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COMMUNICATIVE COMPETENCES IN ENHANCING OF REGIONAL COMPETITIVENESS IN THE LABOUR MARKET

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Abstract. The characteristic of the regional labour market requires the usage of modern aspects for the key factors' analysis of labour cost increase. The high rate of migration, covering Ukraine in recent years, is influencing negatively on the labour market structure. It is necessary to remark among positive features that the demand increasing for highly intellectual staff, skilful in communication in foreign languages and building up social relations is of great importance. The subject of scientific research defines communicative competences as the key factors of human capital, which promotes the increase in competitiveness of an individual in the labour market and, as a result, an increase of the regional competitiveness. The aim of the research is to establish the dependency between the level of communicative competence and competitiveness in the labour market studying communicative competence factors in terms of the theory of human capital, the determination of the conformity between the requirements to human capital and the conformity of the investigated factors to these requirements. Communicative competencies are a set of skills, which allows labour market entity distinctly expressing and applying the business format of communication. The practical use of oratory allows negotiating with foreign counterparties, putting into practice the etiquette of business communication, and competently solving the complicated situations. The research of existing requirements to communicative competence defined the levels of qualification, which ensure the development of new kinds of activities. It defined the position of Ukraine in professional communicative competence in the world rating. The research was to carry out of rating assessment of the economic situation in regions according to economic indicators, which can be changed under the influence of a factor of the communicative contractors' competence (average monthly-paid salary per an employee, export, and import of goods in the region, turnover of retail trade). The methodology of the research is based on the research of the role of human capital factors in increasing the cost of labour on the basis of the statistical method and analysing data of the labour market economic indicators, and in substantiating the relationship between the level of professional communicative competence in the country and its social and economic indicators. Value/originality. The methods of analysis and synthesis allowed revealing regularities and formulating recommendations for improving the competitiveness of the regional labour market by inducing the development of communicative competences and raising the index of human capital of the country in a whole. Positive dynamics of import and export, business activity, direct foreign investment and overall trade turnover indicators will be immediately reflected in a whole at the regional level and at the level of the country. Life expectancy of the population, the level of education and culture, the criminal situation decreasing will be approved by the social indicators.

Key words: European integration, foreign language, human capital, rating, international trade, export, import.

JEL Classification: F02, F15, I25, O11, O25

1. Introduction

Currently, the importance of the research of communicative competencies is gaining significant relevance under the conditions of transnational corporation activities. Most of the foreign researches about the influence of individuals' communicative

competencies on the country's economy involve economic and social integration of immigrants.

Hence, in accordance with the same principle, it is possible to characterize the positive influence of salary increase among the citizen of the state in the national and regional market. Any profession imposes its

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requirements on a specialist, especially if it concerns highly professions. One of such requirements is the ability to solve the professional tasks with the help of correct, competent, and skilful speech. Characteristics of the labour market of Eastern European countries including Ukrainian, considering the influence of the communicative skill's factor on the cost of labour, is of considerable interest from the point of view as an employer and as an applicant. On one hand, it effects on the competitiveness of an individual in the labour market, judging from the point of an applicant, and on the other hand, it has an influence on the competitiveness of the labour market institutions in the struggle for well-educated and skilful labour resources, judging from the position of the employer.

Considering the phenomenon of competitiveness, it must be noted that this category must be accepted through the prism of the factors, which determine it. During the decades, Ukrainian and foreign scientists have developed methods, which are based on different approaches in order to identify key factors of competitiveness.

Interdisciplinary research is now becoming increasingly relevant; it is characterized by a symbiosis of economics and philology, studying the communicative competencies of individuals (Chiswick, 2008). Implementation of the theoretical substantiation empirically allowed establishing a direct relationship between the growth of communicative competences of individuals and economic indicators of economic development.

Indeed, the ability to be skilful in communicative competencies is considered as an independent form of human capital by foreign scientists. Therefore, it is an asset that requires investments and is embodied in a man and it will increase the productivity of the labour market in a whole (Chiswick, Miller, 1995, 2007; Chiswick, 2008).

