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V.O. Onyshchenko, Doctor of Economics, Professor. **T.A. Shevchuk**, Master student. **Theoretical foundations of formation and assessment of banking institutions innovation potential.** The global financial crisis and increased competition in the banking market forced banks to seek additional ways to gain a competitive advantage, in particular through the introduction of innovative technologies of customer service, new products and services. At the same time, given the significant level of financial cost and risk that accompany innovation, number of banks capable of full implementation of innovative development programs, is very limited. This causes the relevance of studying the ability of banks to innovate, assessing the adequacy of their available resources and the potential of their efficient use. In this context, it is necessary to formalize the innovation potential of the bank.

Favorable conditions for the occurrence of banking innovations are primarily changes in the external environment for banks. In this respect, it should be noted, that the global banking business is in a perpetual state of development. This was facilitated by the deregulation of banking and financial market liberalization, are associated with the fundamental changes in the world monetary system. With the development of information technology banking got new opportunities for development.

Two main factors that determine the situation in the financial sector are globalization and information technology: the contradictory impact on the banking business: on the one hand, open up new possibilities, allow actively borrow new ideas, wherever they appeared, and on the other – comprehensively enhance competition. Pressure of global competition causes higher rates of innovation than on domestic or private markets.

Maintaining the balance between these processes, the bank's purpose is its survival in the market. Depending on the results of the analysis of the medium, as well as the Bank's mission, it produces a specific product strategy, sticking it in the normal course of business. At the present stage in the development of special emphasis is placed on such a strategy, and a number of developing of innovative banking products. This is regarded as an indispensable way to stabilize operation, preserving and strengthening the competitive position of the bank and leads to economic growth. The improved version of the innovative capacity of the institution structure is presented. Using the technique Krivich Y.M., the goal was set to consider the following groups of indicators of financial innovation potential of the bank: figures based on the equity of the bank; indicators based on the assessment made by the bank's capital. The following problems of the innovative capacity formation are identified: low capitalization, low level of information technology, lack of technology for project financing, poor quality equipment used; classified information, imperfect legislation, insufficient number of credit bureaus, incomplete utilization of communication tools, lack of space for self-actualization, weak bank marketing.

It is necessary to develop effective ways to improve the innovative capacity of the bank, namely: 1) the search and implementation of innovative uses of building; 2) identifying hidden opportunities and ways to implement them in the projects of innovation of the bank; 3) coordination of innovative capacity and innovation needs of the bank; 4) compliance with the innovative capacity of the customers' needs.

The proposed directions can not completely solve the problems of the innovation potential of Ukrainian banks, but they are driving in the area of improving the innovative capacity of the bank.

Keywords: bank's potential, innovative potential, innovation, financial institution, the basics of assessment, evaluation of innovative potential, banking innovation.

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THE RATE OF POPULATION'S FINANCIAL LITERACY INCREASING: WORLD EXPERIENCE

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Introduction. Financial education and financial literacy are among the most important factors of economic growth of the country and raising of population incomes. Society reaches the largest economic success when the citizens of a country have developed skills in making responsible and conscious decisions in financial sector. Financial literacy is a key instrument for poverty reduction, one of the ways to reduce the economic risks of the enterprises and individual consumers.

The urgency of the issues of the low level of financial literacy is particularly increased in recent decades, then the problems of the exhausting personal debt burden became sharp considerable, lack of effective savings, inability of citizens to take effective measures to protect of their own welfare and so on. Exactly in this period was marked by an increasing focus of governments of developed countries to the problems of increasing financial literacy.

The latest researches and publications review. Financial literacy has become a subject of active researches of many foreign scientists: A. Lusardi, T. Lucia, O. Mitchell [1, 2], that pay attention to the formation of financial literacy in developed countries; M. Kuznetsova, M. Ovchinnikova, L. Stakhovich, A. Stolyarova, G. Shahnazaryan [3-5], that explore the relationship between the level of financial literacy with the degree of investment activity, define the necessity of skills planning development and consider the ways of financial literacy improving. The domestic scientists O. Blyskavka, R. Bond, A. Zelentsova, O. Kutsenko, N. Lozitskaya, A. Klimchuk, D. Radzyshevskiy examine the condition of financial literacy in Ukraine and determine the need of its increasing [7 – 10]. Despite a wide range of scientists that deal with financial literacy, the problems continue to pile up and become more important. In terms of economics an insufficient level of knowledge in the financial services industry testifies to the low level of involvement of the general public to use these services, and therefore – limits the level and quality of savings and investments which determine potential of economic growth.

The problem statement. The aim of the paper is to research a foreign experience of providing financial literacy of population and delineation of possible ways of improving it in Ukraine, taking into account international developments in this field.

Basic materials and results. Increasing of financial literacy is becoming a priority task not only for countries with economy that have undergone the process of transformation, but also for developed countries. Number of countries that adopt and implement the financial literacy programs are increasing every year. In particular, in Europe are operating more than 180 programs to improve financial literacy of population [11]. Successful national programs have been developed and implemented in the U.S., UK, Germany and Austria, among countries with the market, which has been recently formed - in Bulgaria, Slovenia and Poland. Majority of countries carry out voluntary programs that offer financial education through various formal and informal education programs. Approximately half of the countries - members of the Organization for Economic Cooperation and Development (OECD) conducted a national policy of financial education and virtually all OECD countries offer such education in the form of public-private partnerships.

The research of schemes and programs of improving the level of financial literacy in 28 EU [12] countries showed that:

- these countries are significantly different from each other by the number of implemented programs aimed at improving financial literacy. The biggest amount of variant of programs according the increase of financial literacy are in UK, Germany and Austria. In the Netherlands and France there are a lot of various projects too. In Central Europe among the countries of EU the most active

is Poland. In Bulgaria, Latvia, Luxembourg, Slovenia and Romania's international programs of EU are implemented;

- main target groups are children and young people;
- out of each three schemes (programs) two offer their services through intermediaries;
- each second program uses a wide range of tools and channels, among which the most important is the internet;
- each sixth program is carried out by private financial services provider that aims to cover both consumer financial services and those who do not use them; the content of the scheme is essentially objective;
- programs of education of the adult population – the consumers in the field of financial services can be effective in their implementation in moments available for training, such as when a citizen takes a mortgage loan for the first time or starting to plan retirement.

Despite a general agreement concerning the fact that financial education programs are needed – but not all of them are effective. In a series of empirical researches scientists found a positive correlation between financial education and financial literacy [13]. On the other hand, in some researches were reported about mixed records or whether a lack of correlation between financial education and financial literacy, or, finally, signs of altered financial behavior [14].

Financial Education Programs conducted among pupils in Poland show that the level of financial knowledge increases by 20-40% depending on the type of program and the age of the target group. Program «Financial Literacy School», established in Austria [17], demonstrates that children and young people aged between 10 to 18 years very well respond to financial education programs and easy to grasp the basic knowledge about financial concepts. The results of the OECD study of the effectiveness of financial education in the U.S. [18] suggest that among persons undergoing these programs, there is an increasing savings rate and lowering of non-performing loans.

Implementation experience in financial education programs for adults show:

- adults are hard to teach if they do not have a specific need for education in the financial services industry (if there is no "the moment available for study");
- despite the fact that the character of financial psychology often prevents to choose optimal behavior, financial education can prevent a person who learns about these hazards and suggest workarounds;
- enhance of consumer protection and the development of financial education is better than restriction of consumer choice;
- financial education can not replace with itself the regulation of consumer protection.
- In the UK, a national program of financial literacy is realized in all priority areas:
- new parents (New parents: Money Box);
- schools (Schools: Learning Money Matters);
- young adults (Young Adults: Helping Young Adults Make Sense of Money);
- workplace (Workplace: Make the Most of Your Money);
- consumer communications;
- online tools;
- money advice.

Poll of 5300 Brits [3], conducted in 2009, found that many people are not able to plan beforehand their finances, do not understand the nature of the potential financial risks and in case of economic downturn with high probability finds himself in a difficult financial situation.

The U.S. government in 2003 established the Commission for Financial Literacy and Education and specialized online resources. In July 2010, the United States Congress adopted The Law on Protection Consumer Rights and created Consumer Financial Protection Bureau (CFPB). Among other tasks the Bureau should promote financial education.

Organisation for Economic Co-operation and Development (OECD) has launched an inter-governmental project in 2003 in order to develop common principles and standards of financial education and financial literacy.

In 2008, the OECD has created an international portal over financial literacy, which is a coordinating mechanism for implementing educational, information and research programs.

The main goals of the portal:

- to become a global information service of financial education for collecting a comprehensive information: data, resources, researches and news concerning financial education and information programs worldwide;
- to promote being informed and awareness concerning financial education worldwide and provide dissemination of research, good practices and instructions on financial education;
- to provide access and exchange of information, knowledge, experience and skills in the field of financial education;
- to support the creation of the International network of financial education through the creation of the community network and sharing practices between network members;
- to stimulate the development of good practices and principles of financial literacy increasing under the auspices of the OECD.

International Network of Financial Education (INFE) was also established by OECD in 2008 with the aim of:

- improving and expansion of awareness of the importance of financial education around the world;
- promoting the exchange of information and views on programs, initiatives, problems, researches and obtained results related to financial education;
- promoting the exchange, design and development of good practices and effective tools;
- discussion of analytical work of members of the International Network, the OECD and other organizations working in the field of financial education;
- discussions of international principles and practices developed under the auspices of the OECD.

As part of the official meetings twice a year, constant interaction between members of the International Network and the creation of special subgroups of INFE experts significantly expanded its partnership and thematic framework for financial literacy, including:

- created program of financial education in schools;
- developed techniques for evaluating the effectiveness of financial education programs;
- currently there are more than 150 institutions from 75 countries who are members of the INFE OECD.

Thus, wide international experience in improving financial literacy has been gained. To the program of financial education are involved government agencies, non-profit community organizations, private companies. Depending on the functional characteristics of these organizations and goals set before them business covers various aspects of educational programs, support and protection of consumers of financial services.

In international practice there are programs targeted at different categories of population and target groups [4]. Most of them oriented towards the system of school and higher education. Others - the economically active population, beginner entrepreneurs and small businesses representatives. Another direction of activity is the increasing of financial literacy in categories of citizens with low income or without higher education. The focus for this target group is made on the daily management of personal budgets and financial planning (for example, Stay positive in the Netherlands and MoneyHelp in the UK).

Raising of financial literacy is carried out by both commercial and non-profit organizations: professional and civic associations or associations of consumer protection. Some projects developed for specific social groups, in particular financial management program for young housewives (for example, Financial literacy: Women understanding money).

Practice of delivering information to audiences by ways and channels of information may differ.

In some programs the main channel of financial literacy increasing is the Internet (for example, the Dolceta Program, acting on the EU territory).

In cooperation with the Bureau "Help with advice" has developed a program for 16-18 years old students "Money Matter". It includes basic financial issues such as opening a bank account, credit and debit cards and so on. This program uses Internet technologies with developed interactive scenarios of role plays which describes different aspects of personal finance management, and is designed for online participation in small groups. Participants receive special task – "dilemmas" on their computers. Working in small groups, they study dilemmas using the educational information found on the Talkingshop website. Students communicate online with personal finance advisor from the Bureau «Help with advice», which helps students orientate in complex financial situations. The same technology can be used for schooling, Talkingshop website offers great options for the use of games in education process.

In other programs the Internet is used in combination with other learning tools (FSA's Consumer Communications in the UK). In programs of national scope for wider coverage of the audience are used the features of all channels of knowledge transfer, including print, television, radio, seminars. For example, programs increasing the financial literacy in Poland.

As projects can be regarded such successful examples of programs of financial literacy improving: «Responsibility for the Future» (USA), «Finance and Pedagogics» (France), «Financial driving license» (Austria), «Pension Saving» (Sweden), «Be able to plan your future» (Poland), «Financial Literacy at work: money work force» (Great Britain), «"Money talk!» (Hungary), «Financial Literacy. Money understanding» (Australia) and others.

A number of leading international banks and financial companies are actively involved in various programs of financial literacy increasing, have educational and social goals [3].

Programs, as a rule, are usually created considering the cultural specificity of a country or adapted to this specifics. Further placed a brief description of some of the good practices implemented by large international companies.

Citigroup Inc. – the biggest international corporation, which is one of the world leaders in financial services, has established a special fund City [8], which supports financial work programs in 65 countries and provides grants to nonprofit organizations, as well as implements financial literacy programs.

Examples of implemented programs:

- in Malaysia, Singapore, Taiwan, comicbooks for young and middle-school ages had been published, where the main characters learn from their own experience the principles of money management;
- special education programs about mortgages in Chile and other Latin American countries;
- education programs in the field of financial literacy, lesson plans for teachers and professors.

HSBS Bank created a program Global Education Program, aimed at financial literacy of young people between 16 and 25 years, and the development of financial competence of women entrepreneurs.

The Bank of America - Merrill Lynch [5] supports programs that teach young people financial literacy. The main areas of study are: personal finances, investment opportunities, long-term investment, entrepreneurship. Students enrolled in these programs, organize their small business, create a student credit unions are exploring ways to manage personal finances, investment opportunities, long-term planning, the basics of business, etc. Merrill Lynch employees conduct special training programs or act as mentors students. The company invests in these projects different types of resources: financial support, expertise, employee engagement as volunteers, provides grants to non-profit organizations and create partnerships with them.

