

INNOVATIVE EMPLOYMENT IN THE STRUCTURE OF THE MODERN LABOR MARKET

Larysa Shaulska

*Vasyl' Stus Donetsk National University,
Faculty of Economics,
Department of Management and Behavioral Economics,
st 600-richchia, Vinnytsia, 21021, Ukraine
l.shaulska@donnu.edu.ua*

&

Nataliia Yakymova

*Vasyl' Stus Donetsk National University,
Faculty of Economics,
Department of Management and Behavioral Economics,
st 600-richchia, Vinnytsia, 21021, Ukraine
n.yakimova@donnu.edu.ua*

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Mariia Krymova

*Ptoukha Institute for Demography and Social Studies
National Academy of Sciences of Ukraine
Department of Employment Risk Research
Shevchenko blvd., 60, Kyiv, 01032, Ukraine
mariya.krymova@gmail.com*

Abstract

The article explores the specificities and common features of development of modern labor markets of Ukraine and Poland and determines that the expansion of the innovative type of employment is a productive solution of typical problems. The theoretical and methodological approach to identification of features, scales and intensity of the expansion of innovative forms of employment, which includes: systematization of criteria of attribution to innovative employment; a comprehensive system of innovative employment indicators; grouping of factors of priority influence

on the nature of employment and expansion of employment of the innovative type; analysis of the current situation on the labor market and forecasting of transformational shifts for timely identification of innovative forms of employment with the aim of scaling and sufficient regulation, is substantiated. In modern conditions of development of national economies there is an obvious tendency of gradual decrease of the employment rate of the population in the production and services sectors, instead of the significant increase of the employment level in the knowledge sector.

Key words: *transformation of employment, innovation employment, innovative types and forms, the algorithm determining factors and characteristics, system of indicators, forecasting, monitoring*

INTRODUCTION

Under today's conditions of development of the national economy, tendencies of a gradual decline in the level of employment in the manufacturing sector and, conversely, a significant increase in the level of employment in the service sector are becoming more and more visible. The above changes lead to changes in the structure and nature of employment, which greatly affect the state of the labor market and form new trends in its transformation. The structural changes taking place in the modern economy have certain regularities, namely: an increase in the share of high-tech manufacturing, telecommunications, financial and business services; emergence of new technological processes, usage of new technology, new types of raw materials and the production of new types of products; decrease in the share of the manufacturing sector and the growth of the service sector, deconcentration of industrial production, and shift in its sectoral structure. They form the strategic sectors of the national economy at the present stage of development, and are also the main causes of changes in the structure of employment in the labor market. Problems of employment are the subject of research by many scholars. Characteristics of the nature and role of employment in the economy can be found in the writings of A. Smith, D. Ricardo, T. Malthus, J.-B. Say, J. St. Mill, K. Marx, A. Marshall. Problems of the functioning of the labor market, employment and unemployment are investigated in works by L. Walras, J. M. Keynes, A. Phillips, M. Friedman, T. Veblen, J. Galbraith. Significant contribution to economic research of employment in Ukraine and the countries of Eastern Europe was made by M. Beblavi, L. Beztelesna, K. Bendukidze, O. Grishnova, E. Libanova, L. Lisogor, M. Mahay, K. Oblouy, V. Onyienko, M. Svenchytsky, M. Shalenko, G. Schleifer, I. Stefanets and others. At the same time, the problem of identifying innovative types and forms of employment is pending and requires the development of effective tools and regulatory methods that should become the basis for providing a professional qualification balance in the labor market.

PRESENTATION OF THE MAIN RESEARCH MATERIAL

The modern realities of the development of the European Union countries show the existing sustainable tendencies to expansion of the creative sector of economies, an increasing part of the gross domestic product is responsibility of innovative sectors, the main resources of that are man and his mind. There is an active rebuilding of the

labor market structure, and the number of people employed in industry and services is gradually decreasing in favour of an increase in science, education and information technology. These trends are most evident in the developed countries of Western Europe - Switzerland, Sweden, Netherlands, United Kingdom, Denmark, Belgium, Finland and Norway (the share of the employed in the quaternary sector of economy in these countries is more than 20%). The countries of Central Europe, which demonstrate more moderate progress in the development of innovation and the expansion of innovative employment, in particular Poland and Ukraine, are not left aside of these processes. Thus, over the last ten years the share of employed Poles in the quaternary sector of the economy grew on 2% and runs as high as 15.8%. In Ukraine, these rates are less slow, an increase equals 1.2% and specific gravity of 13%, with the EU average in 19% [Eurostat 2019].