The financial state of living standard of the population has a direct imprint on its quality of life and well-being (Evans et. al., 2010). Obviously, the low income of the family also restricts the educational rate of investments (Nkecchi, 2008). Therefore, the development of the communicative competencies, as the impetus for human being development, is limited by the financial budget of the family. Therefore, in this situation, it is necessary to mention the role of the state and the local authorities as the "investors" of the economic development via the population gaining of the necessary communicative competencies, language awareness, and educational programs. Concomitant empirical researches show that highly educated individuals are more likely to emigrate and choose countries with higher pay per hour (Nkechi, 2008; Grogger, Hanson, 2011). So the creation of conditions for personal development and provision of a competitive labour market are the most important conditions, which the implementation will reduce migration processes in Ukrainian society.

Meanwhile, the development of communicative competencies increases the efficiency in the labour market and, on the other hand, proficiency in a large number of foreign languages make people more "efficient in the consumption of goods and services" (Barry, Chiswick, Miller, 2014) (in this case, the term is the purchase of goods or services of higher quality at lower prices). The popularization of Internet commerce, the use of digital marketing, of course, is impossible without the development of communicative competences.

The development of the innovative potential of the region is achieved by the concentration of the educated population as a driving force for the economic development of the region. Therefore, the proposed assessment of intangible assets in the region through a methodology based on the assessment of human potential creativity (Florida, 2005) suggests that the most competitive regions are those, which population is dominated in specialists with advanced communicative competencies. It is due to some factors. Firstly, the dependence of the value of the labour market on the quality of competencies requires further research. Secondly, significant immigration processes in Eastern European countries relate to highly skilled personnel. Thirdly, the European integration processes of the countries of the Eastern Partnership with an increase in the rate of trade with the countries of the European Union and foreign direct investment also depend on these factors.

The purpose of the article is to research the influence of the study on the development of communicative competences and on increasing the regional competitiveness of the labour market in the context of European integration processes.

2. The development of communicative competences as a factor of human capital

Communicative competencies meet three requirements to human capital. Firstly, they have features of efficiency. Secondly, they are expensive to acquire. Thirdly, they are embodied in human activity (Schultz, 1962). The indicated properties at the macro level are directly related to the formation of the phenomenon of human capital (Figure 1).

When considering investments into other forms of human capital, such education and training are likely to be more productive, if they are acquired by communicating in the language of the dissemination of relevant knowledge in the labour market (Barry, Chiswick, Miller, 2014).

The presence of the individual communicative competences is one of the hallmarks of his professionalism and the ability to solve his professional tasks. Acquiring communicative skills takes place in the individual during his training, gaining his first professional experience.

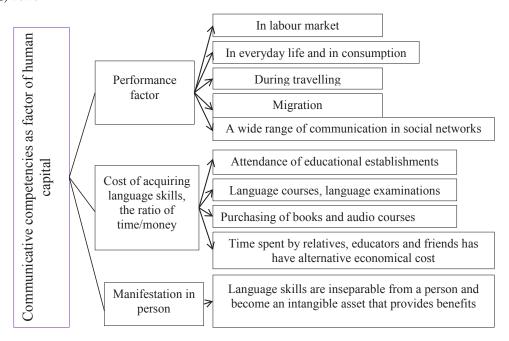


Figure 1. Clarification of the requirements, which the communicative competences of the human capital factor correspond to

Source: Developed by the authors based on (Barry, Chiswick, Miller, 2014)

The demand for highly skilled personnel in the labour market forms the following requirements for the applicants:

- 1. High level of education (higher education, master's degree, postgraduate study, doctorate).
- 2. Profession related to the scientific and technical sphere, creativity, art.
 - 3. Foreign languages awareness.
- 4. Cultural leisure during non-working hours and at weekends.
 - 5. Social and public activity.

In its turn, the material stimulation of communicative skills in the population creates the necessity of introducing new wage systems that take into account the knowledge and competencies of the worker and motivate the worker to further acquisition of these skills, so as the popularity of the remuneration system, which is so-called "payment for knowledge", becomes widespread.