Investing Pays Off (IPO) helps young people navigate the various funds.

Wide experience in development of the financial literacy worldwide in Visa Inc, which is set to promote the acquisition of the financial literacy skills of 25 million people till 2015. To do this, Visa has also created a special website about financial literacy, including materials about budgeting, saving, banking services, credit cards using, debt management, security in using of cards, etc. Also, website presents a variety of financial games. Research of the measures stipulated by the program of financial literacy Visa in some countries allowed to summarize the main aspects of these programs (Table 1).

Table. Programs of Visa Financial Literacy in some countries

Prepared on the material [10]

Program	Tools for implementation	Attracted audiences	The aim
Program of financial literacy increasing in Africa (2005-2012)	Establishment of demonstration activities (performances and clickable show), where the audience receives basic financial skills such as budget planning, saving skills, bank account opening, using of ATMs and also information on security issues of payment systems	Local companies, municipalities, universities, colleges, secondary schools students	Make clear and affordable banking services for the residents of the African region
Visa Inc in Kenya universities	The introduction of the concept of financial literacy through cooperation with educational institutions and the integration of financial literacy into the curriculum of schools and colleges	Educators and students	Pay attention to the problem of low financial literacy among young people; teach to understand the various aspects of budgeting, savings and credit management
National endowment for financial education	Set up an Independent Trust Fund and programs: «Your Spending, Your Savings, Your Future: A Beginner's Guide to Financial Readiness», resources represent a large collection of educational materials that are intended to assist in the organization of financial literacy programs	Different target groups	Promote a formation of positive attitudes and responsible and effective behavior towards money at a young age
Program of Association of Australian banks «Financial literacy during all the life».	Programs, united by a common motto: «Financial literacy during all the life»: program Student Banking, training program for old australians about new banking technologies. With the business structures support, a large number of sites and portals for youth include tips, success stories in managing personal finances, using modern Internet technology were created.	Different segments of Australian community	Liquidation of financial illiteracy among Australian residents

Conclusions. The task of improving financial literacy in Ukraine - is the sphere of responsibility of the state, business and family. In order to achieve an adequate level of financial literacy, people have first of all to overcome the passive attitude to create their own welfare. Also necessary to step up the implementation of measures to improve the financial literacy at the national level. Indeed, in Ukraine, unfortunately such measures are only declared in the Strategy of public policy in the sphere of reforming consumer rights protection in financial services markets and increasing of financial literacy level of the population of Ukraine, which a second year is at the design stage. Although the strategy is being actively discussed by regulators and members of the financial services, proposed practical approaches for improving the financial literacy are limited by development of information brochures about financial literacy, in which would be explained the main issues, that arise at consumers up to financial institutions supervised by National Commission for the State Regulation of Financial Services Markets, and posting information on websites [19].

At the same time, global experience in implementing financial literacy programs confirms the fact that proper level of financial literacy will promote not only improving the living standards of citizens, but also a positive influence on the state of financial services market and promote investment processes in the national economy. Identifying priority areas, instruments and appropriate informational ensuring of practical implementation measures to improve financial literacy based on positive foreign providing will give an opportunity to the state, higher educational institutions and research institutions as soon as possible to begin solving the problems of low financial literacy of ordinary Ukrainians.

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L.O. Ptaschenko, Doctor of Economics, Associate Professor. **A.M. Shabardina**, Master student. Poltava National Technical Yuri Kondratyuk University. **The growth of the population's financial literacy: international experience.** The international experience of providing financial literacy programs has been studied; schemes and financial literacy programs in 28 countries of the EU, the U.S., the Netherlands, the African countries, Kenya and Australia are analyzed. It is emphasized that proper level of the population's financial literacy will promote not only improving the living standards of citizens, but will also produce a positive effect on the state of financial services market and promote investment processes in the national economy.

Keywords: financial literacy, financial education, financial services market, improvement of financial literacy programs.

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ANALYSIS OF MODERN ENVIRONMENTAL TAXATION IN UKRAINE AND IN THE EU

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The problem statement. A new stage in the development of environmental economics is directly related to the restructuring of economic management. At this stage, an effective economic mechanism of management of economic activities are financial and economic activities and taxes, which would make unprofitable for associations, enterprises and organizations wasteful use of natural resources and damaging the environment.

The latest research and publications review. Theoretical, methodological and applied aspects of environmental taxation addressed in scientific writings of many Ukrainian scientists, in particular A.A. Veklich, T.P. Galushkina, I.M. Sinyakevich, E.V. Hlobystova. However, a number of important issues of this problem has not yet found a solution. Given the adoption of the Tax Code, there is a need depth analysis of environmental taxation.

The purpose of this study is analysis of the current situation in environmental taxation in the EU and Ukraine, causes lack of effective use of environmental taxes in Ukraine.

Basic materials and results. Currently, environmental taxes exist in one form or another in all economically developed countries, particularly in the European Union .

The EU is one of the world leaders in the field of international environmental cooperation. According to Eurostat , in 2010, 27 EU member states have received about 292 billion euros from environmental taxes , which corresponds to 2.4% of gross domestic product (GDP) and 6.2% of taxes and social contributions [1].

EU member states with the highest share of environmental taxes in GDP - Denmark (5.7%), the Netherlands (3.9%) , Bulgaria and Malta (both 3.5%), and the lowest - Spain (1.6%), Lithuania (1.7%), Romania (1.8%) and Latvia (1.9%).

Environmental taxes applied in the EU can be divided into four main categories: energy, transport , taxes on pollution and resources. Energy taxes amount to 72 % of total environmental tax revenues and about 5 % of total taxes and social contributions to the EU average. Transportation tax is slightly less - 23% of total environmental tax revenues and 1.5% of the total amount of taxes and social contributions. The remaining two categories - taxes on pollution and resource - are characterized by significantly lower amount of income (together they account for only 5 % of total environmental taxes) [2,5].

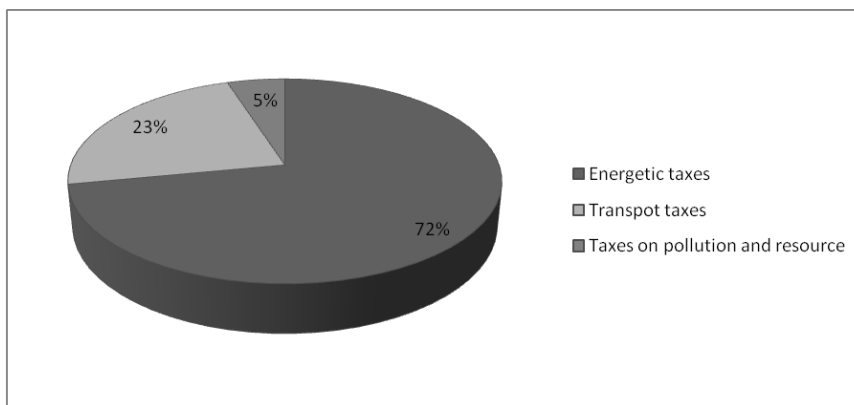


Figure.1 Types of environmental taxes in the EU

[compiled by the author based on the 2.5]

Energy taxes take a major share of environmental taxes in all member states, except Malta. The highest share of energy taxes were observed in Lithuania, Luxembourg and the Czech Republic (about 93 % of total environmental taxes) and Slovakia (90%). The highest share of transport taxes were found in Cyprus, Malta and Ireland - about half of all revenues from environmental taxes. The largest share of taxes on pollution and resources observed in Denmark (31%) , the Netherlands (17 %) and Estonia (14%).

According to a study that was recently conducted by Eurostat, the statistical organization of the European Union (EU) in the field of environmental taxation in the last few years in Belgium there are lowest environmental taxes in Europe. So, in 2010, environmental taxes collected in Belgium reached an amount that is less than 5 % of the total taxes and social contributions of the country, compared with 10 % in the Netherlands. According to Eurostat, in 2010, environmental taxes brought the Belgian government about 7.3 billion euros, of which approximately 4.7 billion euros was obtained from energy taxes (64% of the total). About 2.08 billion euros was obtained from transport taxes (28% of the total), and 0.53 billion euros were collected from taxes on emissions and resources, including taxes on mining, pollution of water and air space , noise and waste (7% of the total) [2].

The European Union has introduced a new tax on car emissions of greenhouse gases. It is planned that its amount can reach enormous size and are within tens of thousands of euros. Date of introduction of this tax EU government negotiates with representatives of the European automobile industry. The first cars that must pay this new tax will be limousines and executive cars. It is planned that in the near future in Europe wishing to purchase " Rolls-Royce " will be forced to pay an additional 12.5 thousand euros , with the purchase of " Maserati - 18 thousand euros, for" Lamborghini" -17 thousand euros. However, the largest amount of tax will be levied on new car " Bugatti Veyron , " - about 40 thousand euros. The amount of this tax is calculated from the comfort of the working volume of the engine and the amount of greenhouse gases such as CO₂. These environmental regulations entered in force in the EU in 2012, and by 2015 all cars in the European Union will have to meet the new requirements on emission of greenhouse gases [11].

EU government resorted to the introduction of such a tax to automobile industry soon moved to a new, more environmentally friendly and fuel-efficient engines. Experts estimate that revenues will increase the EU average of 10 billion euros annually. Thus the sum of the tax on the average economy class cars will not be as large size, as in expensive cars. [3]

Another transport tax, however, already tried to introduce air transport in the EU. The Tax Law on carbon emissions became operational in EU states as well as Iceland, Norway and Liechtenstein in January 2012. Airlines are required to pay 15 percent of its greenhouse gas emissions. The first payment period had to come in April 2013, by that time it was supposed to calculate the data for the year 2012. However, against EU environmental tax were more than 20 states. At the moment, EU government to "freeze" this kind of tax for its further review and revision [4].

In recent years, the average level of revenue from environmental taxes in the EU increased. In the individual EU member states since 2001 saw an increase in the share of environmental taxes in total in-

come (Netherlands, Poland). The dynamics of green tax incomes in the EU for the period 2001 - 2011 is presented in table 1 [5,6].

Falling income from environmental taxes in relation to GDP in some countries explained by the fact that taxes are levied per unit of physical consumption and are usually set in nominal terms, that is, they are not adjusted for inflation index.

Share of the proceeds of certain types of environmental taxes in the countries is significantly different.. The predominance of energy taxes is typical for most states in the EU, but in some countries the proportion of transport tax is a fairly large (Cyprus, Malta, Ireland).

In Ukraine today operates an environmental tax that with the adoption of the Tax Code replaced fee environmental pollution.

Table 1. The dynamics of environmental taxes in some EU countries, % of GDP [compiled by the author based on the 5.6]

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Belgium	2,3	2,2	2,3	2,4	2,3	2,2	2,1	2,0	2,0	2,1	2,1
Czech Republic	2,6	2,5	2,6	2,6	2,7	2,6	2,5	2,4	2,4	2,4	2,3
Denmark	5,2	5,4	5,2	5,6	6,0	6,2	5,9	4,2	4,0	4,0	4,1
Germany	2,5	2,5	2,7	2,5	2,5	2,4	2,2	2,2	2,3	2,2	2,3
Spain	2,1	2,1	2,1	2,0	1,9	1,9	1,8	1,7	1,7	1,7	1,6
France	2,3	2,5	2,5	2,4	2,3	2,3	2,1	1,8	1,8	1,8	1,8
Italy	3,0	2,8	2,9	2,8	2,7	2,7	2,6	2,5	2,7	2,6	2,8
Netherlands	3,8	3,7	3,7	3,9	3,9	4,1	3,9	3,9	4,0	4,0	3,9
Poland	2,1	2,4	2,5	2,6	2,7	2,8	2,7	2,6	2,6	2,6	2,6
Finland	2,9	3,0	3,2	3,2	3,1	3,0	2,8	2,7	2,6	2,8	3,1
United Kingdom	2,8	2,7	2,7	2,6	2,5	2,4	2,5	2,4	2,6	2,6	2,6
Average value of EU member states	2,8	2,7	2,8	2,9	2,8	2,7	2,7	-	-	-	-

According to the Tax Code of Ukraine, it relates to national taxes and levies with the board for the use of natural resources, land fee, the fee for special use of water and collects for special use of forest resources to the European classification relate to environmental taxes. There are some differences between foreign and Ukrainian classification of environmental taxation. In particular, in Ukraine there are no such ecological taxes and payments [7]:

- tax on products that contain environmentally harmful substances; this tax exists in countries such as Denmark, Norway, Sweden, Czech Republic, France, Germany, Latvia and Poland;
- tax on packaging (glass, metal, plastic) in Denmark, Norway, Sweden and Finland;
- taxes and fees on air travel available in the UK and France;
- collection for environmental protection (Germany, United Kingdom and Sweden).

On September 1, 2013 in Ukraine began to operate two "recycling laws» № 421-VII «About disposing of decommissioned transport vehicles" and the number 422-VII «On Amendments to the Tax Code concerning the payment of environmental tax for the disposal of decommissioned transport vehicles» This tax is subject to import, manufacture and purchase of vehicles and bodies to them, which later disposal. Law establishes the following basic tax rate on deposit decommissioned vehicles: passenger cars and bodies to them - 5500 UAH., And 11 000 UAH. – for buses, trucks, commercial vehicles or special vehicles. Also, the law provides the rate coefficient to be applied to the base rates of tax depending on the volume and the total weight of the vehicle [8].

