

## Sustainable Development: Social and Economic Changes



Edited by dr Wojciech Duczmal dr Tadeusz Pokusa dr Larysa Stepanenko

Opole 2016

# THE ACADEMY OF MANAGEMENT AND ADMINISTRATION IN OPOLE

# SUSTAINABLE DEVELOPMENT: SOCIAL AND ECONOMIC CHANGES

Edited by dr Wojciech Duczmal dr Tadeusz Pokusa dr Larysa Stepanenko

Monograph

Publishing House WSZiA

*Opole* 2016

Sustainable Development: Social and Economic Changes. *Monograph*. Opole: The Academy of Management and Administration in Opole, 2016; ISBN 978 – 83 – 62683 – 85 – 7 (Paper); pp.436, illus., tabs., bibls.

#### Reviewers

prof. dr hab. Ryszard Broszkiewicz prof. dr hab. Petro Zamiatin dr Iryna Ostopolets

#### **Editorial Board**

Marian Duczmal (Chairman)
Józef Kaczmarek
Franciszek Antoni Marek
Tetyana Nestorenko
Tadeusz Pokusa
Witold Potwora (Deputy chairman)
Larysa Stepanenko

The authors bear full responsible for the text, quotations and illustrations.

#### **Publishing House:**

Wyższa Szkoła Zarządzania i Administracji w Opolu 45-085 Polska, Opole, ul. Niedziałkowskego 18 tel. 77 402-19-00/01

300 copies

©Authors of articles, 2016 © Publishing House WSZiA, 2016

### **TABLE OF CONTENTS:**

Introduction	6
Part 1. Economic aspects of the transition to sustainable development	7
1.1. Spatial concentration areas of sustainable agriculture – the economic aspect.	7
1.2. Transport strategy in the concept of sustainable	14
1.3. Monitoring of region sustainable development economic indicators	24
1.4. The role of foreign trade in the development of commodity circulation sphere in Ukraine	29
1.5. The role of the solar power industry in sustainable development of society	36
1.6. Trust as an economic factor of sustainable development	42
1.7. Formation of the legal economy in Ukraine as one of the preconditions for sustainable development	47
1.8. Ensuring sustainable development in Ukraine by valuation and capitalization of natural resources	53
1.9. Decentralization in Slovakia is positive experience for Ukraine	59
1.10. Essence, types and evaluation indicators of the company economic development	65
1.11. Sectorial aspects of sustainable development of the Ukrainian economy	72
1.12. Innovation in the field of postal services Ukraine based on international experience	78
Part 2. Stability of the national economy development: problems and	86
solutions	
2.1. The directions of evolution of intermodal transport as a manifestation of sustainable development	86
2.2. The influence of the commercial and marketing factors of the motor vehicles exchange on the logistics management in transport enterprises	94
2.3. High-technology project management in the field of nanobiotechnologies, as a conscious mechanism to ensure sustainable society development	105
2.4. The role of health care in reproduction of intellectual capital	111
2.5. Energy strategy as foundation for sustainable economic development	118
2.6. Theoretical and applied aspects development of tourism in Ukraine	125
2.7. To the question about the problems and prospects of labour market	134
development in Russia in the context of import substitution	
2.8. Computable sociodynamics	141
2.9. Regional sustainable development strategy: theoretical essence and feature definition	146

4. Зниження дефіциту мікронутриєнтів в раціоні населення, які організм людини не синтезує, але потребує щоденно, шляхом прямої фортифікації продуктів харчування.

В цілому, використання досягнень нанотехнологій відкриваєширокі можливостістворення комплексного підходу до забезпечення якостіпроцесів всього біологічного ланцюга, починаючи від середовища проживання та здатного впливати на причини підвищення захисних та адаптивних функцій організму. В свою чергу це має великі медико-соціальні, екологічні та економічні перспективи.