According to the principle of employee remuneration for the acquisition of additional skills or knowledge is the fundamental principle of such systems, but it is not definitely the number of hours spent working in order to achieve the goals of the enterprise (the basic principle of the traditional system of remuneration). In this case, it is important for the company's managers to identify a set of competencies, qualifications, skills that employees will be rewarded for. It must be mention that a set of this knowledge should be changed when the strategic objectives of the enterprise are to be changed too.

A person must demonstrate some competencies to be granted by reward. Advantages of payment systems for knowledge and competence are likely to orient the workers to acquire new skills, professions, knowledge and they provide an increase in the quality of human resources in the organization, which contributes to its competitiveness increasing. The disadvantages of payment systems for knowledge and competence include the following: they can cause conflicts in the team and besides this; they reward potential but not the result of labour. In addition, the organization's salary costs become constant and do not depend on the volume of sales. Finally, it is a complex and not always an objective process to define employees' knowledge and competence (Gibson, Ivancevich, Donnelly, 2000).

Nowadays at large Western European enterprises, there is a system of investment into workers in order to acquire communicative skills and knowledge of workers in term of the instruments of individual incentives. In this case, there is a link between the received monetary incentive in the form of wages and the qualifications of the employee, but not the results of labour. This form of individual incentives more often gets the form of non-payment tuition, but a loan that will be cancelled, if after training an employee does not work in a firm for a certain period of time (Gibson, Ivancevich, Donnelly, 2000).

The evaluation of the factor of the development of communicative competences at the macro level at the same time gives the opportunity to form a state policy of employment and professional orientation to the state, which the level of education and literacy of the population depends on. Wage rates in the labour

market, migration processes, the state of export/ import of goods and services, cultural development, and even demographic situation are given by it. The key factors of the human capital concept are the impact of learning on personal development and career promotion, healthcare, and the discovery of a new factor of production, which called information (Schultz, 1962). It should be added that advanced linguistic competences have a positive impact on communication with foreign private and state counterparts, assisting to overcome linguistic, cultural, and psychological barriers in communication. The Go Global International Initiative receives support from the National Reform Council in studying a foreign language by students and additionally with the direct participation of volunteers from different countries. The development of communicative competences in childhood allows you to teach a leader's psycho type, to develop critical thinking, to acquire education and experience, and to get rid of linguistic and cultural barriers in communication.

Table 1 Ukraine in the global rating of English language proficiency

Year	Place in the rankings among	Level of English language
	the countries surveyed	proficiency in the country
2013	27 from 60	Middle
2014	44 from 63	Low
2015	34 from 70	Middle
2016	41 from 72	Low
2017	47 from 80	Low

Source: compiled by the author based on data (Education First English Proficiency Index, 2018)

3. Analysis of the influence of communicative competences on the level of development of the region and the labour market in general

According to the EF EFI (Education First English Proficiency Index, 2018) at the beginning of 2018 Ukraine ranked the 47th position in the global ranking of foreign language proficiency out of 80 surveyed countries (or 25th out of 27 European countries) in comparison with a low level of EF EFI 50, 91. It is ahead of Cuba and inferior to Bangladesh (the dynamics are reflected in Table 1).

According to the EF EFI study conducted in 70 countries of the world in 2015 (Table 2), there is a direct relationship between the levels of English language proficiency. Life expectancy, number of researchers per one million permanent residents and % (percentage) of GDP expenditures spent on researches. So the higher the level of knowledge of English language, the higher general social and economic indicators of the country, such as life expectancy, the annual income per capita (i.e. GDP in general), the number of researchers in the country, and the level of spending on researches in the structure of GDP.

We also carried out a regression analysis of the dependence of the EF EPI (2017) index on the nominal Gross Domestic Product, calculated according to the methodology of the International Monetary Fund. The linear dependence (Figure 1) is defined, which is described by the formula: y = 9,11x + 99,126.