Problematic aspect of the domestic tax system is a source of paying environmental taxes - it refers to the costs of the company, does not solve the problem of the state to discourage harmful activities of enterprises, since the actual tax paid is laid in the price of products and is transferred to the end user. Also, given the international experience, it would be advisable to provide for the introduc-

tion of incentives to pay the environmental tax for businesses whose activities are aimed at the preservation and restoration of the environment [7].

Analysts Ministry of income and fixed charges Ukraine height paying environmental taxes for the past year. Thus, in 2012 the budget received 20% more environmental payments than in 2011. For emissions, discharges of pollutants and waste taxpayers listed in the past year, more than 2.6 billion USD. According to the Ministry for the first January – February 2013 budget paid 395.3 mln environmental tax, which is one third higher than revenues for the same period last year. [9]

Tables 2 and 3 show the growth rate of environmental taxes in Ukraine and their share of revenues in GDP in 2008 – 2012.

Table 2. Income growth rates of environmental taxes in Ukraine in 2008 - 2012, in % to the previous year [10]

Indices	2008	2009	2010	2011	2012
Environmental tax / fee for environmental pollution	108,3	94,9	172,3	118,1	123,7

In the reporting period, the highest growth rate of environmental Income tax in Ukraine was in 2010 and was-172, 3% compared with the previous year. Also, you will notice that the GDP share of the environmental tax is insignificant, but there is a trend of perpetual growth [10].

Table 3. Share of environmental taxes proceeds in GDP in Ukraine in 2008 - 2012 years.% [10]

Indices	2008	2009	2010	2011	2012
Environmental tax / fee for environmental pollution	0,12	0,12	0,18	0,18	0,20

In recent years there has been an increase in the payment of environmental payments business entities in Ukraine. Percentage actually paid to the planned environmental payments annually much more. Dynamics for environmental payments in Ukraine in 2008 – 2012 years is illustrated in Table. 4.

Table 4. Dynamics of environmental payments in Ukraine during 2008 - 2012, mln [7]

Years	Planned	Done
2008	990,66	1 182
2009	261,08	406,58
2010	377,77	970,47
2011	906,06	1 085,4
01. – 09. 2012	1180,6	1 055,3

In 2008 - 2012 years. GDP share of environmental tax (tax for pollution of the environment) in Ukraine ranged from 0.12% in 2008 and 2009 to 0.20 % in 2012 In 2011 , despite a significant increase in the tax rates , tax revenues increased by only 18.1 % and in 2012 - 23.7% (also in terms of rate increases) . However, in 2013 – 2014, we should expect a further increase fiscal efficiency environmental tax by increasing its rates (from 50% to 75 and 100% , respectively, relative to their level stipulated in Articles 243 - 246 of the Tax Code of Ukraine). [7]

Existing environmental tax system of Ukraine no longer meets today's realities. The share of environmental taxes in the revenue side of the budget, as well as part of the expenditure on environmental measures should significantly increase. It is possible to be changed and the structure of environmental taxes in the country. This will radically change the situation the negative impact of the national economy on the environment, and create an incentive to reduce the environmental capacity both at the state level

and at the level of regional management systems, as well as to increase the proportion of environmentally oriented investment funds in the overall system, through the mobilized financial system.

Significant impact on the existing environmental taxation system has been made together with the introduction of additional environmental taxes, such as taxes on production and taxation package containing harmful substances. It will also be useful to develop a system of tax incentives in Ukraine for those businesses that use energy-saving technologies.

Conclusions. European experience shows that active use of environmental taxes helps to reduce the overall level of pollution, production growth of new, environmentally friendly products, thus strengthening competitiveness and economic position of producers.

Development of environmental taxation in Ukraine at this stage is characterized by certain problems, the consequences of which in the future we plan to eliminate. Therefore, it is proposed to use the European experience of environmental taxation: to introduce additional types of environmental taxes, borrowed abroad, in particular to impose a tax on production and taxation package containing environmentally harmful substances, to develop a system of tax incentives for businesses that use energy-saving technologies.

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UDC 336.226

O.A. Chyzykova, PhD, Associate Professor of the Development and Productive Forces Location Department, Donetsk National University; **A.E. Yevtyushyna**, the 4th year student, Specialty "Marketing", Donetsk National University. **Analysis of the present day environmental taxation in Ukraine and in the EU.** This article analyzes the existing environmental taxation in the EU and in Ukraine. It reflects the essence of the environmental taxes necessity, their types in the EU, as well as the dynamics of payments. The authors have also analyzed the dynamics of environmental taxes payments in Ukraine. The reasons for the lack of development of ecological environmental taxation in the country are studied recommendations are offered for its improvement.

Keywords: tax, environmental taxation, environment, transport tax, energetic tax.

UDC 334.72: 658.11

CLASSIFICATION OF PUBLIC-PRIVATE PARTNERSHIPS WITH LEVELS OF FINANCIAL CAPACITY

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The existing global classification of Public-Private Partnerships (PPPs) is analyzed, their comparative characteristics are formed. Methods for establishing a system of classification groups are studied and their advantages and disadvantages are highlighted. There is scientific justification for organizing and systematizing the considering classifications on which is built hierarchically-faceted classification of PPPs. A new classification – by level of financial capacity is introduced, that allows analyzing opportunities for Public-Private Partnerships in Ukraine.

Introduction. For Ukraine, which seeks to integrate into the pan- space, there is particular interest to analysis of the main principles, objectives and mechanisms for the implementation of European regional policy, the possibilities of their implementation in national law and the appropriate infrastructure. Public-Private Partnerships (PPPs) in bilateral and multilateral relations between different actors able to influence on the wider areas of cooperation, overcoming contradictions, increase efficiency and improve living standards in the country. This led to increased attention of scientists to explore the potential of PPPs. For Ukraine PPPs in modern form are relatively new phenomenon , resulting in a lack of a systematic vision of the nature, advantages and disadvantages, which complicates the implementation capacity of such relationships.

Studying the urgent economic, social and environmental problems of the functioning economy of country is determined by the possibility and potential financial support of formation and implementation of Public-Private Partnerships. Obviously, the potential opportunities to development of PPPs are largely dependent on the availability of financial resources, limited which is one of the key barriers to the development of PPPs in Ukraine. Under these conditions, the search and implementation of the financial potential of PPPs is one of the key aspects of development.

The latest research and publications review. Problems of attracting private capital to invest in industries that have traditionally been funded from the state budget, are the focus of most researchers developed countries. Using the Public-Private Partnerships as a mechanism for financing of priority sectors in various countries was covered in the works of foreign and Ukrainian economists, as well as numerous pieces of legislation, legal documents, software and analytical instruments OECD, the European Commission and others. Theory and practice of PPPs` implementing investigated such scientists as W. Varnavskyy [1], A. Golovinov [2], H. Dutko [3], I. Zapatrina [4], L. Fedulova [5], P. Shylepnytskyy [6]. Special attention is paid to the problems of study of the theoretical aspects of the PPPs, the analysis of international experience implementing PPPs` models, especially their implementation in specific areas of management.

Unsolved problems. Despite numerous studies in the theory of public- private partnerships, the issue of creation a common classification of PPPs virtually no attention paid that`s why practical aspects of the formation and implementation of PPPs depend on the correct choice of the appropriate form in classification according to certain criteria and requirements. The lack of a coherent classification of PPPs significant impact on the understanding of its content and objectives and necessitates research and organize existing forms, models and types for the purpose of organizing, including classification features that characterize the specific partnership activities. All this led to the need for research and construction of the classification of Public-Private Partnerships. Therefore, to creating the most comprehensive and logically structured general classification there is necessity for a comprehensive study of all existing classifications of partnerships.

The aim of the article is to construct the classification of Public-Private Partnerships with key features of PPP and the introduction of a new classification features - by level of financial potential.

Basic materials and results. Partnership of the state (municipality) and the business is a multi-complex process consisting of many steps and involves the systematic identification of necessary directions of the partnership, requirements for its quality and scope, payment mechanisms, procedures for identifying and evaluating risks and their distribution between the state and private partners , supervision and control by the state over the use of a private investor of state and municipal proper-

ty, which is transferred to the temporary usage . This requires an understanding of shapes, forms and methods of PPP , which is a prerequisite for the organization and planning of the PPPs` project.

To form the classification of Public-Private Partnerships is difficult, because the set of classifications is almost endless, and the existing classification is fragmented, uninformative and impractical. Adopted in international practice classification of PPPs usually distinguishes such forms as contracts, leases, concessions, production sharing agreement and joint ventures, which generally the majority of domestic and foreign authors and economists are observed. Let`s analyze these forms in terms of subject allocation between the partners of ownership, costs and risks of using features that are offered by the authors [8], which are explored Public-Private Partnerships (Tab. 1).

Table 1. Comparative characteristic of Public-Private Partnerships forms

Form	Varieties	Essence and features	Rights, costs and risks
Contracts	Public procurement, contracts and permits for works and public services management, supply of goods for state needs technical assistance.	The administrative agreement concludes between the state (local government) and private firm to perform certain socially necessary and useful activities. Private contract partner gets right to the agreed share of the revenue, profits, or collected payments in addition to the prestige guarantee him a steady market and income, and the possible benefits and preferences.	Ownership is not transferred to the private partner, the costs and risks borne by the state fully.
Rent, lease	Renting in its traditional form and in the form of leasing.	In certain by the contract terms there is a transfer of the private partner state or municipal property for temporary use and for a fee.	The right to dispose of property retained by the owner and not transferred to the private partner. In otherwise leases are completed redemption of the leased property. If the lease agreement, the lessee will always have the right to redeem the property.
Production Sharing Agreement	In the form of prospecting, exploration and extraction of minerals and other related work	The form of the PPPs, which the business entity on payment basis and for a specified period granted exclusive rights to prospecting, exploration and extraction of mineral resources in the area of mineral resources specified in the agreement and the conduct of related work and the investor agrees. In contrast to the concession agreements on production sharing private partner does not belong to the entire volume of output, but only part of it.	The state provides its exclusive right to the use of natural subsoil private investor on payment basis and for a specified period of time. Carry out these works at their own expense and risk. Product distribution may occur by different schemes.
Concession	On the infrastructure that already exists, the construction and upgrading of infrastructure facilities, transfer right management of state property to private management company.	Transfer state (the grantor) the private concessionaire rights durable state property to implement revenue-generating activities in the field of strategic importance, in terms of private investment projects of national innovation transmission facilities exclusive state monopoly in the ownership and management	The state remains the full owner of the property which is the subject of the concession agreement, authorizes private partner to perform within a specified period stipulated in the agreement features and to this end it gives appropriate necessary to ensure the proper functioning of the concession. For the use of state or municipal property concessionaires pay a fee to the conditions stipulated concession agreement. Ownership of the products produced by the concession transferred to the concessionaire.
Joint Ventures	Joint-stock companies, joint ventures with equity participation of the parties. The shareholders of companies may make state agencies and private investors	The peculiarity of the joint venture is a constant part of the state in the current production, administrative, economic and investment activities. Restructuring of the share capital in favor of one of the partners of the joint venture makes only a redistribution of shares, but does not affect the overall size of the capital. Features a private partner for separate administrative and economic decisions is determined usually share in the equity.	Property rights, costs and risks are allocated proportionally according to the equity shares of the parties or the number of shares

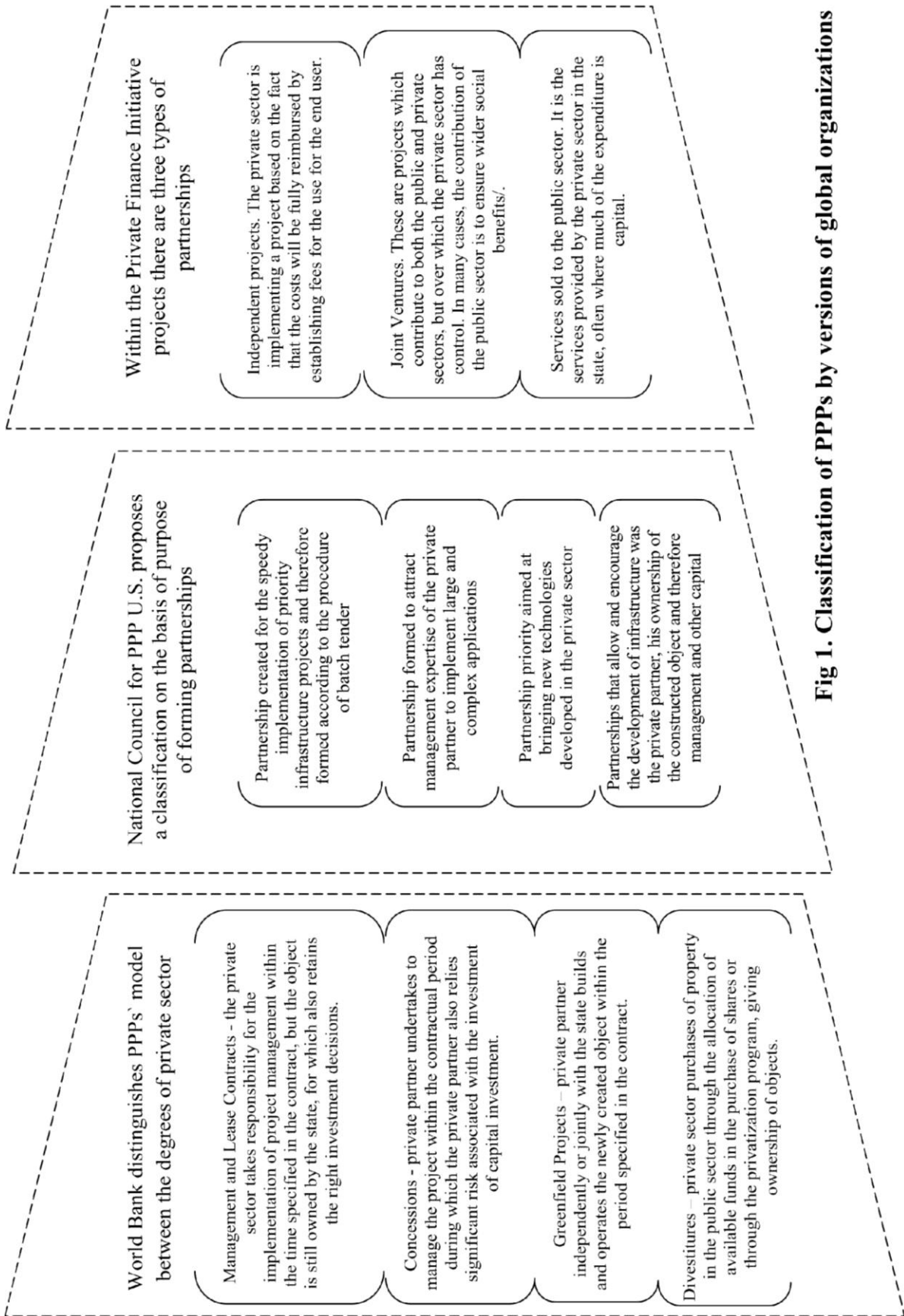


Fig 1. Classification of PPPs by versions of global organizations

It should be noted that there is no single internationally standardized classification of PPPs. Each stakeholder divides the models of the PPPs for signs, facilitating the identification of model and work with it. The most detailed classification of PPPs` types is World Bank classification in terms of participation of the private partner into four main groups (Fig. 1).

