidošanu, integrējot plānošanas, mērķu izvirzīšanas, budžeta lēmumu pieņemšanas pasākumus vienotā veselā</li> <li>▪ nepieciešama pastāvīga programmu darbības efektivitātes izvērtēšana</li> <li>▪ pieeja nosaka visu iestādes izdevumu atkārtotu izvērtēšanu, koncentrējoties uz galvenajiem uzdevumiem un atklājot aktualitāti zaudējušās funkcijas</li> <li>▪ atvieglo prioritāšu identificēšanu un nodrošina konkrētu mērķu izvirzīšanu</li> </ul>	<ul style="list-style-type: none"> <li>▪ prasa detalizētu informācijas analīzi par budžeta finansētajiem pasākumiem</li> <li>▪ prioritāšu noteikšanas sistēma pakļauta subjektīviem vērtējumiem</li> <li>▪ var veidot lielu konkurenci un arī konfliktus</li> <li>▪ salīdzinot ar pārējām budžeta plānošanas metodēm, prasa lielus darba, finanšu un laika resursus</li> </ul>

Pozitīvie aspekti	Trūkumi
<ul style="list-style-type: none"> <li>▪ valsts politikas aktivitāšu nodrošināšana orientējas nevis uz pieaugošu, bet, reālu finansējumu</li> <li>▪ nodrošina objektīvu finanšu resursu pārdali starp struktūrvienībām un programmām</li> <li>▪ viegli identificēt neproduktīvās programmas</li> <li>▪ mazina iespējas manipulēt ar informāciju palielinātu budžeta pieprasījumu veidošanā</li> <li>▪ nodrošina budžeta finansēšanas samazināšanas iespējas</li> </ul>	

Izvērtējot „O” budžeta veidošanas metodi, var apgalvot, ka tā iezīmē fundamentālās izmaiņas budžeta veidošanas praksē. Teorētiskajā un praktiskajā kontekstā šāda pieeja ir atbalstāma. Bet, jāuzsver, ka viens no pirmajiem metodes aizstāvjiem - P. Pirs (*P. Pyhrr*) pieņēma, ka tīrā veidā metode praktiski nav īstenojama, tāpēc ieteica izvērtēt tās potenciālo pielietojamību padziļinātai programmu darbību izpētei. (*Pyhrr*, 1973)

Autore uzskata, ka praktiski nav iespējams detalizēti pārskatīt visu iestāžu aktivitātes katru gadu, tāpēc „0” budžeta veidošanas principus iesaka periodiski izmantot atsevišķu programmu, ministriju, iestāžu darbības izvērtēšanā.

Pastiprinoties ekonomiskajām un līdz ar to arī finansiālajām un politiskajām problēmām valstīs, to budžetu plānošanā aktualizējās nepieciešamība iestrādāt dažādas starptautiskās līgumprasības. Līdz ar to var apgalvot, ka šāda pieeja akcentē jaunu budžeta veidošanas metodi - *līgumbudžeta veidošanu*. Šādas metodes izmantošanas pozitīvie aspekti ir valsts ekonomisko, politisko un finansiālo problēmu risinājumi. Bet, jāuzsver arī būtiskākais trūkums, tas ir, valsts iekšējo nacionālo interešu ignorēšana. Tāpēc praktiskajā kontekstā diskutabls jautājums ir par sadarbības līgumu slēgšanu ar starptautiskajām institūcijām (*SVF, Eiropas Komisija, Eiropas Padome u.c.*).

Var secināt, ka budžeta veidošanas metodes jeb formāts, fokusējoties uz trim galvenajiem aspektiem - izdevumu kontroli, valsts finanšu veidošanas sistēmas uzlabošanas iespējām, izmaksu efektivitāti – ir pakļauts valdības nostājai fiskālās politikas jomā un atbilstoši tai noteiktajam budžeta mērķim. Tas ietekmē budžeta lēmumu veidošanos, to apspriešanas norisi un rezultātā arī valsts naudas līdzekļu sadali un piešķiršanu.