Thus, we received a positive correlation between the EF EPI index and the nominal GDP of the 85 reviewed countries. R2 is equal to 0.2% variation of the dependent variable. Although the model depicts a slight positive increase, nevertheless it exists and defines the necessity

Table 2

Dependence between the level of knowledge of English language and individual social and economic indicators, 2015

Level of English language proficiency	Life expectancy, years	Amount of annual income per capita, USD	Number of researchers per million people	Expenditure of GDP allocated to research, %
Very high (Netherlands, Sweden, Denmark, Norway, Singapore, Finland, Luxembourg, South Africa)	80	31335	4930	2,3
High (Germany, Austria, Poland, Belgium, Malaysia, Switzerland, Philippines, Serbia, Romania, Portugal, Hungary, Czech Republic, Slovakia)	78	18318	3047	1,7
Middle (Bulgaria, Greece, Lithuania, Argentina, Dominican Republic, India, Spain, Hong Kong, South Korea, Nigeria, France, Italy, Vietnam, Costa Rica)	77	11302	2724	1,4
Low (China, Japan, Russia, Indonesia, Taiwan, Brazil, Macao, Uruguay, Mexico, Chile, Bangladesh, Ukraine, Cuba, Panama, Peru, Colombia, Pakistan, Thailand, Guatemala, Ecuador, Tunisia, United Arab Emirates)	76	7518	972	0,7
Very Low (Syria, Qatar, Morocco, Sri Lanka, Turkey, Jordan, Azerbaijan, Iran, Egypt, Kazakhstan, Venezuela, El Salvador, Oman, Mongolia, Saudi Arabia, Angola, Kuwait, Cameroon, Libya, Iraq, Laos)	73	2646	450	0,3

Source: compiled by the author based on data (Education First English Proficiency Index, 2018)

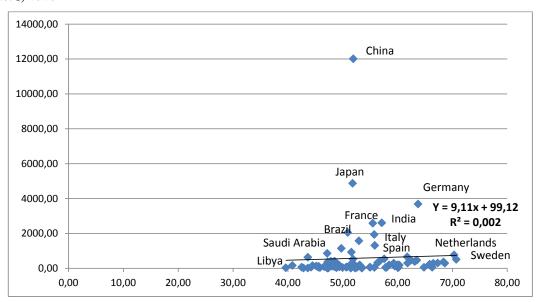


Figure 2. Dependence of nominal GDP of countries of the world on the index of EF EPI Score, 2017

for further deeper investigation of the development of communicative skills of the population. If all variables in the model are equal to "0", the value of the coefficient Y = 99,126. That is, the GDP value is influenced by other factors not described in the model (except for the communicative competences of the population). The values of coefficients 9, 11 indicate that the index of knowledge of foreign language has an effect on GDP.

The results of Indian scientists' researches (Azam, Chin, Prakash, 2013) show that increasing communicative skills of the population, especially in terms of proficiency in the foreign language (in English), leads to an increase in profits by 45%. As far as Turkey is concerned, it has been established (Paolo, 2013) that skills in foreign language and the improvement of the communicational skills among citizens of Turkey lead to approximately 37% of the "remuneration" of ordinary earnings. These studies were conducted using the statistical method of processing personal data.

It should be noted that those, who can speak two foreign languages, communicate a generalized cognitive advantage over monolinguals in the so-called executive functions, associated with the psychological characteristics of the individual: the ability to control attention and task switching, creativity and originality in solving problems (Leikin, 2012).

Communication skills are also heavily related to R&D in business and in the academic world (Fidrmuc, 2011). The command staff of scientific centres, speaking foreign languages, can follow new scientific and technical developments, as well as interact with international researchers and institutions in the process of creating new products, methods, and tools.

Thus, improving knowledge of foreign languages increases the country's scientific potential, leading

to innovations and investments that can contribute to economic growth in the short-term perspective (Segerstrom, 2000) and long-term perspective (Howitt, 1999). However, the cost of research in Ukraine is too low (less than 1% of GDP according to 2017) comparing with developed countries (from 2 to 5% of GDP), which results in a low level of return on assets and productivity (Koval, Slobodianiuk, Yankovyi, 2018).