This classification shows that commercial agreements and contractual structures that are applicable to the PPPs are extremely varied in form. However, the statement by the World Banks` expert Jeffrey Delmon [9]: "The classification of PPPs by the World Bank does not restrict the using of specific schemes of numbers above, but rather is an example of methods that a private company may be involved in PPPs projects. Arguably, there is no detailed scheme than that which takes into account the best conditions of the country, industry, design or content problems.

"That`s why the U.S. National Council for Public-Private Partnerships [10] singles out other forms of cooperation between the state and private investors by the feature of dedication forming partnerships, and within the Private Finance Initiative projects is divided into three types of partnerships (see fig. 1.).

It should be noted that these classifications are not complete and do not reveal the nature of Public-Private Partnerships. Increasing the amount of information in the world leads to the necessity of the using new methods of classification. Method of classification is a set of rules establishing a system of classification groups and relationships between them. There are three classifications of objects, such as hierarchical, faceted and mixed (Fig. 2) [11]. These systems use different strategies for different classifications.

Since public- private partnership is a collaboration tool in different sectors in order to achieve strategic objectives, the classification of the construction in the first place should be made for the distribution of key features of the PPPs, separated by organizational and institutional aspects (Fig. 3). These characteristics are inherent to all kinds of partnerships. These characteristics, firstly, can provide PPPs in particular economic category and separate the mechanism from other forms of interaction between state and business, and, secondly, their presence is a must for every partner of the project.

Thus, as the classification groups were chosen precisely organizational and institutional criteria for separation (Fig. 4). The organization is defined as a group of people whose activities are consciously coordinated to achieve a common goal or purpose [12]. This interpretation makes it possible to consider complex issues of organizations - from the study of the causes of organizational design and to build effective organizations (choice of optimal organizational forms and structures, organizational changes, etc.). In a classification grouping that integrates organizational classification criteria PPPs were separated such features as the level of government, as a key feature of PPPs have at least two subjects of cooperation and the degree of participation of the private sector, because according to the distribution of liabilities, expenses, risks and profits.

The concept of institutionalism includes two aspects: "institutions" - the rules and customs of behavior in the community, and "institutions" - fixing the norms and practices in the form of laws, organizations and institutions. [12] This group features bold RFP due to the fact that cooperation actually acts as a set of institutions that have some internal structure. Therefore, classification grouping institutional features into account the distribution of rights and transfer of ownership, sector and branch of activity, defined goals and directions of relationships.

There is no doubt about the fact that Public-Private Partnerships recent years, is an effective tool for the modernization of existing and creation of new modern infrastructure. However, the question arises whether the prospects for the development of PPPs in Ukraine under the circumstances, and how justified our expectations from the use of partnership?

Therefore there is a need to assess and analyze potential opportunities for the development of Public-Private Partnerships in Ukraine in terms of limited financial resources [13]. So we consider putting another appropriate classifications, which will identify and prevent certain problems in the formation and implementation of PPP in Ukraine, namely the systematization models PPPs` levels of financial potential (see Fig. 4).

Conclusions. The basic principle of building classification was the separation of essential characteristics and stages of Public-Private Partnerships that produce fundamentally different models of interaction. The above classification is constructed in view of its possible use as color features are important in the management of PPPs` projects. So the value of this classification is to describe each type of project for certain characteristics that facilitate the work of the manager.

The hierarchical-faceted classification is not only organizes information about Public- Private Partnerships, but also allows you to make the right choices necessary forms from a large number of alternatives, which contributes to a synergistic effect. The classification takes into account the interaction of the key features of partnership and will not only understand their role in the development of society, but also to evaluate the effectiveness and focus of partnership links between stakeholders, to identify promising future projects , and create economic mechanisms and tools of the PPPs .

Classification is a real and theoretically possible forms of PPPs, it is not the complete and absolute, because the set of classifications practically infinite, and may be revised depending on the setting of research goals.

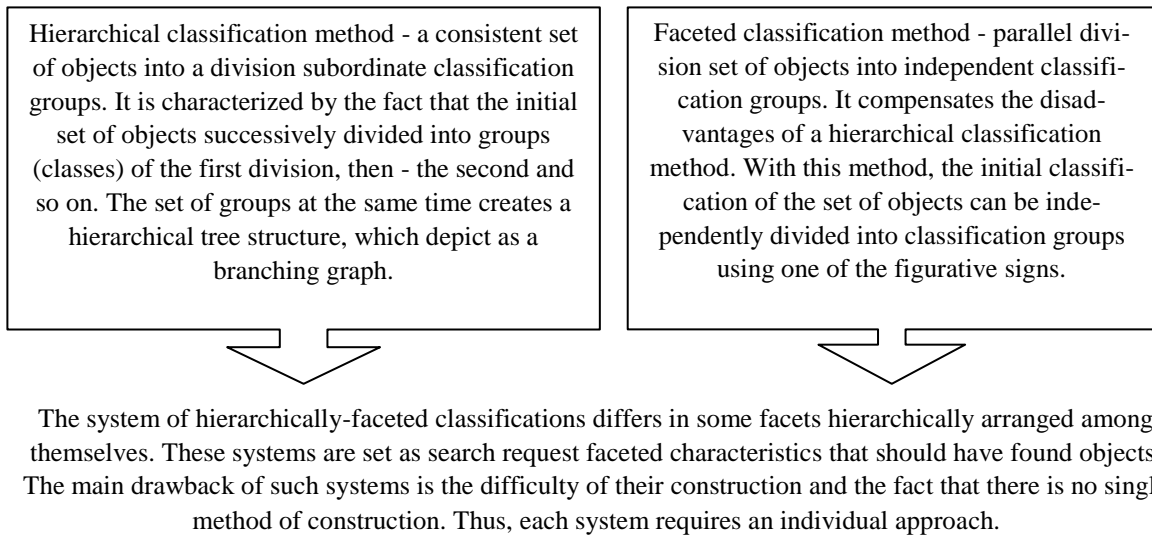


Fig. 2. Methods for establishing the groups classification system

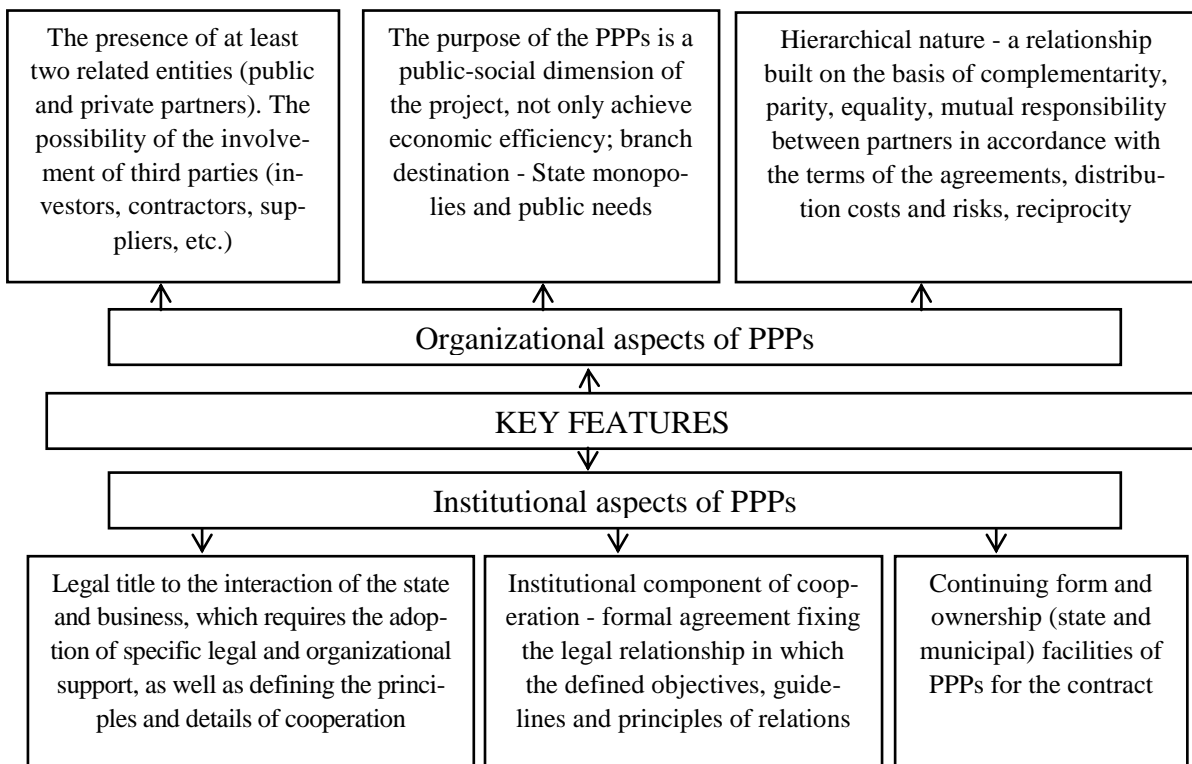


Fig. 3. Key features of the RFP (author's vision)

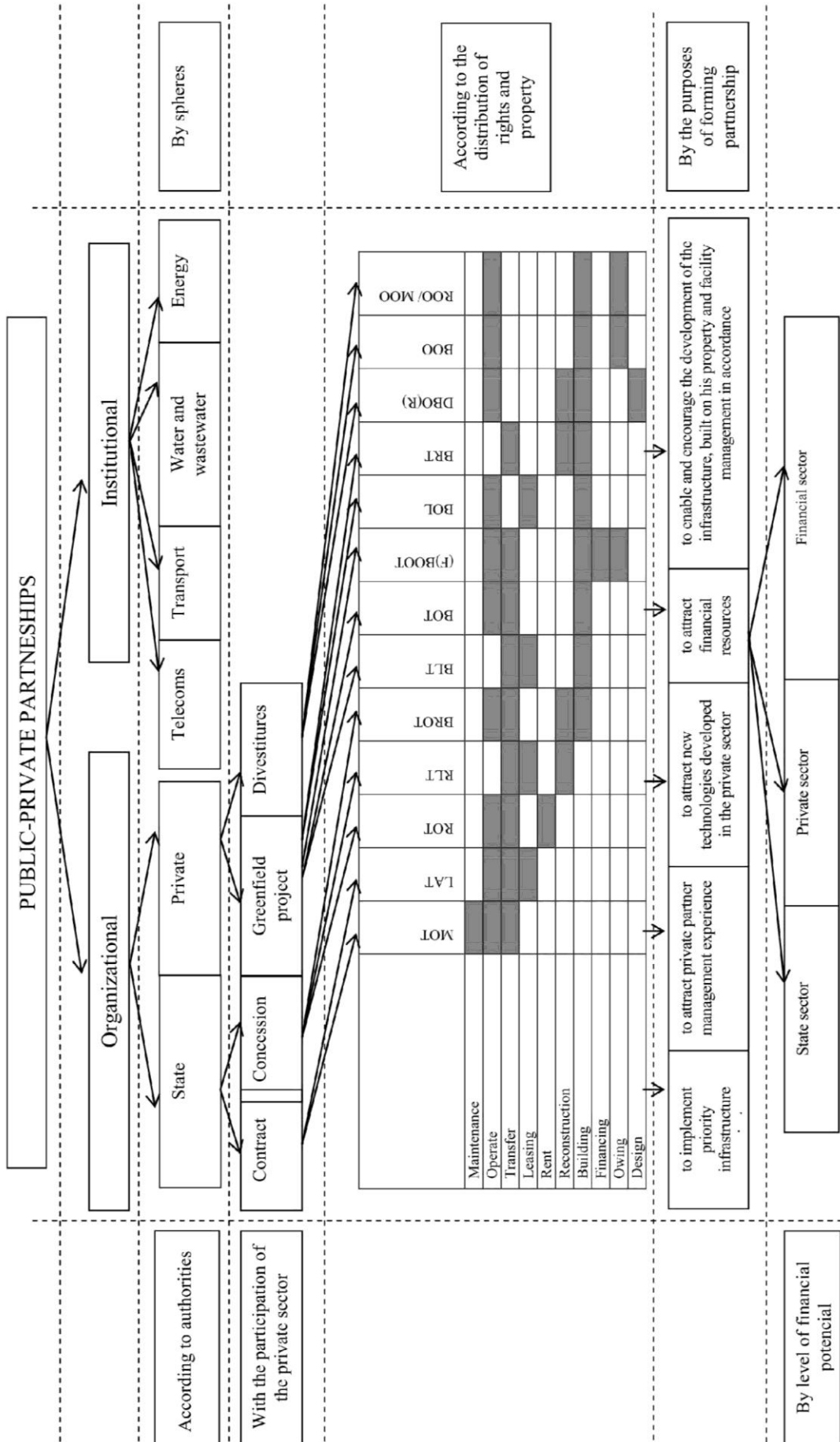


Fig. 4. Hierarchy-faceted classification of PPPs

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UDC 334.72: 658.11

V.M. Ostapenko, a graduate student of the Banking Department. Kharkiv National University of Economics. **Classification of Public-Private Partnerships based on financial capacity.** The existing global classification of Public-Private Partnerships (PPPs) is analyzed, their comparative characteristics are formed. Methods for establishing a system of classification groups are studied and their advantages and disadvantages are highlighted. There is scientific justification for organizing and systematizing the considered classifications on which the hierarchically-faceted classification of PPPs is built. A new classification feature is introduced by the level of financial capacities, that allows analyzing opportunities for Public-Private Partnerships in Ukraine.