#### Литература

- 1. Линник В. А. Пятый международный симпозиум FESTEM импульс к возрождению научной школы микроэлементологии Украины / Линник В. А., Каплуненко В. Г., Любимая Ю. А // Микроэлементы в медицине. 2014. № 15 (1). С. 40-44.
- 2. Нанобіотехнології мікронутрієнтів: питання безпечності та біотичності наноматеріалів при виробництві харчових продуктів/ А. М.Сердюк, М. П. Гуліч, В.Г.Каплуненко, М. В. Косінов [Электронный ресурс]. Режим доступа: http://archive.nbuv.gov.ua/portal/chem\_biol/jamn/2010\_1/Serdiuk.pdf.
- 3. Коденцова В. М., Вржесинская О. А. Пищевые продукты, обогащенные витаминами и минеральными веществами: их роль в обеспечении организма микронутриентами // Вопросы питания. -2008. -77, № 4. C. 16-25.
- 4. Сердюк А. М. Нанотехнології мікронутрієнтів: питання безпечності та біотичностінаноматеріалів при виробництві харчових продуктів / А. М. Сердюк, М. П. Гулич, В. Г. Каплуненко, М. В. Косинов // Журн. АМН України. 2010. Т. 16, No 3. С. 467-473.

#### 2.4. The role of health care in reproduction of intellectual capital

Accelerated growth rate of intangible economy in comparison with material production is a world trend of post-industrial development. Domination of service industry, wide expansion of IT into economic activity, leading role of human and intellectual capital are the main features and sources of economic development and increasing of global competitiveness of a country. Under these conditions, the topicality of scientific investigations related to the pillars of intellectual capital's development increases, including health care.

Health is the main subject of studying for the scholars of different fields: medics, philosophers, lawyers, and psychologists. Genetics mostly concentrate the attention on the research of health hereditary factors, and sure that human being gets it like a "gift of grace", effortlessly. Lawyers try to formalize the conditions and develop effective state policy in sphere of health care. Economic literature focuses on the limited funding of this sphere, non-productive expenses and other imperfections of the system. Economists offer methods of attraction of additional money for the development of health care and effectiveness of their use. These problems are searched by Ukrainian

scholars, such as L. Beztelesna, I. Kutsenko, E. Libanova, Z. Lobodina, N. Machuga, V. Novykov, O. Novykova, Ya. Ostafiichuk, and O. Portnaya. They investigate human health and health care like a result of state social policy.

The main aim of this article is the analysis of the role of health care in economic growth through the qualitative reconstruction of intellectual capital.

Health is a social-economic good. It is an economical one, because it needs in labour expenditure (in comparison with natural free goods). They are connected with diseases' prevention and right stile of life; with direct cost of treatment and opportunity cost through the loss of human ability to work. Health is a social good because it cannot be separated from the human being, who is a social creature. Intensive communication with other people and social networks affect human lifestyle (the best example is the alcohol and tobacco consumption by teenagers, who are following their closest friends). Social condition is providing constitutional rights to equal access of all citizens to qualitative healthcare in spite on the paying capacity. Vaccination and fluorography has social effect as the barriers for widening of infectious diseases in society.

Health is both an intermediate and final investment good. As a final good it provides welfare and human security, liberates an individual, and makes him/her active in cognizing of the out-world. Absence of adequate physical form makes this process impossible. Usually, people put their health on the top in the values' hierarchy. They consider that health is the absolute and the most important good, and without it feeling of happiness and getting of other goods impossible. Health deterioration immediately affects the quality and duration of life. In the UN Human Development Report 2015, according to index of Human life expectancy at birth Ukraine took 124<sup>th</sup> place, following after Iraq, North Korea, Bangladesh, Honduras, and Samoa [1]. It could be explained by diseases and the excess of deaths over births. E.g., in 2015 it was 183 012 people [2].

As an intermediate investment good health forms pre-conditions for qualitative and stable reconstruction of intellectual capital and active individual's economical self-realization. In this case, human being is an active participant of creativity in sphere of production of material and non-material goods under scarce resources, he/she is not a passive consumer, who is satisfying own needs in the keeping fit and life at the appropriate level along with the other commodities and services. According to American researchers the reduction in mortality from heart and cancer on 10% gives and economical effect 3 and 4 trillion dollars [3]. Absenteeism of employees to work in European countries accounts from 3 up to 6% of time, leaving the labour market because of health problems or death rate is about 10% of people [4, p. 27]. Depression, locomotorium diseases, unhealthy way of life (obesity and physical passiveness) are the additional points, caused the reducing of workers' productivity. They need medical aid. The USA pressed for the improvement of citizen's health in 20<sup>th</sup> century, and it nearly doubled an economical growth [3].