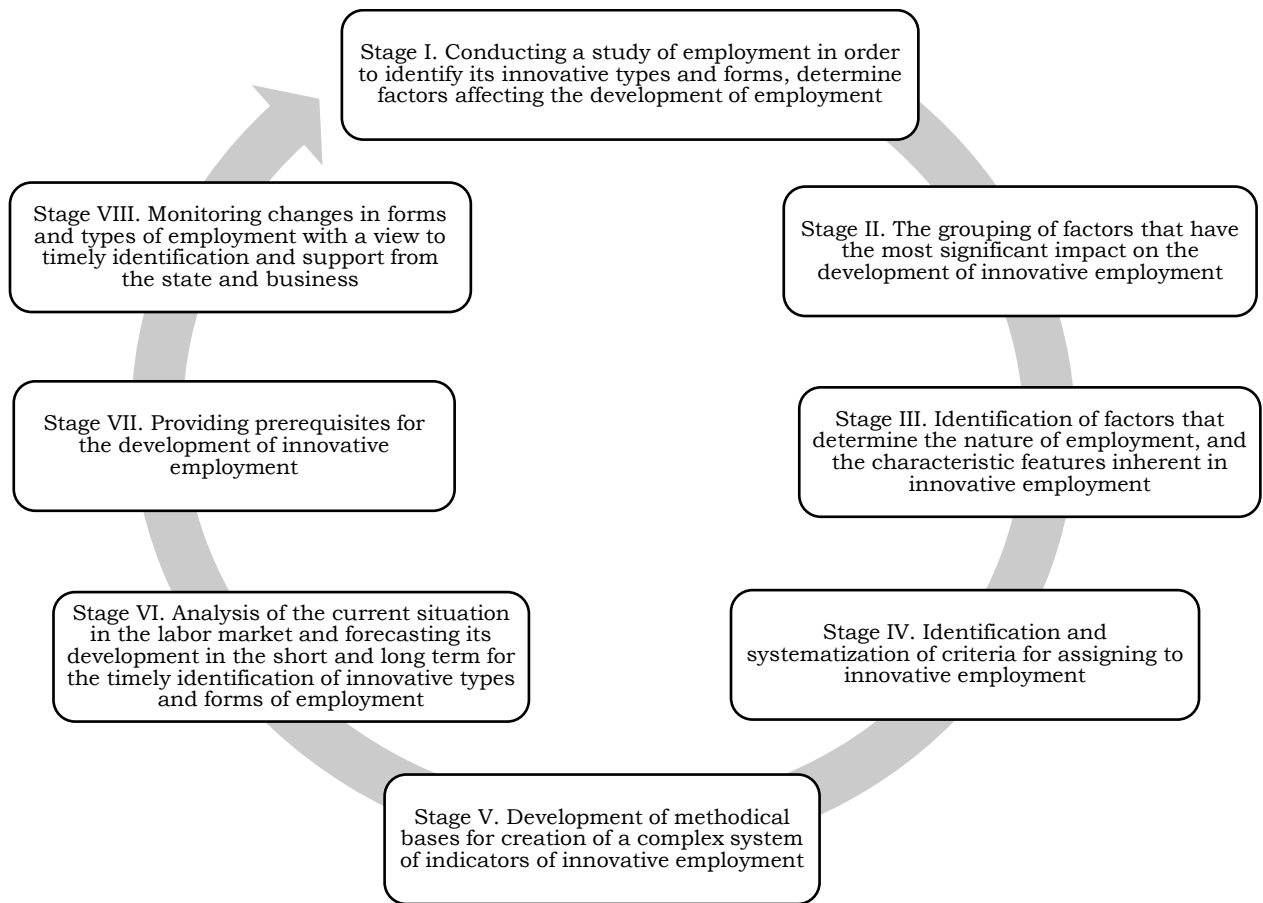
In general, the labor markets of Poland and Ukraine are similar in type and nature of problems and challenges. Typical common problems are: a gradual increase in the average age of the economically active population, characterized by negative indicators of natural reproduction of the population and an increase in life expectancy.

There is a constant outflow of highly skilled workforce (Polish workers are traveling extensively to Germany, Belgium, Sweden, Ukrainians - to Poland, Slovenia, Italy and the Czech Republic) in order to find a higher level of earnings and job prospects. The deficit of highly skilled workers, which has arisen on a background migratory processes and also unwillingness of young people to get unprestige in society professions, is urgent [Buerger, Broekel and Coad 2012]. There is a low level of economic activity and motivation to learning among the younger generation, which is not interested in working in the current employment conditions and needs more flexible and remote forms of work. A lag of level of competence of current and perspective workers from the requirements of workplaces, which are under act of the growing technological changes related with introduction of innovations, is also encountered.