Keywords: Public-Private Partnerships, classification, financial capacity, key features, organizational and institutional aspects.

UDC 330: 504

I.A. Bryzhan', PhD, Associate Professor, postdoctoral student of the Finance and Banking Department. Poltava National Technical Yuri Kondratyuk University. **Innovative aspects of mitigation and recovery from the economic crisis.** The phenomenon of "economic crisis" is widely known and has been observed in practice, so it is reasonable to prepare a set of anti-crisis measures that will enable to reduce the uncertainty risks, the number of managerial errors and suspend the chain reaction of bankruptcies and unemployment. For the development of crisis management tools it is necessary to identify the type of future crisis, so authors developed a classification of economy crises, taking into account the nature of the reproduction proportions violations, frequency of occurrence, flow pattern, the degree of expectedness, multidimensionality of the imbalance scale (sphere of influence, territorial coverage, frequency of occurrence, duration). The study of periodic fluctuations of socio-economic development showed their direct dependence on innovations that form the preconditions for the emergence of economic cycles. Authors developed a conceptual model for dependence of the industrial development dynamics on the level of efficient demand; this model reflects trends of interrelated changes in production volumes and the aggregate demand and their impact on changing the national level of economic development in two scenarios: inertial and active (innovation) ones. It is proved that the activation of consumer demand can be efficiently achieved by introducing innovative products into the market. Therefore, for economic recovery it is advisable to invest in innovation.

Keywords: crisis, industrial crisis, the crisis of underproduction, the crisis of overproduction, anti-crisis tools.

UDC 332.146:330.322

G.S. Azizov, PhD, Associate Professor of the Finance and Credit Department. Sevastopol National Technical University. **N.V. Alesina**, PhD, Associate Professor of the Finance and Credit Department. Sevastopol National Technical University. **On the formation of an innovative model of Ukraine's economy.** It is proved that innovations will only be implemented in case of the direct economic benefits for the four subjects of the innovation market: the creator of an innovative product; the entrepreneur, who assumes the risks of its producing in large amounts; innovative market infrastructure companies, and businesses that want to buy it. It is recommended to use the cluster model at the regional level, which presents the unity of the ideas creator, and those who implement them into production.

Keywords: innovation, the creator of the product, economic benefits

UDC 336.581: [613.9:796] (477)

I.M. Stakhiv, Researcher, Economics of Enterprise Department. Lviv Ivan Franko National University. **Sports and health sphere as a branch of the economy.** The article is dedicated to the sport and health sphere as a branch of the economy. The analysis of the sports and health sphere concept has been performed, and the basic tasks of the studied sphere have been determined.

Keywords: sport and health sphere, market, social and economic problems, services, economy.

UDC 338.439.052

N.Y. Yurkiv, Doctor of Economics. Head of the Bank Security Management Department of the NBU Banking University. **Formation of the institutional basis for the real economy sector security.** Disadvantages of the institutional environment of commercial and business activity in the real sector of the Ukrainian economy have been analyzed, the procedure of implementing the government policy of its improvement is determined in the sphere of providing the country's economic security.

Keywords: analysis, government economic policy, priorities of the government economic policy, country's economic security, national security strategy.

SUBSTANTIATION OF STRATEGIC GOALS FOR USING TRANSIT POTENTIAL OF THE REGION

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Zaporizhza National Technical University.**

Introduction. The model of Ukraine's development, based on the production and export of industrial products with low added value, has already exhausted itself. At the same time the opportunities of state to solve the problems of regional development using the traditional methods of allocation the subventions and subsidies from the state budget are essentially decreased. Thus, the regions have been put into the terms of real self-survival, the level of well-being depends on the quality of regional and local authorities' work, their capacity to attract new investments and create the new jobs. Therefore the public demand on another forms of regional development stimulation, which are based not on the principles of parity and leveling but on the principles of competition, exists. The search for the region's "points of increase" is going out to the fore, namely the search of those branches, the synergy of which will favor the development of other ones. One of such points is the efficient usage of the region's transit potential (RTP). To activate this point, the marketing strategy of using the RTP with substantiated goals and dominants, which will be the part of general territorial economic development strategy, is necessary.

The latest research and publications review. Among the Ukrainian scientists, who studied the problems of transit potential development, the following scholars should be noted: D.Preyger – studied the problems of realization the transit potential of Ukraine [1], N.Tkachenko – investigated the improvement of development strategy of the transit potential of Ukraine [2], Y.Makogon – studied the perspectives of development the transit potential of Ukraine [3], K.Solyannik – investigated the projects of development the transit potential, which have been realizing within the transport strategy of Ukraine [4], O.Minina – studied the development of the region's transit potential [5]. In spite of the attention to the problems of realization and development of transit potential, many issues remain undiscovered, particularly, the marketing strategy of using the transit potential of the region.

The aim of the article is to substantiate the strategic goals for effective usage the transit potential of region from the positions of market management. The object of research – the usage of RTP. The subject of research – methods, ways of forming the strategic goals for effective usage of RTP.

Basic materials and results. Before to substantiate the strategic goals for effective usage the transit potential of region it is necessary to define what exactly concern to this notion, to distinguish its components. On the basis of walkthrough and generalization of concepts "region", "potential", "potential of region", "transit" is formulated the essence of transit potential of region as aggregates of spatial resources of region, in particular a transport complex and corresponding infrastructure, which can be used for present possibilities for providing of trouble-free and safe movement of certain volumes of transit streams by the territory of region. For the effective use of transit resources of region a purposeful marketing management is needed taking into account the necessities of market and demand on transit services. Namely the marketing management allows to score competition advantages, oriented on a long-term prospect, readiness to the changes and flexibility, arriving at the same time put mission and goals.

A marketing management must be examined as an integral administrative conception, as a part of general management system by the region. It foresees the development of marketing strategy of the RTP usage, which behaves to functional strategies and sent to achievement of strategic goals, on realization of the concerted actions in area of demand satisfaction. The noted strategy is formed on the basis of analysis of possibilities of the RTP usage, choice of the system of goals, working out of plans and realization of measures, competitive edges sent to the receipt, providing of the effective use of transit potential taking into account the necessities of market. In accordance with the offered model of regional strategic management on the fig.1, determination of mission and goals is going on the stage of forming of strategy. However, foremost, it is necessary to be determined with classification of goals, which in management system by a region allows to outline desirable results, which a region aims to get from the usage of transit potential.

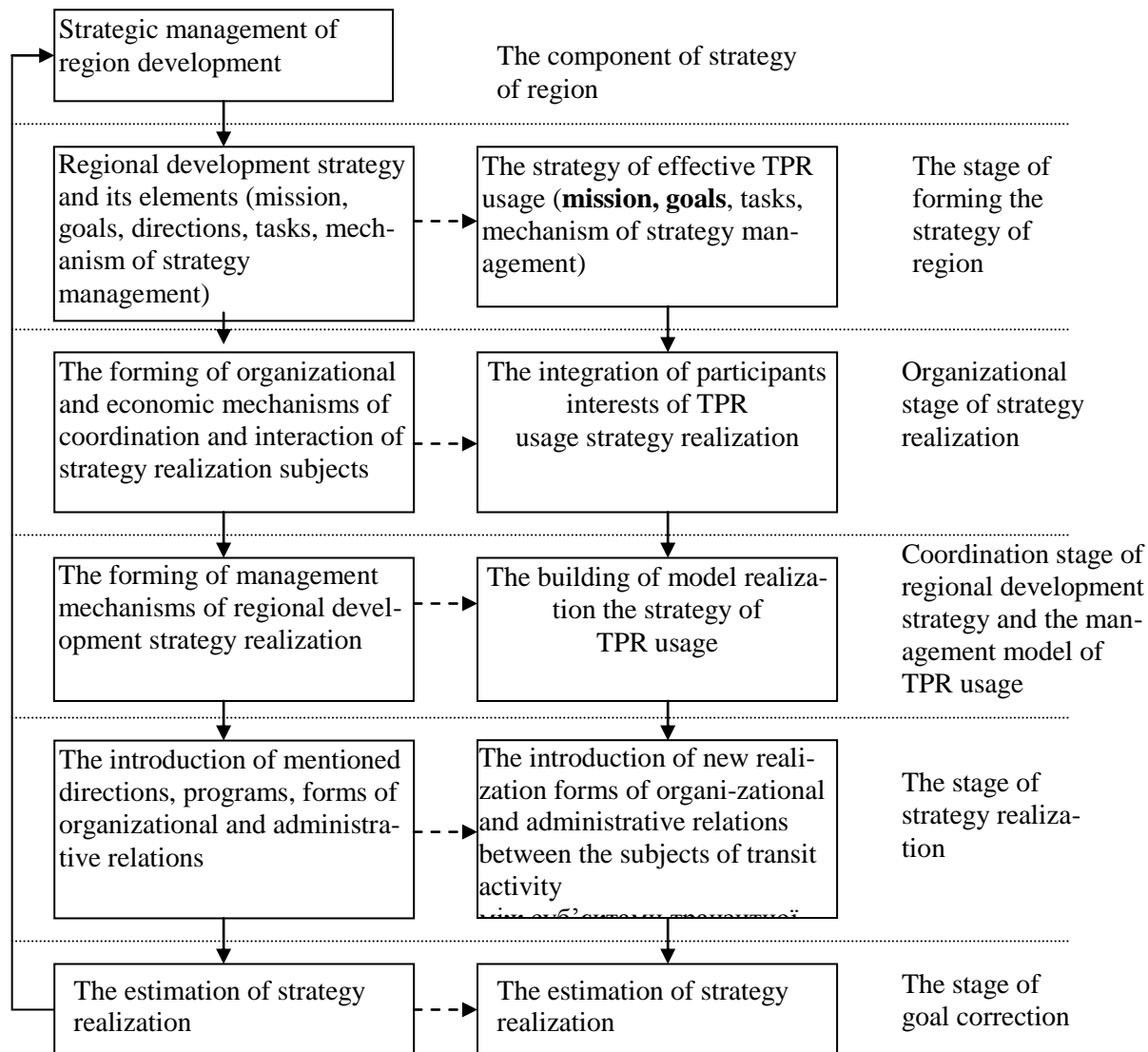


Figure 1. The model of regional strategic management

Researchers in the area of management offer different classifications of goals and determinations of concept "goal", but all identically pass essence of goal as a desirable, concrete result of activity which is measurable and accessible within the limits of certain time space [6-9]. The considered types of classification of goals taking into account problematics and specific of RTP research induce to take advantage of R.Daft classification on the criterion of hierarchicalness, concentrated, foremost, on the strategic and tactical goals [8]. An exception from the list of operating goals is related to that problems of a transport system of region, which comes forward as a basis of realization of transit potential, are such which can not be decided during a short time domain.

As a concept RTP is the system, strategic goals must have a system character also, be interconnected and concerted between each other in accordance with the content filling of RTP. It was well-proven in previous researches, that component maintenance of RTP includes four constituents potentials: naturally-territorial, labour, transport, infrastructural [10]. Each of constituents of RTP includes components of the I-st and II-d levels. For every constituent of transit potential strategic goals which are then specified for every component of constituent of the I-st level are formulated. The important condition of realization of goals appears their resource material well-being, support both on the national, regional and on the local levels.

Determination of goals is a relating link between subjects and objects of marketing management. It is important to find out at formulation of goals, at first, the sizes of charges on achievement of goals and facilities which are used for their achievements, that is to take into account the elements of material character; secondly, are possibilities and necessity for achievement of the put goals which are the elements of non-material character.