On the contrary, unhealthy population increases public health expenditures and their alternative use in other spheres is reducing (e.g. in education, which is the ground new economics or economics of knowledge). Business suffers because of that: sicknesses and diseases of employees reduce benefits and productivity and quality of intellectual potential. The availability and high quality of medical services is an important factor in attracting of high- qualified specialists, scholars, entrepreneurs, and an obstacle for brain drain.

Intermediate and final tasks of health are connected, because the investment functions of human and intellectual capital impossible without adequate physical and social status of the individual. It is the sphere of interest for society, state, and companies because it helps to increase social and economic efficiency at the macro level. Cameralists, German contemporaries of Physiocrats and Adam Smith, considered that public health and positive demographic rates were the source of state's wealth. Nowadays, public health approaches to macroeconomic category, along with national wealth, national income, quality of life, educational level of the population. This process accelerates the rapid development of the intangible economy, its transformation factor in the national competitiveness. Modern economists underline that democratization of health care and its total guaranteed availability as an economical and social imperative of post-industrial economics.

However, post-industrial civilization differ risk of sickness rate as a result of intensive intellectual activity, hypodynamia, computer addiction and excessive consumption of material goods. According to World Health Organization's researches, among the leading behavioral and psychological risk factors related to mortality globally are: high blood pressure (13% of mortality), followed by tobacco incense (9%), high blood sugar (6%), physical inactivity (6%), and overweight or obesity (5%) [5]. A definite contribution to the incidence submit information technologies: they change the nature of production, programming the mind and way of life that is becoming more dynamic. Perception and processing of vast flow of information, removal of restrictions of informal working day, constant innovations, and erosion of traditional hierarchy of management system, making many decisions on-line, mentally overload the people. Separation of information and financial services from the real economy reconstructs a virtual and fictitious capital, provokes crisis, shrinking tax revenues to the public budget, making difficult to finance health care.

Poverty and unstable economical and political development negatively influence on the public health. According to data of WHO, more than two thirds of deaths from cancer registered in low- and middle-income countries, particularly in Ukraine [5]. Uncertainty affects individuals unable to adapt to the radical changes, and as a result they have psychic diseases or suicide. Clan-oligarchic system, strong stratification of population according to the level of life, endless redistribution of property, and long-term unemployment and poverty are undermining public health in Ukraine.

Table 1. Sickness rate of Ukrainian population (number of first registered cases of diseases, thousands) [2]

	Cancer	Blood system diseases	Skin and subcuta- neous fat diseases	Diseases of the musculo-skeletal system and connective tissue	Diseases of the genito- urinary system	Congenital anomalies (mal- formations), deformations and chromosomal abnormalities
1990	310	1149	1799	1374	1224	41
2000	382	2338	1996	1571	1939	62
2010	418	2390	1921	1532	2138	52
2013	440	2256	1856	1444	2046	55

Given table demonstrates the consistent growth of diseases from 1990 up to 2013: cancer by 42%; skin and subcutaneous fat diseases by 3,1%; diseases of the musculoskeletal system and connective tissue by Ha 5,1%; diseases of the genitourinary system by 67,1%; and blood system diseases doubled. Age of people with cardiovascular diseases significantly reduced and covering youth. Consequently, there is a danger to normal reconstruction of intellectual human resources.

HIV / AIDS are the real danger for young Ukrainians. We have to remember that they are the part of population, which is the main holder of intellectual capital. In Ukraine, in 1987-2015 officially registered 280 297 new cases of HIV-infection, and 38 128 people died from AIDS in Ukraine [6]. AIDS very often appears with Tuberculosis, and the most patients die very quickly. Ukraine has the one of the highest Tuberculosis mortality levels in European region. A definite number of diseases related to the alcohol consumption. After WHO data, Ukraine sat 6<sup>th</sup> place in the world in this field, there are 13,9 liters of spirit on each Ukrainian per year (17,5 liters in Belarus; 16,8 liters in Moldova, 15,4 liters in Lithuania, 15,1 liters in Russia, and 14,4 liters in Romania) [5].

Poor health of Ukrainian citizens is exacerbated with the economical crisis and military conflict in Donbas. The monitoring mission of the United Nations on human rights in Ukraine estimated 9167 of dead people in the course of this conflict, and 21,044 have been injured. A big number of wounded or maimed has lengthy mental health. At uncontrolled territory there are unsanitary conditions, which could trigger a surge of infections. Absence of clean water, improper handling of corpses, irregular removal of rubbish, lack of fresh food, problems with heating and electricity will have inevitable negative consequences.