All this intensifies the necessity of search of approaches of adjusting of public policy toward the diffusion and promotion of the transition to innovative types and forms of employment that can partially solve the current problems in this sphere. That is why the identification of new features of the employment sector and the definition of prospects of its regulation is relevant and needs more detailed study. Based on the theoretical and applied research, it is advisable to propose the following algorithm of determining innovative types and forms of employment (Fig. 1).

Stage I. Conducting a study of employment in order to identify its innovative types and forms, determine factors affecting the development of employment.

The structural changes taking place in the modern economy have certain regularities, namely: the increase in the share of high-tech manufacturing, telecommunications, financial and business services; emergence of new technological processes, usage of new technologies, new types of raw materials and the production of new types of goods; decrease in the share of the manufacturing sector and the growth of the service sector, deconcentration of industrial production, and shift in its sectoral structure. They form the strategic sectors of national economies at the present stage of development, and are also the main causes of global changes in the structure of employment in the labor market.

Fig. 1. Algorithm of determination of innovative types and forms of employment

Source: Author's own processing.

Changes in the structure and forms of employment affect the value system of a modern employee and deepen differentiation in the labor market. Informatization and intellectualization of the economy requires highly educated, highly skilled workers with a high communicative potential, able to produce new knowledge, ideas, methods and capable of learning, endowed with critical thinking, ready to change, free from stereotypes, endowed with such features of character as: purposefulness, perseverance, responsibility, discipline, innovation, adaptability, self-control, resistance to neuro-psychological overloads, high level of efficiency.

Stage II. The grouping of factors that have the most significant impact on the development of innovative employment.

An important methodological task is to determine the factors influencing the process of development of innovative employment and their classification as stimulators and disintegrators, taking into account that the forms and proportions of employment are dynamic, they change under the influence of many macro-, meso- and microeconomic parameters. Based on the research of scientific works it is expedient to distinguish the following groups of factors that have the most significant impact on the development of innovative employment: socio-economic, political-legal, industrial, cultural and institutional.

Socio-economic factors are economic reforms, leading to changes in socio-economic condition of the state, the presence of the shadow economy, economic activity, providing the supply of labor resources in the labor market. The group of socio-economic factors includes: general socio-economic conditions, quality of life, working conditions, material conditions and level of social protection, etc.

Political and legal factors influencing the innovative employment, regulate the legal aspects of employment and labor resource utilization, encourage entrepreneurs to create innovative jobs. These factors influence internal and foreign political stability, the main priorities of state development. The group of political and legal factors should include public administration, social, labor rights and guarantees that characterize the level of observance of rights and safeguards established by law.

Cultural factors are based on the general level of culture and mental characteristics of the population and appear as the labor potential of the population, the culture of work and employment behavior. Readiness for innovation, initiative, creative work, and desire to raise the vocational and educational level should characterize the labor mentality and be characteristic of modern workers.

Production factors affect employment through innovative industrial economic structure, its change and development and through innovative processes in enterprises. *Institutional factors* affect employment through the regulation of social institutions and legal system to ensure employment issues.