The goals of the effective usage of RTP can be defined on the basis of analysis of its state, exposure of existent problems, research of transit transportations' market. A goal is not only the lineation of desirable result but also result possible. Traditionally the process of analysis of research object takes place "from above to the bottom", when at first distinguish problems in the conditions of forming and use of RTP, and then try to bind them to the results. The lack of such approach is that it does not ground for limitation of area of analysis, and also for co-operation of conditions and results. Researchers must examine all in theory possible threats, risks of conditions of RTP forming. Therefore the sequence of analysis more expedient to execute from results to the terms. The offered logic of research will allow to chop off unimportant for end-point search of problems areas and abandon in sight only most meaningful. Thus, the process of analysis will be rationalized. Realization of such sequence of research foresees an analysis of: the results of RTP usage; production of transit services; conditions of RTP forming. As a result of analysis it turns out what it is necessary to change, what problems must be worked out, that in the future a region was able effectively to use transit potential. For example, there is a problem of the effective use and development of transit potential in a region. But in such abstract kind, deciding a problem is impossible, in any case it needs to be specified and structured, that is to present it in a kind of the whole complex of separate interconnected problems, deciding which, it is possible to get the decision of general problem. The task of analysis consists in that, to specify a general problem, providing, the same, possibility of its decision by parts. A specification of problems is the basis for determination of goals. Research logic allows to offer composition-having a special purpose approach which foresees determination of goals of research object on the basis of analysis and selection of problems of the use taking into account its component maintenance.

Thus on the first stage of research – «Analysis of results» connecting with determination of goals for effective usage the transit potential of region – the dynamics of transit transportation volumes by the territory of region, the volumes of revenues from transit activity are studied. In the process of research it was found out that statistical bodies didn't keep records of regional transit transportation by different modes of transport with the exception of processing of transit goods in the ports. Certain information on transit is contained in the informative reports of regional customs, but she does not determine the volumes of transit by the types of transport. It lights up the problem of absence of informational support to transit transportations by the territory of the region, which is necessary to be solved in a theoretical ground and practical organization.

The second stage of determination process of strategic goals is identified as "Analysis of production of transit services" and foresees the research of a transport system of region, namely receipt of information concerning: the state of material and technical base and results of activity of enterprises of a transport complex of region, competitive edges of RTP (estimation of constituents of RTP), state of management system of RTP (analysis of practice of management RTP development); labor resources, involved in the work of transport enterprises.

On the third stage "Analysis of terms of RTP forming" the instruments of estimation of marketing environment are used. At first, it is SWOT-analysis of region from positions of the use of its transit potential, namely a quantitative methodology of realization of SWOT-analysis. Secondly, the authentication and estimation of factors of RTP forming with the help of method of hierarchy analysis of A.Saati. The noted methods are used with drawing on the results of the expert questioning.

The composition of methods of economic analysis (SWOT-analysis, the diagnostics of technical and economical state of the transport complex of region and analysis of RTP forming factors) constitutes the methodical base of determination the strategic goals and priorities of effective usage the transit potential of region. The essence consists in the integration of received results for the detection of common targets (fig. 2).

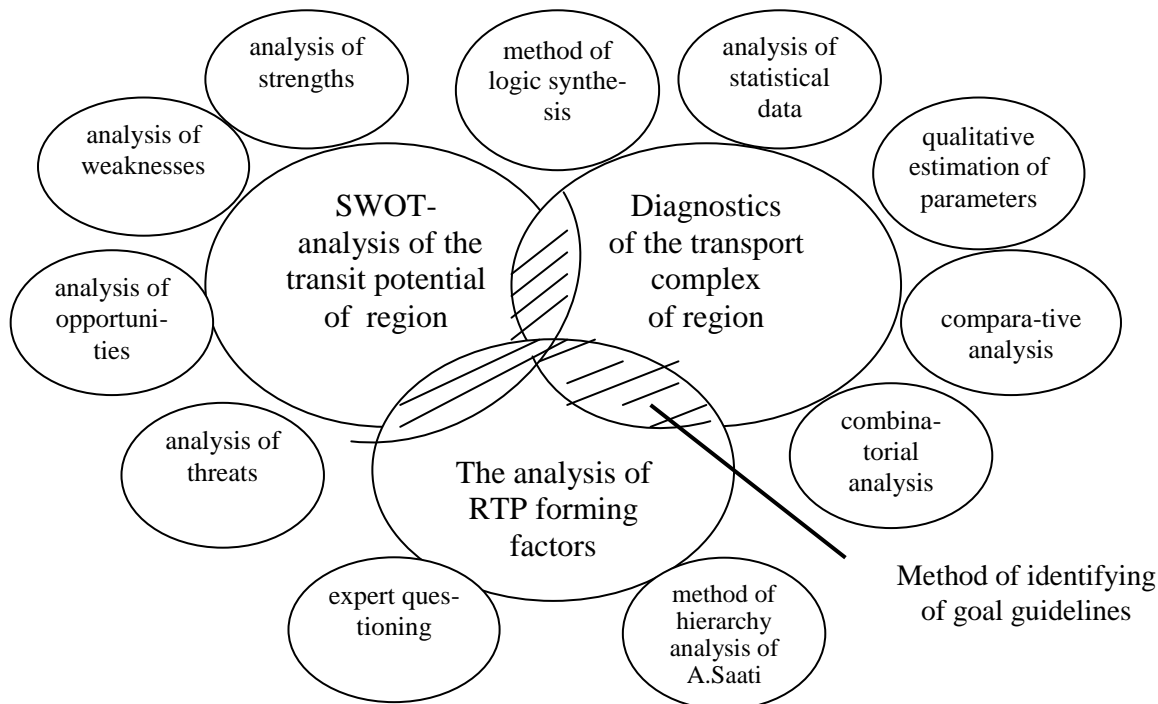


Figure 2. The composition of economic analysis methods for determination of goals for the efficient usage of the region's transit potential

Thereby, the conducted analytical research permits to display the process of forming goals for the efficient use of the region's transit potential as an algorithm which consists of three stages and foresees realization of the results analysis (fig. 3). Thus, the subsidiary elements of material and non-material character, internal and external environment influence on the forming of goals. Using the offered algorithm of research on the basis of analysis of results of transit activity in a region, exposure of existent problems, estimation of constituents of transit potential, factors of forming of transit potential of region and results of SWOT-analysis, strategic and tactical goals are formulated in accordance with every constituent of transit potential of region.

Presented on the fig. 4 system of goals of the use of transit potential of region, concentrated round a marketing management of transit transportations by territory of region, expose the orientation of goals in the direction of increase of efficiency.

On condition of the put goals achievement, a region will get the competitive transit system, oriented to the consumer of transit services. Therefore forming of the competitive transit system of region appears a general strategic goal due to creation of certain competitive edges which are fully appropriate, if to take into account the development of regions on principles of competition and inter-regional collaboration. The achievement of general strategic goal is a base for achievement high-quality of new level of a transport maintenance of transit transportations in a region, orientation on satisfaction of necessities of transit services market. Coming from this, mission is determined as an achievement of the European level of a transport maintenance of transit transportations in a region.

Conclusions. Thus, the ground of strategic goals of the effective use of RTP takes place on the basis of combination of methods of economic analysis (SWOT-analysis, diagnostics of the technical and economical state of a transport complex of region, analysis of factors of RTP forming) and drawing on the got results for determination of general goal guidelines. The new sequence of realization of research is thus used - from the results of transit activity to the terms of forming. The goals of the effective use of RTP are classified on the criterion of time and taking into account the component maintenance of RTP (the components of the 1-st level). However, determination of goals is only the first step in the process of forming of marketing strategy of the RTP use. Therefore the subject of further researches will be the working out of strategy of marketing management of region transit potential.

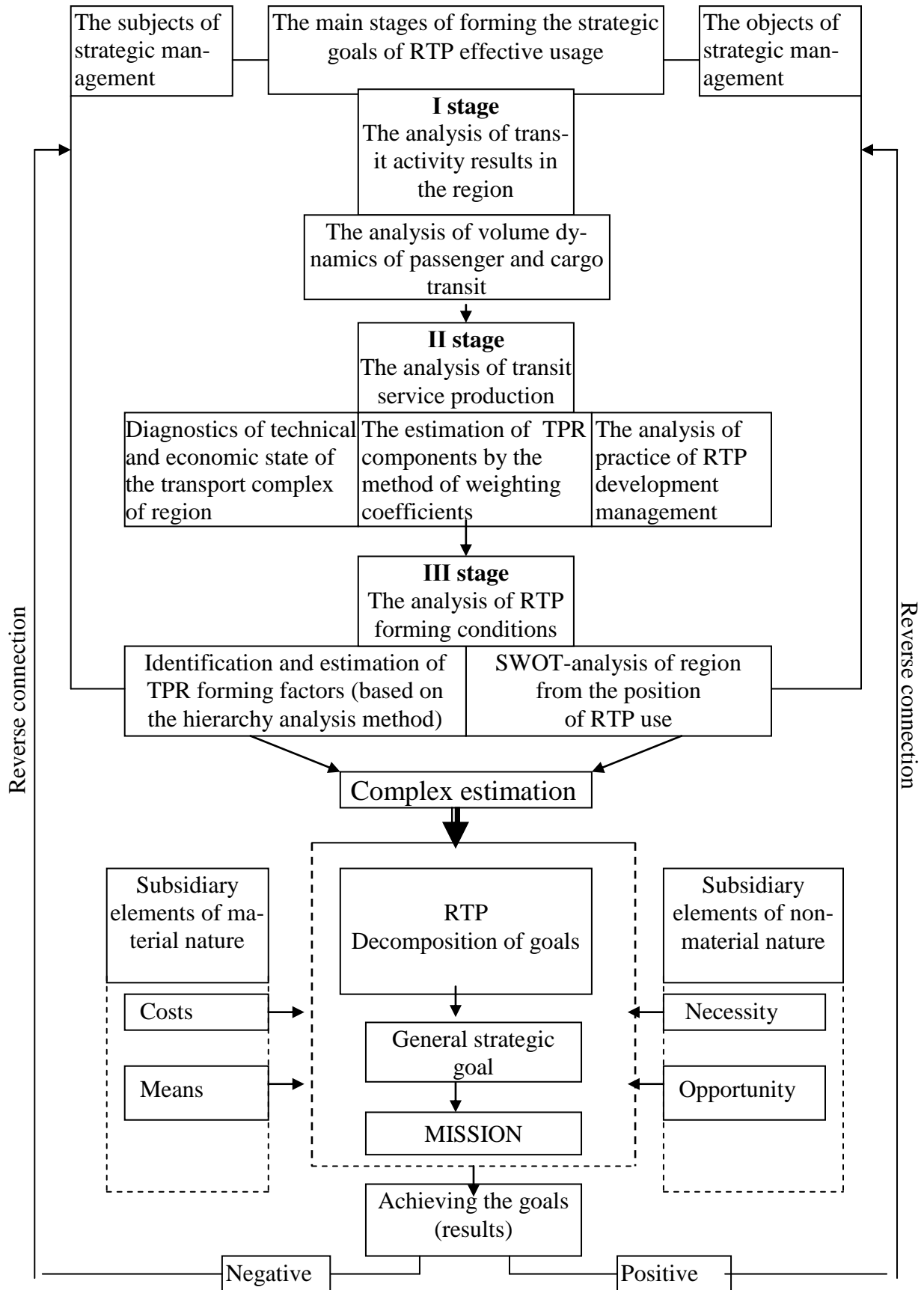


Figure 3. The algorithm of the strategic goals substantiation for using the region's transit potential