So, we have to underline that diseases and unhealthy lifestyle reduce the chances for reconstruction of intellectual capital. Qualitative medicine helps to eliminate pathologies from human body, maintaining of physical and intellectual capacity for work, their mental endurance and ability to research work. It acts indirectly and

guarantees progressive restructuring of national economy for the tertiary sector. People's knowledge and their high qualification are the driving mechanism of this process. These externalities along with positive side effect from the treatment of infectious diseases caused the importance of state in health care. Private health market does not reproduct externalities it, backward, encourages the formation of inequality in access of citizens to them. In one's turn, government also has imperfections, which we can mention in excessive counter-productive administration. State hierarchy and bureaucracy often hamper providing of important initiatives to realization. Sometimes excessive state paternalism affects dependency. Even an ideal state sometimes cannot identify and satisfy in optimal way increasing needs of the population in improving of human health or foresee all consequences of the adopted decisions. Non-commercial non-governmental medical organizations have to help the state bodies. They really need it. Giving the priority to the legal basis or a private medicine is a matter of political choice.

Reformation of health care in Ukraine has to take into account world's trends and globalization. The first one is a continued accelerated growth of average cost of health care in comparison to their growth in other industries. After OECP data, total health expenditure per capita increased in 1981–2013 (in dollars) in Germany, Canada, Netherlands, Great Britain, the USA, Ireland, Spain, Norway, Portugal respectively in 4,5; 4,9; 6,4; 6,7; 6,8; 7,6; 8,0; 8,2 times. This indicator in 2013 in countriesmembers of OECP on the average was 3452,7 \$ [7]. According to analysts of the European Commission, the share of health expenditure in GDP in 27 EU states also increased from 7,3% in 2010 up to 8,4% in 2045, in fact on 15% [8].

This trend has some objective factors: further democratization of society, attention to human rights realization, and also increasing of its role in creation of non-material component of GDP, technological progress and the introduction of expensive medical technologies; rising costs for developing of new drugs; human growing expectations for higher quality and number of medical services; an aging of population. To side factors of steady growth of average cost of health care we can include aggressive marketing of pharmaceutical monopolies; asymmetry of information for patients who have no medical training, and the appointment of additional, unnecessary procedures. All these phenomena cause long debates in scientific community on the coordination of macroeconomic policy and urge developed countries for strategy of cost health care containment for a long period of time.

The risks of increasing of non-health care expenditures for Ukraine is a challenge, because our public health resources are very limited. WHO encourages governments to direct to the industry 6-8% of GDP for normal reproduction of vital activity of the population. This indicator in Ukraine before 2015 varied at the level of 3,5-3,8%, last year it decreased to critical point 3%.

Non-reformed system of public health in Ukraine preserved command and administrative type of management and this is a real problem. It is cumbersome, monopolized, and corrupted. Its hierarchy is in contradiction to the market surrounding, had been formed in Ukraine since 1991. As a result we have creeping uncontrolled "entry" of market into health care through the informal payments to doctors, and their handling by public factors of production as private property objects.

Decentralization is a dominative trend of world development and we can mention such tendencies in Ukraine. However, here there is uneven distribution of budget money between regions for national health care programs; underfunding of medical institutions from local budgets; regional differentiation of remuneration of medical personnel; disparity reduction of the staff without taking into account the demographic situation in the region. Regional policy in the health sector requires fundamental changes.

There is dis-balance between primary segment of medicine (local therapists, pediatricians, and family doctors), secondary ones (hospitals), and high specialized one, mostly for hospitals. Moreover, the level of unreasonable hospitalization of population is about extremely high, almost 70%. However, the segment of medical institutions is the most expensive one, because of the operation of equipment and high asymmetry of information on quality of services of narrow specialists, which artificially increases the expenses.

The world trend for the structural reconstruction of health care in Ukraine is realizing, but in a very contradictive way. The main drawback of it are that: copying of European practice without taking into account domestic specific (distances between the location of family physicians, on the one hand, and hospitals and laboratories of clinical analysis, on the other hand, the unjustified closure of hospitals in a very remote areas, poor roads for ambulance cars or their absence, the shadow economy); minimal impact on the reform of physicians and patients, maximum one is influence of bureaucracy. Sorely lacking of modern managers and family physicians, they treat only the part of urban population.