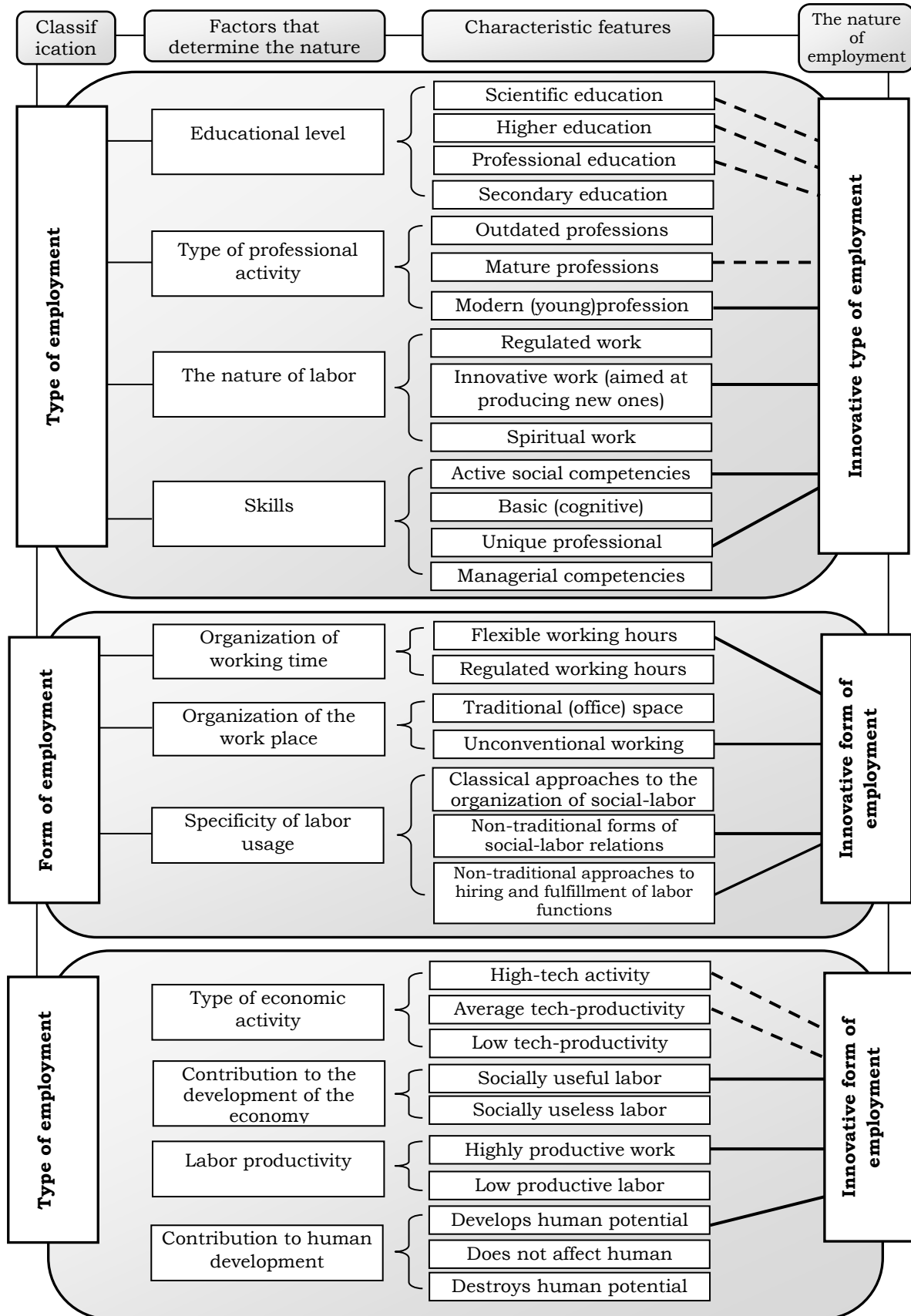
Based on the research, it is expedient to allocate legal, organizational and economic methods among the methods of regulation of innovative employment of the population. *Administrative methods* regulate the legal means that make an impact on social and labor processes in employment. *Organizational methods* of regulating employment contributes to the implementation of measures for the organization, effective management and control activities of the state towards the development of innovative employment. *Economic methods* of regulation of innovative methods of employment are a set of economic measures through which a government directly and indirectly influences social and labor processes in the workplace, contributing to significant economic results.

Stage III. Identification of factors that determine the nature of employment, and the characteristic features inherent in innovative employment (Fig. 2).

In the context of existing types, forms and types of employment, it is advisable to distinguish the following factors that determine the nature of employment, as well as the characteristic features for each factor that will determine the innovation of employment:

- for types of employment: education (science, higher, vocational or secondary education), the type of professional activity (older, mature or modern (young) profession), the nature of work (regulated, spiritual or innovative work), skills (active social, basic cognitive, unique professional or managerial competencies);
- for forms of employment: the organization of working time (flexible working hours or regulated), organization of the workplace (traditional or non-traditional office workspace), specific labor utilization (classic or innovative approaches to social and labor relations);

Fig. 2. Factors and characteristics that determine the type of employment



Source: Author's own processing.

- types of employment, economic activity (high, middle, low-tech activities), contribution to the economy (socially useful or socially useless work), productivity (high-performance or low-labor), contribution to human development (developing or destroying the human potential).

In the presence of a certain set of characteristics, it can be determined whether employment is innovative or not. For example, the type of employment in which an employee needs a high level of education, active social and unique professional competencies, in which innovative work and modern young people are present, should be considered innovative.