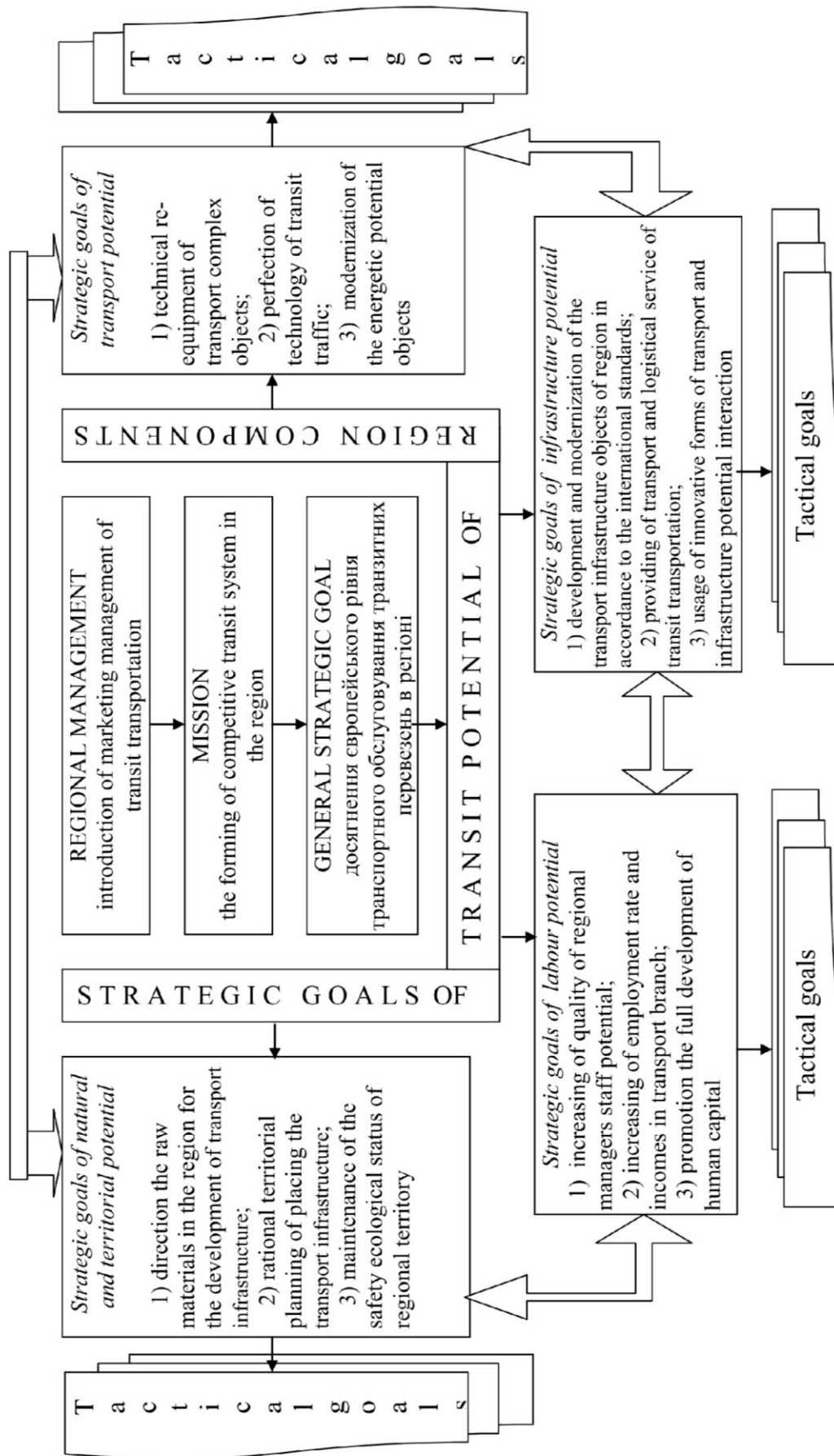


Figure 4 – The system of goals for efficient usage of the region's transit potential

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UDC 332.122: 338.47

V.V. Lyfar, Doctor of Economics, Professor, Department of Marketing, Zaporizhzhya National Technical University. **Grounds for the strategic goals of using the transit potential of the region.** In this article the market management is considered as part of the region's strategic management, the classifications of goals are analyzed. The algorithm for shaping the strategic goals of using the region's transit potential is suggested on the basis of combined economic analysis methods. The system of goals for efficient usage of the region's transit potential is determined taking into account its component content.

Keywords: transit potential of region, transit transportation, strategic goal, strategy, market management.

UDC [338.431:332.13] (477:1-22)

V.D. Ponikarov, PhD, Professor of the Control and Auditing Department, **O.A. Yermolenko**, lecturer, Legal Regulation of Economy Department, S. Kuznets Kharkiv National Economics University. **The role of agrarian reform in improving the qualitative characteristics of the production forces human component in rural areas of Ukraine.** The article is devoted to the issue of land relations improvement and implementation of agrarian reform in Ukraine in order to form the efficient structure of the production forces in the country's regions. Recommendations are given concerning changes in regulation of waste management, which will help to further increase the capacity of existing land resources for the development of their own agricultural sector.

Keywords: agrarian reform, production forces, rural areas, land resources, rules of waste management.

USC 332.146.2

A.V. Boyko, PhD in Economics, researcher, department of modeling and forecasting of economic development. Institute for Economics and Forecasting, Ukrainian National Academy of Sciences. **Convergence and unevenness in regional development of Ukraine: risks, trends and prospects.** The author investigates the risks, state and trends of economic, social and environmental, innovative regional development of Ukraine during 2000-2012. The author substantiates the directions for an integration of Ukrainian economic space, based on activation of inter-regional cooperation and collaboration.

Keywords: regional development, convergence, unevenness, risk.

UDC 332,146

R.V. Pinda, PhD, Associate Professor, postdoctoral student of the Institute for Regional Studies of the National Academy of Sciences of Ukraine, Lviv. **Regional policy of building clusters development in Ukraine.** Development of regional building cluster at the post-crisis stage in the evolution of regional economies is an objective necessity, as it permits expanded reproduction resource potential by investing in promising areas of economic activity and high efficiency on the basis of their synergistic effects and economies of scale of activity; increasing amounts of financial and economic activity of the real economy by increasing the quality of products and services, cost optimization and pricing policy options to improve the viability and economic security business of building and industrial complexes, diversify their activities and the creation of appropriate conditions for further development.

The purpose of the article the generalization of the negative effects of insufficient effective regulation of construction in Ukraine, scientific and theoretical study of conceptual approaches to regional policy in the construction industry in Ukraine at the regional and local levels.

The primary measures to achieve this strategic objective is to create the legal, regulatory, methodological and normative- technical base implementation of regional development programs building cluster development mechanism providing infrastructure, renovation of existing building materials, structures and components to ensure the targets of growth in construction works and services, investment and development of financial instruments, organization of training and retraining, promotion of new technologies in the construction industry in the region.

The mechanisms that can be used in the implementation of regional development policies of building clusters include: the popularization of integrated systems, power arrangements, provision of information exchange, public funding of projects promoting cooperation in the formation of networks, eliminating bureaucratic obstacles cooperation, resource support of clusters and their members, promote the development of technology parks and business incubators.

The next step (after clustering) of the construction industry national project should be a system for building interregional cooperation.

Keywords: regional policy, regional building clusters, institutional environment, government control, development of the industry.

UDC 669:65.016

A.M. Tkachenko, PhD, Professor, Head of the Marketing Department, State Higher Educational Institution "Ukrainian State Chemical Technology University", Dnipropetrovsk. **C.A. Marchenko**, Master student, the Economics of Company Department, Zaporizhzhya State Engineering Academy. **New approaches to management of the enterprise development.** The article covers the essence of the «development» and «development of the enterprise» concepts. The classification of the enterprise's economic development, suggested by I.O. Bogatyryov, has been considered together with the approaches to the definition of the "development of the enterprise" notion, suggested by V. Kyfyak.

Keywords: development, management, business development, classification of economic development, development approaches, the internal and external environment.

UDC 334.711:338.24

I.B. Khoma, PhD, Associate Professor, Department of Finances. National University „Lviv Politekhnika”. **N.I. Andrushko**, senior lecturer, Department of Finances. National University „Lviv Politekhnika”. **Organizational, economic and administrative aspects of machine-building enterprises innovative development.** Problems and prospects of innovative development of machine-building enterprises in Ukraine are considered in the context of organizational, economic and administrative aspects. The comparative analysis of basic innovative organizational structures is carried out and basic pre-conditions of the stable economy growing in the conditions of the machine building industry innovative development are determined.

Keywords: machine-building enterprises, innovative development, innovative infrastructure.

UDC: 681.51

Y.A. Burenko, Doctor of Economy, Associate Professor of Economics and Entrepreneurship Department, Kherson National Technical University. **Motivation factors enhancing staff competencies in the innovative development of production.** The authors have considered and systematized motivation factors of the necessity to strengthen the competence for innovative development of production.

Keywords: competence, innovation, motivation factors, intellectual resources.

UDC 005.591

T.O. Pozhuyeva, PhD, Associate Professor, Department of Marketing. State Higher Educational Institution "Ukrainian State University of Chemical Technology". **Modern approaches to management of the enterprise's innovation activities.** The article states that the innovative development of the economy is the main strategic guideline of the commercial entity's economic policy. Raising the efficiency of the innovative businesses' activities requires significant changes and search of completely new organizational structures of management. The methods to be applied in the management of innovative development at the micro- and macro-levels have been substantiated.

Keywords: innovations, innovative development, innovative businesses, innovative activities, innovative way of development, principles of innovative management, management methods of innovative development.

UDC: 334.716:658.821

D.D. Radulov, business economics graduate student of Odessa National University of Economics. **Assessing the impact of external factors on the level of fabricated metal products enterprises competitiveness.** Today, in science and practice there is virtually no method of assessing the impact of external factors on the level of the enterprise competitiveness. The article analyzes the combined use of multivariant statistical analysis: principal component analysis and taxonomic method for assessing the impact of external factors on the level of competitiveness of enterprises producing fabricated metal products. A combined approach was used in the calculation of specific factorial indices, the list of which has been developed as a result of the research study. A quantitative assessment of the external factors impact on the meso-level enterprise's competitiveness has been obtained. Recommendations have been given to the enterprise «South Electro-Engineering Plant» on ways to improve the total level of competitiveness.

Keywords: competitiveness of enterprises, external competitive factors, assessment of the impact of external factors, taxonomic method, the principal component.

UDC 339.138:658.8

V.O. Martsenovskiy, senior lecturer of the Management and Social Work Department, State Municipal Higher Educational Institution "Institute for Entrepreneurship "Strategy", Zhovti Vody. **Research of the shopping process peculiarities in the Internet.** The current state of Internet commerce in Ukraine has been analyzed. The results of the regional study of online shopping peculiarities are presented. The problems of Internet commerce in Ukraine are considered. The opportunities for further development of online-shopping are determined.

Keywords: E-commerce, Internet marketing, online audience, online-shopping.

UDC 332.872

L.T. Shevchuk, Doctor of Economics, Professor., Vice-Rector for scientific work and international communication, Ternopol Institute of Social and Information Technology. **I.V. Melnychuk**, PhD, teaching assistant of the Economy of Enterprise Department, Ivano-Frankivsk National Technical University of Oil and Gas. **Organizational-economic energy saving mechanism in the city housing fund.** Based on the analysis of problems and to accelerate the introduction of energy efficiency measures in the city housing fund, the organizational-economic mechanism of its energy saving is suggested. The peculiarity of its operation is the phased introduction of all measures that ensure their efficient implementation and their monitoring

Keywords: energy saving, organizational-economic mechanism, housing fund, thermal upgrading, heating, the economic effect.

UDC 378.339.924:351:330.322

O.V. Garashchuk, Doctor of Economics. National Inspection of Educational Institutions of Ukraine. **V.I. Kutsenko**, Doctor of Economics. NI "Nature Management and Stable Development Economics Institute of the NAS of Ukraine". **The innovation way of the higher education development in Ukraine: conceptual fundamentals.** The role of higher education opens up in the development of economy and ensuring social mobility of population. The importance of innovations in the education sphere is underlined in the achievement of proper quantitative and quality parameters of higher education. The basic constituents and types of innovative activities in the system of personnel training are presented. The ways of strengthening the innovative potential of higher school and improvement of its use are offered.

Keywords: innovation, education, economy, socio-economic development.

UDC 336.018

MATHEMATICAL METHODS OF RISKS STUDY

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Today in Ukraine there is no consensus on the mathematical methods of risk in terms of financial security. A wide variety of areas, ownership, business organization, business structures supported by rapid change and uncertainty of the market situation. This process employs the use of mathematical calculations and analysis methods in the planning and management, and a need to create and improve the knowledge base using special mathematical methods and mathematical support management decision making.

Mechanisms using mathematical methods assessment and business analysis of the subject and the object and control, the nature of the relationship between individual links its internal structure determination stupas n th e external environment are examined from both Ukrainian and foreign scientists and specialists. Among them, O.B. Berezhnaya, I.G. Britchenko, NA Brehin, VA B.Vitlinskiy, G.I. Velykoivanenko, G. Davydov, A. Belikov, LA I. Donets, L.A Ostankova, N. Shevchenko, S.E. Shershneva, M. Zyemba, R.H. Hayes, S.K. Villvrayt.

However, despite the established foundation of research in this area, some question the use of mathematical tools of research risks, in our view, remain poorly understood. In particular, this applies to a number of theoretical questions using mathematical methods prediction and control of financial security, methods of mathematical analysis in the application of long-term risk management entities, and so on.

The purpose and objectives of the study. Purpose of work is a generalization and improvement knowledge Mathematical methods in risk activities at c and enterprises as economic entities.

The object of study are commercial, administrative and regulatory processes of the enterprise during its operation under the influence of destabilizing factors.

The study examined are the theoretical, methodological and practical basics of using mathematical method s to assess the impact of risks on the activities of the company as business entity selection and management strategies.

Results. Scientists have different interpretations of concepts of risk. For example, L. Donets in [6, p.34] defines risk as activities related to overcoming the inevitable uncertainty in a situation of choice, during which it is possible quantitatively and qualitatively assess the likelihood of achieving the anticipated results, failures and deviations from the target. I. Britchenko in [7] considers risk as the possibility of adverse events as an economic category, which occurs under conditions of uncertainty and leads to the likelihood of incurring losses or shortfall now n rybutku. LA Ostankova, N. Y. Shevchenko in [27] argue that risk - the probability of an event or a group of related random events that lead to loss of the object that owns this risk. V. Kovalev in [21] defines risk as the level of financial loss that is expressed: a) does not achieve this goal, b) uncertainty in the predicted results, and c) in the subjective assessment of the predicted result.

In our view, the current definition does not fully take into account sytuatsiynist, Multivariate subjectivity and the nature of risk. It is the result of an individual, conscious but do not always objective management solution that has been adopted person.

Summarizing the existing conceptual apparatus, the author considers it possible to clarify the definition of risk. Consequently, **the risk** - a situation resulting from or deliberately adopted a variant management solutions that could lead to material losses or other size.