Tomēr teorētiski praktisko diskusiju rezultātā tiek uzsvērts, ka neviens atsevišķi pielietotais budžeta veidošanas formāts nevar būt ideāls. Tāpēc tradicionāli mūsdienās tiek izmantota vairāku formātu kombinācija, ko ietekmēja budžeta praktiķu centieni reformēt budžeta veidošanas procesu.

Līdz ar to kā vienu no galvenajām iezīmēm, kas raksturo valstīs īstenotās budžeta reformas, padarot tās būtiski atšķirīgas no klasiskās pieejas budžeta veidošanas procesam, jāmin uz rezultātu orientēta budžeta izstrādes principu ieviešanu valsts pārvaldē. Tātad, centieni virzīt budžeta procesu no ieguldījumu izvērtēšanas uz iestāžu darbības rezultātu akcentēšanu, joprojām ir aktuāli jaunas pieejas budžeta formēšanā, tas ir, *uz rezultātiem pozicionēta izpildes budžeta veidošana*. Kā galvenais tiek izvirzīts arguments, ka sabiedrība valdības aktivitāšu rezultātos ir ieinteresēta vairāk nekā vienkārši aktivitātēs.

Izdevumu plānošana atbilstoši augstākminētajiem principiem notiek, vadoties ne tikai pēc konkrētu politikas programmu mērķiem, bet arī pēc rezultātu kvantitatīvajiem vai kvalitatīvajiem novērtēšanas rādītājiem. Tas nozīmē, ka kopumā tiek izvērtēts, cik lielā mērā katra iestāde ar savu darbību ir nodrošinājusi izvirzīto valdības darbības mērķu sasniegšanu, un ieguldīto finanšu resursu izlietojuma uzskaitē ir pakārtots process.

Veiktajos fundamentālajos pētījumos par budžeta veidošanas metodēm autores uzmanību piesaistīja asa kritika pastiprinātai valsts budžetu politizācijai. Šajā kontekstā tiek akcentēts, ka valsts budžeta plānošana ir sarežģīts darbs, kas ietekmē ne tikai valsts finanšu vadību, bet arī sociālo un ekonomisko situāciju valstī, tāpēc tā veikšanu nepieciešams uzticēt profesionāļiem un praktiķiem, maksimāli norobežojoties no politiskā subjektivisma. Līdz ar to var piekrist viedoklim, ka speciālisti valsts finanšu jomā, reāli izvērtējot konkrēto situāciju valstī, spēj izdarīt labāku budžeta veidošanas formāta izvēli nekā politiķi, nodrošinot adekvātu fiskālo pasākumu īstenošanu. Tas ir aktuāli, jo budžeta procesam izvirzītā mērķa sasniegšana ir atkarīga arī no budžeta plānošanas metodes izvēles.

Tomēr mūsdienās, ņemot vērā valdības budžeta veidošanas politizācijas aspektu, valsts finanšu efektivitātes nodrošināšanā ieteicams ievērot OECD izstrādātajās budžeta pārvaldības vadlīnijās budžeta plānošanas procesam ieteiktos pamatprincipus:

- fiskālā disciplinētība,
- skaidri definētas budžeta prioritātes,
- sociāli ekonomiskās attīstības plānošana,
- atklātība,
- demokrātiskas diskusijas,
- rezultātu vērtēšana,
- risku uzraudzība,
- reālas prognozes, kompetence.

Var secināt, ka valdības budžeta plānošanu kopumā ietekmē gan politiskie, ekonomiskie, sociālie, gan arī administratīvie un starptautiskie faktori.

## **Secinājumi** **Conclusions**

Valdības īstenotā politika ietekmē valsts ilgtermiņu attīstību, kas ir būtisks sociāli ekonomiskais aspekts. Viena no galvenajām tās sastāvdaļām ir fiskālā jeb budžeta politika. Lai veidotu efektīvu fiskālo politiku, nepieciešams noskaidrot kādi ir to ietekmējošie faktori, vai tiem ir objektīvs vai subjektīvs raksturs, kā arī kādi fiskālie riski var apdraudēt atsevišķu valsts finanšu rādītāju izpildi.