Stage IV. Identification and systematization of criteria for assigning to innovative employment.

At the present stage of development, the main criteria for assigning to innovative employment should be considered as follows:

functional and informative: creative nature of work; high level of intellectualization of labor, usage of the latest innovative technologies; high level of communicative (communicative potential); production of new knowledge, ideas and methods; ability to learn, self-improvement; critical thinking; readiness for change; possibility of solving problems in non-standard ways, non-standard, non-template thinking, rejection of stereotypes; adaptability (ability to adapt and adapt to modern production requirements), purposefulness, openness, mobility; competencies (adapted for innovation); degree of comfort of working conditions, possibilities of professional self-realization;

organizational and economic: increasing the share of high-tech industries, telecommunications, financial and business services; reducing the share of the manufacturing sector and the growth of the service sector; creating economic opportunities for the population through the development and implementation of economic policies aimed at developing new innovations and preserving existing jobs; dissemination of information technologies; formation of modern skills and competences in modern educational institutions of all levels of accreditation and forms of ownership, stimulation of their creativity, activity and initiative; increasing the motivation of employees to innovate labor; creating effective incentives for innovation, development of competition in the workplace; growing the needs of the economy in innovation work; growing demand for highly skilled workers in the priority sectors of the economy;

technical and technological: the emergence of new technological processes, usage of new technology, new raw materials and new products; creation of a proper material and technical base; creation of favorable conditions for the development of creative potential of all subjects of employment relations - employers, hired workers, intermediaries in the labor market; increase of state and corporate financing of innovations; increase of state investments in science and education, support of enterprises financing training and vocational retraining of employees; balanced usage of tools and tools for adjusting the employment system.

Stage V. Development of methodical bases for creation of a complex system of indicators of innovative employment.

When conducting research on innovative types and forms of employment, it is necessary not only to perform its qualitative analysis, but also to establishing relevant criteria and indicators. In modern literature, the problems of evaluating new processes in the field of employment in the transition to an innovative and creative

economy are not disclosed. Statistics record only the change in the individual proportions of the distribution of labor resources (in particular, sectoral, educational and vocational and qualification). The analysis of most radical shifts is mainly qualitative.

An analysis of forms and types of innovative employment requires the development of scientific tools that allow for a quantitative and qualitative assessment of the current state and degree of its development. It involves the development of methodological, methodical and analytical foundations for the creation of a comprehensive system of indicators of innovative employment and its effectiveness from a socio-economic point of view. In developing such a system, it is advisable to follow requirements: ensuring the flexibility, transparency and availability of indicators and indicators in relation to different measurement conditions; analysing a sufficient number of factors that determine the formation of innovative employment; developing common approaches that will provide a unified methodological basis and comparability of indicators for interstate analysis of the processes of development of innovative employment.

It should be borne in mind that it is impossible to evaluate innovative employment with any single absolute or relative indicator. A set of variables to measure the employment of an innovative type should ensure that representative results are obtained. It is interesting to distinguish the following groups of indicators:

1. Proposals for the distribution of labor resources according to participation in socially useful work, which characterizes the level of labor innovativeness and identifies the directions of ensuring full employment. It was established that the increase of the level of innovation of labor contributes to increase of incomes of the worker, payment and working conditions, quality of life, increase of free time.
2. Structure of employment by types of economic activity, characterizing innovative employment. Under the current conditions of the national economy branch structure of employment is characterized by low productivity and needs to increase employment in the service sector and science.
3. Professional qualification structure of employees, exhibiting a degree of balance and combination of abilities of individuals and society's needs for skilled workers. Detection of the vocational qualification frame structure enhances the efficiency of intellectual capacity usage and ultimately the economic and social development of society.
4. Employment rate that characterizes the dynamics of the working age population in terms of demographic, social and economic changes in society. Ways of increasing employment is the motivation of people to productive, innovative and creative work, business, state supported job creation.

An important indicator determining the types and innovative forms of employment is the employment of economically active population. The structure of social production there is characterized by a significant reduction of the proportion of material production (industry, agriculture, construction) and increase in the share of the service sector (trade, financial activities). The larger is the share of profitable and progressive economic activities, the higher the productive employment.