Non-effective structure of health care and shadow economy for a long time had slowed the introduction of mandatory health insurance. It is the condition for the realization of article 49 of Ukrainian Constitution about free medical care, because it increases the amount of necessary for medicine resources, minimizes risks of unforeseen costs for sick people, excluding cases of denial of treatment. Insurance coverage helps to reduce regressive health care funding, when poor people get sick more often, pay a larger share of their income on treatment than wealthy people. It is very important for Ukraine, where the decile coefficient, which reflects the degree of inequality in society, based on indirect estimates, is about 30 : 1. Insurance funds control standards of equality of diagnostics and treatment and stimulate an effective management. Ukraine needs social health insurance medicine.

Thus, the state that reflects national interests has to pay more attention for the development of health care from the viewpoint of human capital reproduction, rate of intellectual work and active social-economic self-realization of the individual. The main ways of improving health care in Ukraine are related to the effective use of scarce public resources and coincide with global trends. They include: fiscal decentralization, innovative development, effective structural-technological restructuring of health care system, widening of functions of medical establishments in making of financial and administrative decisions, diversification of financial sources of their activity, the development of contractual relations with the local administration and organization of competition for governmental contracts.

All state medical establishments have to become providers of qualitative reforms, introducing technological and management innovations. Nowadays the most urgent task for Ukraine is reducing the shadow economy in general, and in sphere of health care, in particular; the combination of economic interests of society, physicians, hospitals and government in the introduction of mandatory health insurance. The development of civil control over national economics, activation of non-governmental non-profit sector, directed on satisfaction of social needs is one of the ways of health care perfection. An improvement of public health in Ukraine, its influence on the quality of intellectual resources is connected with the reformation of many sectors of national economics, not just public health. It is necessary to increase the level and quality of life for the population, to create proper working conditions and pure environment, promotion of healthy lifestyle. In the complex it will help to achieve the goal of formation of high-quality intellectual capital of society.

#### References

- 1. Human development report 2015 [Electronic resource]. Access regime: http://hdr.undp.org/sites/default/files/hdr15\_standalone\_overview\_ru.pdf.
- 2. State Statistics Service of Ukraine [Electronic resource]. Access regime http://www.ukrstat.gov.ua.
- 3. Health and Economic Development / New York Academy of Medicine, August 2011 [Electronic resource]. Access regime: http://www.nyam.org/dashny/pdfs/NYAM\_HealthEcoDev\_1.pdf.
- 4. Coggi P. T. Investing in Health: a European Commission Perspective [Text] / P. T.Coggi,
- B. Hackbart // Eurohealth. 2013. Vol. 19. № 3. P. 26-28.
- 5. World health statistics 2012 [Electronic resource]. Access regime: http://apps.who.int/iris/bitstream/10665/44844/8/9789244564448\_rus.pdf.
- 6. СПИД в Украине. Статистика [Electronic resource]. Access regime: http://www.antiaids.org/news/aids\_stat/spid-v-ukraine-statistika-na-01012016-10757.html.
- 7. OECD. Data. Health resources [Electronic resource]. Access regime: https://data.oecd.org/healthres/health-spending.htm.
- 8. European Commission and EPC. The 2012 Ageing Report: Economic and Budgetary projections for the 27 EU Member States (2010-2060). Brussels: European Union, 2012 [Electronic resource]. Access regime: http://ec.europa.eu/economy\_finance/publications/european\_economy/2012/pdf/ee-2012-2\_en.pdf.

# 2.2. Reiss Ferdynand. The influence of the commercial and marketing factors of the motor vehicles exchange on the logistics management in transport enterprises.

The article presents the issues concerning the influence of the commercial and marketing determinants on the logistics management in road transport enterprises in the aspect of their exchange. It is very important from the perspective of the issues concerning the sustainable development rules.

# 2.3. Kalnichenko Olena, Liubyma Iuliia. High-technology project management in the field of nanobiotechnologies, as a conscious mechanism to ensure sustainable society development.

This article is dedicated to high-technology innovative project management, that aims to create unique products for disease prevention and improvement of human health and environment. The basic aspects that determine the causes of deterioration of the general population status are studied in the article. In the article high light unpromising directions of nanobiotechnologies application to create an integrated approach that opens possibilities to in fluency there as on store duce protective and adaptive functions of organism by means of extensive burden diminution on the ecosystem and food quality improvement.