Research Methods risk is not the only universal machine suitable for making decisions on all occasions. The study of risk - a collection of various mathematical methods, combined joint task study the best solutions.

The principal features of the research risks are:

- bahatokryteriynist problem of choice;
- not only quantitative but also qualitative (fuzzy) description of risk parameters that are specified as requirements;
- statement of the problem in fuzzy definition of risk management strategies a great influence on the choice of method of solving expert information that determines the preference of a particular index.

Each of these methods has its own scope. Mathematical studies m METHODS risks can be classified in four main groups: analytical, statistical, mathematical programming, games theory (Fig. 1).

Analytical methods are characterized by the fact that the established analytical, formula dependencies between the terms of the problem being solved and its results. These methods include probability theory, the theory of Markov processes, queuing theory, dynamic medium. Probability theory - the study of patterns in random events. With it you made a decision that depends on the conditions of random. The theory of Markov random processes developed to describe the operations,

developing randomly over time. Queueing theory considers the massive repetitive processes. Dynamics of average method is used in cases when you can make a relationship between the deal and its result based on the average performance of these conditions [3].

Statistical methods are based on the collection, processing and analysis of statistical data obtained as a result of actual hostilities and produced artificially by statistical simulation on a computer. These methods include sequential analysis method and statistical test. Sequential analysis makes it possible to make a decision based on a number of hypotheses, each of which is immediately checked sequentially, such as checking quality party products [3]. The method of statistical tests (Monte Carlo) is that the course of operations played, as it is copied to the computer, with all the operations of chance.

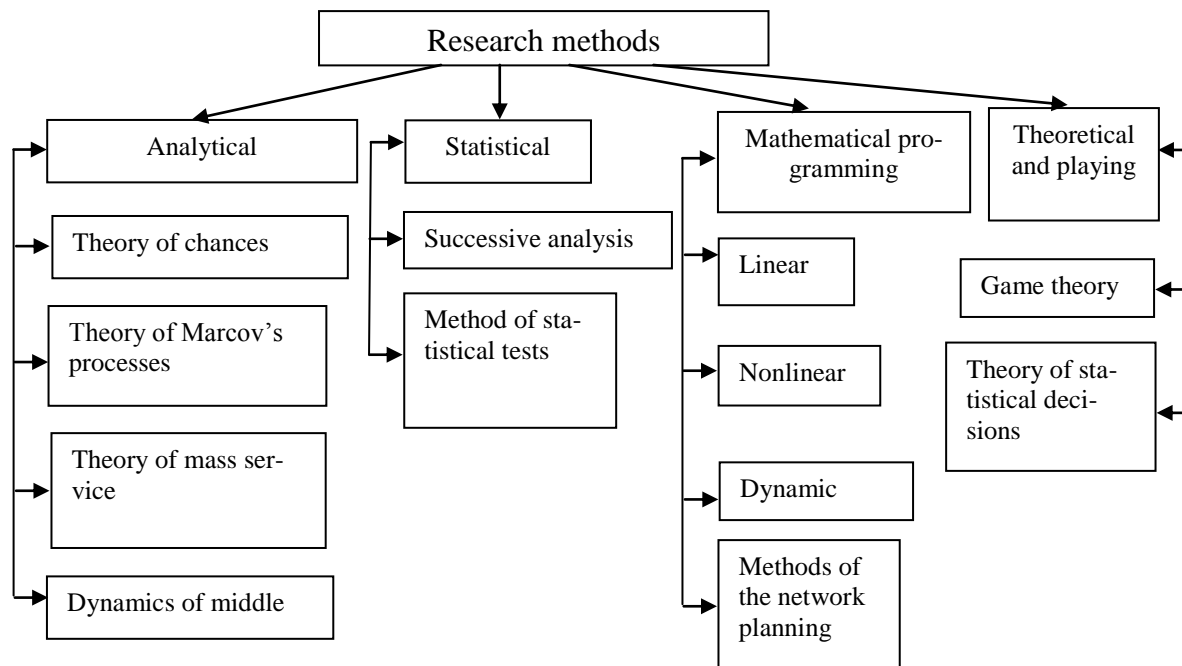


Fig. 1. Methods of research of risks

As shown by studies, the main objective in assessing the riskiness of economic activity is not the definition of the type, quality and quantity of risk, namely its choice of strategy to minimize the problem of materiality of the risk and the adequacy of its evaluation.

On the basis of the results of theoretical studies can identify the most common methods of selection strategies determine the impact of risk on economic activity:

- statistical method for evaluation;
- method main index;
- method resulting index.

For comparison, the most common methods of selection strategies determine the impact of risk on economic activity will conduct analysis with an example.

According to statements and to calculate the optimal option strategy of the company following results: A strategy for the implementation to determine the material risks of the 150 cases in profit 120.5 thous. was obtained in 68 cases, a profit of 200 thousand. - In 42 cases, and a profit of 150 thousand. - In 40 cases. In implementing the strategy used in 150 cases, a profit of 150 thousand. was obtained in 60 cases, a profit of 200 thousand. - In 60 cases, a profit of 170 thousand. - In 30 cases. Similar data for strategy B, D, E are given in Table 1. Calculate the optimal strategy option definition of significant risks to statistical evaluation methods, the main methods and the resulting index.

Table 1 - Calculation of the statistical method of assessing

The strategy for selecting significant risks	Total number of cases N	Income (gain), mln	Number of cases that recur	Chance of profit	Mean values of estimated income	Dispersion	Standard deviation	Coefficient of variation
	N	X _i	n _i	P _i = n _i / N	M			V
A	150	120.5	68	0.45	150.63	1094.12	12.27	0.08148
		200	42	0.28				
		150	40	0.27				
B	150	150	60	0.40	174.00	504.00	13.19	0.07581
		200	60	0.40				
		170	30	0.20				
In	150	185	45	0.30	161.27	251.61	12.70	0.07874
		146	38	0.25				
		154	67	0.45				
D	150	172	55	0.37	142.37	543.81	11.93	0.08381
		136	31	0.21				
		120	64	0.43				
D	150	115	71	0.47	139.27	668.80	11.80	0.08474
		185	25	0.17				
		150	54	0.36				
E	150	110	81	0.54	126.40	347.04	11.24	0.08895
		130	15	0.10				
		150	54	0.36				

Here are the calculations:

1. Average estimated value of profits (expectation):

$$M(X) = \bar{X} = \sum_{i=1}^n x_i P_i$$

$$M_A = 120.5 * 0.45 + 200 * 0.28 + 150 * 0.27 = 150.63;$$

$$M_B = 150 * 0.4 + 200 * 0.4 + 170 * 0.2 = 174.00;$$

$$M_B = 185 * 0.30 + 146 * 0.25 + 154 * 0.45 = 251.61;$$

$$M_H = 172 * 0.37 + 136 * 0.21 + 120 * 0.43 = 543.81;$$

$$M_H = 115 * 0.47 + 185 * 0.17 + 150 * 0.36 = 139.27.$$

$$M_E = 110 * 0.54 + 130 * 0.10 + 150 * 0.36 = 126.40$$

2. Variations possible outcome indicators are the following:

a) the variance:

$$\sigma^2 = \frac{\sum_{i=1}^m (x_i - \bar{x})^2 f_i}{\sum_{i=1}^m f_i}$$

$$\sigma_A^2 = (120,5-150,63)^2 * 0.45 + (200-150,63)^2 * 0.28 + (150-150,63)^2 * 0.27 = 1094.12;$$

$$\sigma_B^2 = (150-174)^2 * 0.4 + (200-174)^2 * 0.4 + (170-174)^2 * 0.2 = 504.00;$$

$$\sigma_B^2 = (185-161,27)^2 * 0.3 + (146-161,27)^2 * 0.25 + (154-161,27)^2 * 0.45 = 504.00;$$

$$\sigma_G^2 = (172-142,37)^2 * 0.37 + (136-142,37)^2 * 0.21 + (120-142,37)^2 * 0.43 = 504.00;$$

$$\sigma_D^2 = (115-139,27)^2 * 0.47 + (185-139,27)^2 * 0.17 + (150-139,27)^2 * 0.36 = 668.80;$$

$$\sigma_E^2 = (110-126,40)^2 * 0.54 + (130-126,40)^2 * 0.10 + (150-126,40)^2 * 0.36 = 347.04.$$

b) standard deviation:

$$\sigma = \sqrt{\sigma^2}$$

$$\sigma_A = 12.27; \sigma_B = 13.19; \sigma_B = 12.70; \sigma_G = 11.93; \sigma_D = 11.80; \sigma_E = 11.24.$$

c) The coefficient of variation:

$$V = \frac{\sigma}{M} * 100\%$$

$$V_A = 8,15\%; V_B = 7,58\%; V_B = 7,87\%; V_G = 8,38\%; V_D = 8,48\%; V_E = 8,90\%.$$

So you need to choose an option strategy in because the average relative deviation of the likely magnitude of the profit to the maximum probable in strategy B is only $\frac{(M_B - M_B)}{M_B} * 100\% = \frac{(174 - 161,27)}{161,27} * 100\% = 7,32\%$ and performance variations possible result

smaller: standard deviation of return for strategy B is only 251.61 thousand. compared to 504 thousand .. and the coefficient of variation of only 0.29% higher than in strategy B. Given that the standard deviation of return for the strategy used most for all the above, the next viable option strategy G that has the appropriate above-described method performance.

Determine the optimal strategy of choice by major indicator. To do this, the average value of the profit will choose for the main indicator for each strategy. For ease of analysis results will put in Table 2.

$$P_A = (120.5 + 200 + 150) / 3 = 156.83 \text{ thousand.};$$

$$P_B = (150 + 200 + 170) / 3 = 173.33 \text{ thousand.};$$

$$P_T = (185 + 146 + 154) / 3 = 161.67 \text{ thousand.};$$

$$P_H = (172 + 136 + 120) / 3 = 142.67 \text{ thousand.};$$

$$P_D = (115 + 185 + 150) / 3 = 150 \text{ thousand.};$$

$$P_E = (110 + 130 + 150) / 3 = 130 \text{ thousand.}$$

Table 2 - Results of the calculation method of the main index

Strategy	A	B	In	D	D	E
Profit thousand.	156.83	173.33	161.67	142.67	150	130

These data show that the most appropriate strategy is option B, then B, A, D, G, E, respectively.

Determine the optimal strategy selection method resulting multiplicative index. For ease of analysis results in Table 3 post.

$$P_A = (120.5 * 0.45 + 200 * 0.28 + 150 * 0.27) / 150 = 150.63 \text{ thousand.};$$

$$P_B = (150 * 0.40 + 200 * 0.40 + 170 * 0.20) / 150 = 174.00 \text{ thousand.};$$

$$P_T = (185 * 0.30 + 146 * 0.25 + 154 * 0.45) / 150 = 161.27 \text{ thousand.};$$

$$P_H = (172 * 0.37 + 136 * 0.21 + 120 * 0.43) / 150 = 142.37 \text{ thousand.};$$

$$P_D = (115 * 0.47 + 185 * 0.17 + 150 * 0.36) / 150 = 139.27 \text{ thousand.};$$

$$P_E = (110 * 0.54 + 130 * 0.10 + 150 * 0.36) / 150 = 126.40 \text{ thousand.}$$

Table 3 - Results of the calculation method of the resulting multiplicative index

Strategy	A	B	In	D	D	E
Profit thousand.	150.63	174.00	161.27	142.37	139.27	126.40

Compare the results of the evaluation of each of the chosen methods and the results are summarized in Table 4

Table 4 - Comparison of estimates

Strategy	Statistical method for assessing	Method main index	The method of the resulting index	Mean	The maximum deviation from the mean	The relative deviation
A	150.63	156.83	150.63	152.70	4.13	2.71
B	174	173.33	174	173.78	0.22	0.13
In	161.27	161.67	161.27	161.40	0.27	0.17
D	142.37	142.67	142.37	142.47	0.20	0.14
D	139.27	150	139.27	142.85	7.15	5.01
E	126.4	130	126.4	127.60	2.40	1.88

As shown in Table 4, the methods give approximately the same assessment to select option strategies. The relative deviation does not exceed 5% of the mean yield strategy. This suggests that mathematical methods allow a sufficiently high accuracy to justify the choice of strategy and risk to calculate income or loss when choosing the appropriate strategy. The main problem is not the choice of mathematical tools and estimate the amount of risk that is the essence of strategy formation mechanism of prediction and prevention of the onset of most cases of risk, which is a type of informal tasks.

Conclusions As shown by studies, the main objective in assessing the riskiness of bank activity is not the definition of the type, quality and quantity of risk, namely its choice of strategy to minimize the problem of materiality of the risk and the adequacy of its evaluation.

Mathematical methods allow a sufficiently high accuracy to justify the choice of strategy and risk to calculate income or loss when choosing the appropriate strategy. The main problem is not the choice of mathematical tools and estimate the amount of risk that is the essence of strategy formation mechanism of prediction and prevention of the onset of most cases of risk, which is a type of informal tasks.

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R.G. Snishchenko, PhD, Associate Professor of the Finances and Credit Department, Kremenchug Mykhailo Ostrohradsky National University. **Mathematical methods of risks research.** The author's definition of risk is presented, the principles features are determined, classification of mathematical methods of risks research is displayed, the most widespread mathematical methods for choice of estimation strategies determining the risk impact on economic activities are studied.

Keywords: risk, research methods, estimation strategy.