Exploring priorities in the field of innovation employment it is advisable to distinguish areas and indicators of determining the level of realization of economic interests in the field of employment (government, employers and workers). The indicators determining the level of realization of economic interests are the growth rate of gross

domestic product, gross domestic product at constant prices, employment, unemployment, the ratio of real wages and living wage for the employee, amount of social benefits, loss of working time, etc. The indicators determining the level of realization of the economic interests of employers are output per worker, working hours as a percentage of the fund of working time, turnover and number of employees in hazardous and dangerous working conditions and so on. The indicators determining the level of realization of the economic interests of workers are the dynamics of the average wage, ratio of the average wage and subsistence minimum level of salary arrears and so on.

Under modern conditions for workers it is a more important to receive high income from labor, work in satisfactory conditions, to have a professional growth but what is also important is the freedom of choice of occupation and place of work. For companies it is important to obtain high revenues through intensification of labor. For the state the primary purpose is to promote sustainable economic growth, improve living standards of employees by ensuring high productivity of employment, improving the competitiveness of the national economy, job retention and creation of new workplaces.

In developing the methodology for innovative types and forms of employment following groups of factors and conditions that are characteristic of innovative employment were determined:

1. Forming an effective state policy aimed at development of innovative employment (fostering appropriate level of institutional support to facilitate the development of innovative employment; providing support for innovation-active enterprises, fostering self-employment, promoting innovative employment through tax incentives and direct costs, increased spending on science, education).
2. Encouraging people to innovative work (improving the quality of human capital, ensuring adequate public support of innovative progressive labor practices, focusing on the development of innovative forms and types of employment, formation of innovative work culture, focusing on labor mobility and flexible use of intellectual potential in the workplace).
3. Improvement of the system of education (providing a sufficient amount of qualified specialists, formation of an innovative type of employee, development of new forms and types of education, formation of innovative skills, creativity, ability to work in a team, innovative susceptibility).
4. Financial and organizational support for innovative employment in enterprises (spreading innovation-active enterprises that introduce staff development programs, creating a favorable climate for innovation enterprises).
5. Improvement and development of science, financial and organizational support of scientific activities (development and implementation of measures to improve quality of research activities, ensuring the process of perception and adaptation knowledge, creating new knowledge and technologies).

It is advisable to distinguish two approaches to building innovation indicators determining the types and forms of employment:

building a system of indicators, each of which reflects certain aspects of innovative employment (technical, informational, economic, educational, professional, institutional and social indicators);

building an integrated (complex) indicator by which you can judge the degree of innovation of employment at a given level. Forming an integral indicator can also be based on several sets of indicators.

Identification of innovative types and forms of employment in modern conditions is possible by studying the system of indicators of employment. Fig. 3 shows a system of indicators determining the innovation types and forms of employment, which can be analyzed on the basis of official statistics. The scheme consists of the following units: indicators to determine types and innovative forms of employment, as well as indicators that reveal the content of the specified factors.

The proposed definition of indicators of innovative types and forms of employment can be divided into following units:

technical-informational (the number of PCs per capita, share of the business Internet users, number of PCs per 100 employees (including Internet access), capital-labor proportion, availability of high-performance jobs, value of fixed assets per worker, introduction of new fixed assets per employee, degree of depreciation of fixed assets), *economic* (GDP per capita, GDP per person employed, number of patents per employed, proportion of GDP generated in hi-tech branches, share of GDP generated in intellectually-intensive areas of non-production sphere, average monthly wage in intellectual fields in relation to the subsistence level, level of economic activity, employment by economic activity, the distribution of employees by level of education and economic activities, level of productivity labor, level of entrepreneurship, innovation activity);

educational and professional (the number of university students per 10,000 population, average duration of training of employees, proportion of graduate and doctoral students in employment, proportion of staff with higher education, proportion of workers advanced training or trained, quality and innovation of educational programs, proportion of workers that are engaged in innovative work, proportion of staff employed in research and development by total employment in the economy, share of spending on training in the cost structure, share of employment in hi-tech industries, share of employment in professional and social services);