#### 2.4. Kaminska Tetiana. The role of health care in reproduction of intellectual capital.

The main aim of this article is the analysis of the role of health care in economic growth through the qualitative reconstruction of intellectual capital. The article is devoted to the intermediate and final role of health as a social and economic good. Author investigates social conditions in providing of constitutional rights to equal access of all citizens to qualitative health care in spite on the paying capacity. The level of health and sickness rate and their influence on the intellectual activity of citizens are presented. Author suggests ways for the reformation of health care in Ukraine.

# 2.5. Klopov Ivan. Energy strategy as foundation for sustainable economic development. Scientific justified and accepted by society and the institutions of government long-term energy policy is needed to ensure a stable global economy and the world's population with energy. The basis of the energy strategy must be based on global energy strategy, national energy policy and energy strategies of enterprises. There is a problem identifying priority ideas regions of the world energy strategies and improving Ukraine's energy strategy based on international experience. The article analyzes the content and outcomes of modern European energy policy. Identified deficiencies Ukraine's energy

# 2.6. Kozhukhovskaya Raisa. Theoretical and applied aspects development of tourism in Ukraine.

policy and proposed solutions.

The study is the analysis of the economic situation in Ukrainian tourism industry based on inbound and outbound tourism. During the research the author analyzes the dynamics of tourist flows, as well as selected elements, functions and factors influencing the development of the tourism industry. The principles of the state policy for tourism development in Ukraine and ways of its implementation are generalized.

# 2.7. Kolesnik Elena. To the question about the problems and prospects of labour market development in Russia in the context of import substitution.

The article is devoted to consideration of issues concerning the peculiarities of the implementation in the Russian Federation the policy of import substitution were the main factors that have a direct impact on the formation, functioning and development of the labour market in import-substituting production. The proposals developed will

- 1.11. Zhylinska Oksana Doctor of Economic Sciences, Associate Professor, Taras Shevchenko National University of Kyiv, Ukraine,
   Andrusiak Iryna PhD Student, Taras Shevchenko National University of Kyiv,
  - Ukraine
- **1.12. Zadorozhnyuk Natalia** PhD in Economics, Associate Professor, Odessa National Polytechnic University, Ukraine,

**Maslii Natalia** – PhD in Economics, Associate Professor, Odessa National Polytechnic University, Ukraine.

#### Part 2. Stability of the national economy development: problems and solutions

- **2.1. Pokusa Tadeusz** PhD, Academy of Management and Administration in Opole, Republic of Poland
- **2.2. Reiss Ferdynand** Academy of Management and Administration in Opole, Republic of Poland
- 2.3. Kalnichenko Olena PhD in Technical Sciences, Taras Shevchenko Kyiv National University, Ukraine,
  Liubyma Iuliia PhD Candidate, University of Economics and Law KROK, Ukraine
- **2.4.** Kaminska Tetiana Doctor of Economic Sciences, Professor, Yaroslav Mudryi National Law University, Department of Economic Theory, Ukraine
- **2.5. Klopov Ivan** PhD in Economics, Associate Professor, Donbass State Engineering Academy, Ukraine
- **2.6. Kozhukhovskaya Raisa** PhD in Economics, Associate Professor, Uman State Pedagogical University named after Pavlo Tychyna, Ukraine
- **2.7. Kolesnik Elena** Candidate of Economic Sciences, Associate Professor, Tyumen Industrial University, Russia
- **2.8. Kolyada Yuriy** Doctor of Sciences, Kyiv National Economic University named after Vadym Hetman, Ukraine,
  - **Tukalo Vitaliy** PhD Candidate, Graduate School for Social Research, Polish Academy of Sciences, Republic of Poland
- **2.9. Komirna Vitalina** Doctor of Economic Sciences, Associate Professor, Ukrainian State University of Chemical Technology, Ukraine,
  - **Ganzhela Inna** Lecturer, Ukrainian State University of Chemical Technology, Ukraine
- **2.10. Krutogorskij Jaroslav** PhD student, SHEI "Donbass State Pedagogical University", Ukraine
- **2.11.** Lyzanets Anzhela PhD in Economics, Associate Professor, Mukachevo State University, Ukraine,
  - Musatkina Victoria Mukachevo State University, Ukraine
- **2.12. Mandych Olexandra** PhD in Economics, Associate Professor, Kharkiv National Technical University of Agriculture named after Petro Vasilenko, Ukraine.