Izvērtējot valdības budžeta veidošanā praktizētās pieejas, var secināt, ka viens no svarīgākajiem valsts finanšu plānošanu ietekmējošiem elementiem tiek akcentēts budžeta veidošanas metode. Tās izvēle ir saistīta ar budžeta veidotāju centieniem, ko viņi gatavi iekļaut budžeta procesā un kādu vēlamu rezultātu tajā iegūt.

Valstu finanšu praksē ir akcentētas dažādas valdības budžeta izdevumu veidošanas metodes: kopsummas, izdevumu pozīciju, izpildes, programmu budžeta formēšana. Veicot to analītisko izpēti, var norādīt uz pozitīvajiem aspektiem, kā arī identificēt trūkumus. Tāpēc tradicionāli mūsdienās tiek izmantota vairāku formātu kombinācija, ko ietekmēja centieni reformēt budžeta veidošanas procesu.

Kā viena no galvenajām iezīmēm, kas raksturo valstīs īstenotās budžeta reformas, ir uz rezultātu orientēta budžeta izstrādes principu ieviešanu valsts pārvaldē.

Valdības budžeta izdevumu veidošanas metodes jeb formāts, fokusējoties uz trim galvenajiem aspektiem - izdevumu kontroli, valsts finanšu veidošanas sistēmas uzlabošanas iespējām, izmaksu efektivitāti – ir pakļauts valdības nostājamai fiskālās politikas jomā un atbilstoši tai noteiktajam budžeta mērķim. Tas ietekmē budžeta lēmumu veidošanu, to apspriešanu norisi un rezultātā arī valsts naudas līdzekļu sadali un piešķiršanu.

Valdības budžeta izdevumu plānošana ir komplicēts darbs, rezultātā tas ietekmē ne tikai valsts finanšu vadības efektivitāti, bet arī sociālo un ekonomisko situāciju valstī. Tāpēc tā veikšanu nepieciešams deleģēt profesionāļiem un praktiķiem, maksimāli norobežojoties no politiskā subjektivitātes.

Valdības budžeta plānošanu kopumā ietekmē gan politiskie, ekonomiskie, sociālie, gan arī administratīvie un starptautiskie faktori. Tomēr mūsdienās, ņemot vērā valdības budžeta veidošanas politizācijas aspektu, valsts finanšu efektivitātes nodrošināšanā ieteicams ievērot OECD izstrādātajās budžeta pārvaldības vadlīnijās budžeta plānošanas procesam ieteiktos pamatprincipus.

## Summary

Government policy affects the sustainable development of the state, which is a significant socioeconomic aspect. One of its main components is a fiscal or budget policy. To prepare an effective fiscal policy, it is necessary to find out which factors affect it, whether they are of objective or subjective nature, and what fiscal risks can threaten the management of particular government finance.

Having assessed the approaches employed by the government in the preparation of the budget, it can be concluded that one of the most important elements affecting government finance planning is the budget preparation method. Its choice is related to the efforts of budget creators, what they are ready to include in the budget process and what result they wish to achieve.

In financial practice in different states, different government methods for budget expense preparation are accentuated: formation of the aggregate amount, of expense items, of management, and of the programme budget. Having performed their analytical research, we can indicate positive aspects and identify drawbacks. This is why nowadays a combination of several formats is traditionally used, affected by the efforts to reform the budget preparation process.

One of the main features characteristic of the budget reforms implemented in different states is the implementation of the result-oriented budget preparation principles in state administration.

Government budget expense preparation methods or format, focusing on three main aspects – expense control, opportunities for improvement of the government finance preparation system, expense efficiency – is subjected to the government position in the field of fiscal policy and the budget aim set in compliance with it. It affects the preparation of budget decisions, the discussion process, and as a result, the distribution and allocation of government finances.

Government budget expense planning is complex work, which ultimately affects not only the efficiency of government finance management but also the socioeconomic situation in the state. This is why its preparation must be delegated to professionals and practitioners, dissociating from political subjectivism as much as possible.

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