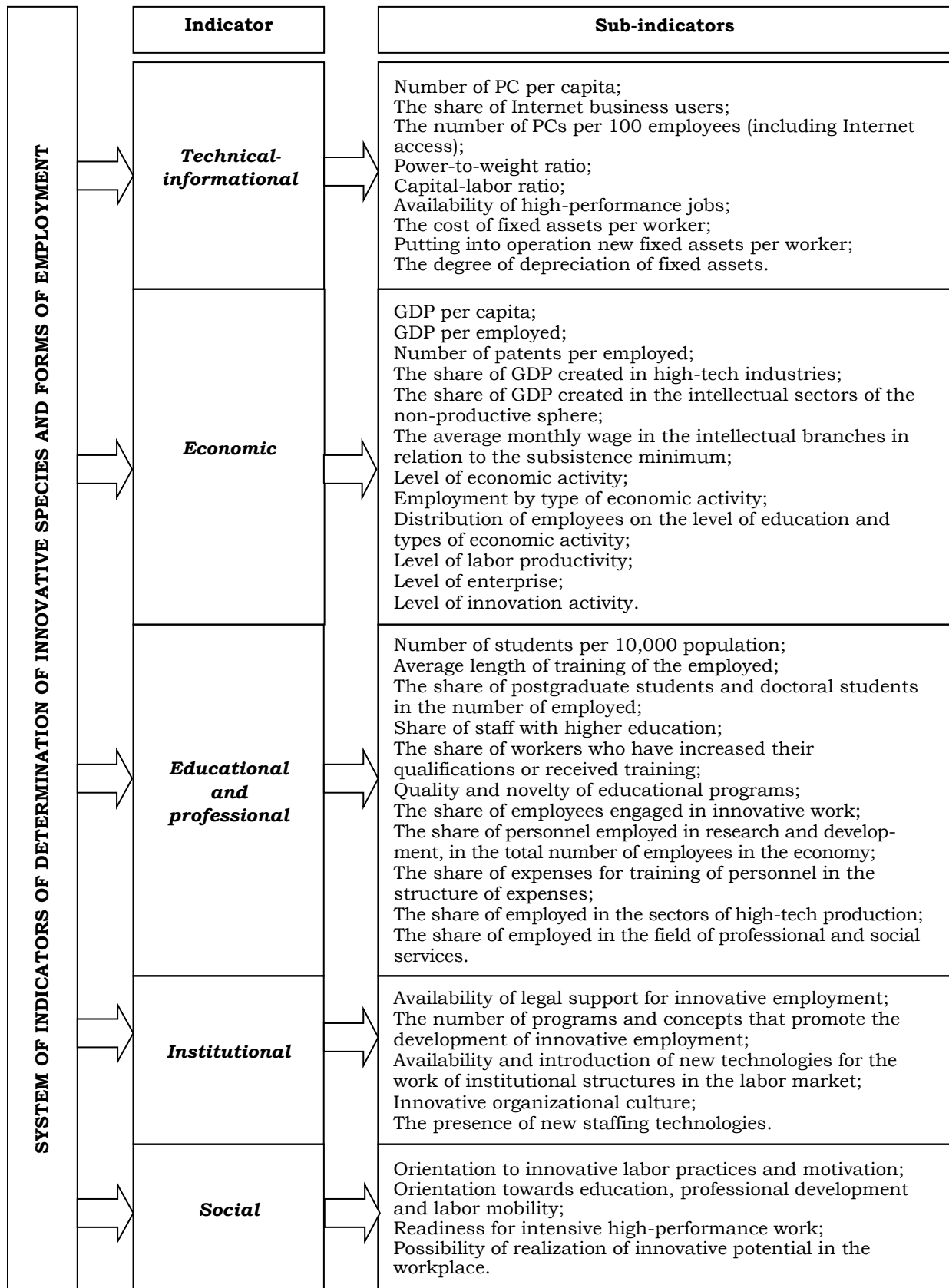
institutional (a legislative framework to support innovation employment, the number of programs and concepts that contribute to the development of innovative employment and the availability of new technologies institutional structures in the labor market, innovative organizational culture, recruitment for new technologies);

social (focus on innovative labor practices and motivation, focus on education, training and labor mobility, commitment to highly intensive work, ability to implement innovative potential in the workplace).

Within the definition of innovative types and forms of employment should be considered not only quantitative parameters of employment of innovation, but also its quality characteristics. To identify innovative employment quality parameters a method of peer review can be used (poll workers, employers, government officials) that will further formalize and make the process convenient for data collection and analysis.

Stage VI. Analysis of the current situation in the labor market and forecasting its development in the short and long term for the timely identification of innovative types and forms of employment.

Fig. 3. The system of indicators determining the innovation types and forms of employment



Source: Author's own processing.

In last decade there are constant changes in the structure of employment by economic activity, the most significant of which is the exceed the share of employment in the service sector over the share of employment in the agricultural sector due to the movement of the source values and wealth from the sphere of material production to the production of intangible knowledge. Therefore, for early detection of innovative types and forms of employment the analysis of the labor market and forecasting of its development in the short and long term is necessary.

Stage VII. Providing conditions for the development of innovative employment.

Prerequisites for promoting the development of innovative employment should be: improving the legal framework that regulates and promotes relationships between entities and the state;

providing high quality labor resources formation, improving their professional skills, experience, ensuring a high level of innovation, mobility and adaptability of workers;

improving scientific and technological level and innovativeness of the economy;

developing innovative, flexible forms of employment, which is a reserve increased employment;

increasing labor market flexibility and production expansion of the service sector;

increasing the share of high-tech industries, growth of the service sector;

creating economic opportunities for the population through the development and implementation of economic policies aimed at developing new innovative and preservation of existing jobs;

stimulating creativity, activity and initiative of workers to ensure formation of the necessary skills and competencies;

the spread of new technology, new raw materials and new products;

increasing public funding in science and education.

Stage VIII. Monitoring changes in forms and types of employment with a view to timely identification and support from the state and business

Innovative employment contributes to the high level of economic development, improving the competitiveness of the national economy, providing quality of life of the population receiving work income greater than the minimum required for the reproduction of resources of labor, improving working conditions, providing professional growth, improving enterprise competitiveness, job retention and creation new workplaces.

Innovative employment determines needs of the economy for skilled workers and the needs of the workforce in jobs with appropriate working conditions, providing a balance of supply and demand in the labor market. The state should build appropriate employment policies, given the principle of consistency of economic development, which includes the coordination of social and economic policy with employment policy at all levels.

Monitoring of employers requirements for candidates for vacant positions and related improving of the content of the education system. Optimal in this situation could be the creation of the "bank of competences" with employers and professionals in the field of education; key task of the "bank" is collection and update by interviewing managers of different industries, information on the competencies, knowledge and skills needed for workers of different professions. The existence of the mentioned "bank" will create and adjust the curriculum according to the current needs of employers and maximize the quality and efficiency of the education system.

Thus, the current components of the state policy related to the development of

innovative employment should be: stimulating entrepreneurship; providing financial support to enterprises that carry out a policy of creating new innovative jobs; supporting domestic and foreign investment aimed at providing innovative labor; providing regulatory support to SMEs; promoting self-employment.

CONCLUSIONS

In modern conditions of development of national economies there is an obvious tendency of gradual decrease of the employment rate of the population in the production and services sectors, instead of the significant increase of the employment level in the knowledge sector. Changes in the structure and forms of employment affect the value system of a modern employee and deepen differentiation in the labor market. Informatization and intellectualization of the economy requires highly educated and highly skilled workers with a high communicative potential, able to produce new knowledge, ideas, methods and capable of learning, endowed with critical thinking, ready to change, free from stereotypes, endowed with such features of character as: purposefulness, perseverance, responsibility, discipline, innovation, adaptability, self-control, resistance to neuro-psychological overloads and a high level of efficiency. The article explores the specificities and common features of development of modern labor markets of Ukraine and Poland and determines that the expansion of the innovative type of employment is a productive solution of typical problems. Despite the similarity of problems and challenges, the Ukrainian labor market is inferior to the Polish, by level of the dynamism of transformational change, and also by the effectiveness of managerial and political decisions implemented by the government and social partners in sphere of support of the development of state employment policy. Poland's practice of forecasting the needs of the country's economy in a highly skilled workforce approaches to monitoring changes in the content and nature of work, an existing management training system and also measures regarding promote the development of creative sectors of the economy, can be a great example of reforming the labor market in Ukraine towards focusing on its balancing and supporting trends of the expansion of innovative types, forms and areas of employment. The methodology proposed in the paper is, first of all, the basis for assessing the volume of innovative employment in the countries, its nature and the existing gaps in state regulation of this field. The theoretical and methodological approach to identification of features, scales and intensity of the expansion of innovative forms of employment, which includes: systematization of criteria of attribution to innovative employment; a comprehensive system of innovative employment indicators; grouping of factors of priority influence on the nature of employment and expansion of employment of the innovative type; analysis of the current situation on the labor market and forecasting of transformational shifts for timely identification of innovative forms of employment with the aim of scaling and sufficient regulation, is substantiated. The current components of the state policy regarding to the development of innovative employment should be: stimulating entrepreneurship; providing financial support to enterprises that carry out a policy of creating new innovative jobs; supporting domestic and foreign investment aimed at providing innovative labor; providing regulatory support to SMEs; promoting self-employment. The versatility and complexity of the proposed approaches allows it to be used not only in economic systems that are in the nascent stage of the creative

economy, but also in those which have long ago embarked on this path and are actively producing new knowledge and expanding the number of people employed in innovative areas of the economy.

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