Thus, communicative competences can increase individual profits by increasing their own personal productivity via their direct influence. This influence may also be mediated, because communicative competences will open up individuals to access more paid professions, to increase their skills and cognitive skills, and potential performance (Paolo, 2013).

Regarding macroeconomic factors, it is known from the theory of international trade that the general language of communication increases trade flows by about 40% (Otten, 2013). In the course of the survey, according to the statistics, a regional rating of Ukraine in 2017 was carried out on the basis of indicators of the average monthly-paid wage per employee, export and import of goods, and retail trade turnover. The abovementioned indicators are selected out of all indicators of the social and economic status of the region. In our opinion, they mostly depend on the level of knowledge of foreign languages, spoken by residents of the region. So Kyiv, Dnipropetrovsk, Lviv, Donetsk, Kharkiv, Odesa regions are the most developed regions according to the indicators of average monthly-paid wage, export and import of goods, and retail trade turnover, indicated in statistical data of 2017. These are regions with developed international relations, the highest population density and developed industry.

Table 3

Main indicators of the labour market in Ukraine, 2017

	Number of unemployed '000 people	Vacancy rate i'000 people	Salary with a bonus for foreign language competence, UAH
Agriculture	92,1	2,2	15921
Industry	53,9	92,4	14314
Building	7,8	2,2	14314
Wholesale and retail trade; wheeled transport and motorbikes maintenance	48,1	107,6	10576
Transport, storage facility, mail service and express delivery service	13,7	5,4	9726
Hospitality industry and catering service	6,8	1,4	9861
IT and telecommunications industry	4,1	0,4	23673
Finance and insurance business	9,1	0,5	12927
Real estate services	2,7	0,7	9426
Research, academic, and technical activities	6	1,1	11355
Activities in the sphere of executive and supportive services	6,4	2	9426
Public administration and military defence; compulsory social insurance services	37,1	4,2	29357
Education	7,2	2,7	11355
Healthcare and social service	10	3,4	16485
Art, sport, entertainment and recreation services	1,6	0,5	11797

Source: compiled by the author based on data (State Statistics Service of Ukraine, 2018)

We also conducted a hierarchical classification method and the k-means data on the number of unemployed, demanded in the labour market; the number of vacancies, supplied in the labour market, and the labour cost based on English language skills, taking into account the allowance for communicative competences, among kinds of economic activity with the help of cluster analysis with application of the software package *Statistica*. The main source data used to calculate *Statistica* with the application of software is shown in Table 3.

The data, brought to the standardized form, form a hierarchical classification in the Euclidean dimension according to the results of the study (Figure 3). The fullband method determines the distance between clusters as the largest distance between two different objects in different clusters.

According to the results of the hierarchical classification, it is found that for further investigation of the k-means method, it is expedient to use the assertion that this data array forms 4 clusters (four areas are identified, which "touch each other" more closely). The k-means method determines which of clusters types of economic activity are enlisted according to the calculations (Table 4). These clusters form similar types of economic activity, in which the professions have similarity in terms of demand, supply, and value of labour in the labour market. In each of the clusters, there are objects with similar influence.

The results for cluster characteristics are shown in Table 5.

Table 4
Distribution of activities by clusters

Type of economic activity		
Agriculture		
Industry, wholesale and retail trade; wheeled transport and motorbikes maintenance		
IT and telecommunications industry, public		
administration and military defence; compulsory social	3	
insurance services		
Building, transport, storage facility, mail service and		
express delivery service, hospitality industry and		
catering service, finance and insurance business, real		
estate services, research, academic, and technical	4	
activities, activities in the sphere of executive and		
supportive services, education, healthcare and social		
service, art, sport, entertainment and recreation services		

For 4 clusters received, standard deviations were calculated for the three indicators used in the study. In Figure 4, the average and confidence intervals for the variables in each cluster are graphically depicted.

Thus, the use of mathematical modelling methods to confirm the hypothesis about the influence of communicative competences on the country's economy has allowed identifying trends regarding the direct influence of the development of communicative competences on nominal GDP and structuring the labour market into clusters by types of economic activity, identifying 4 clusters using the hierarchical method and k-means method.

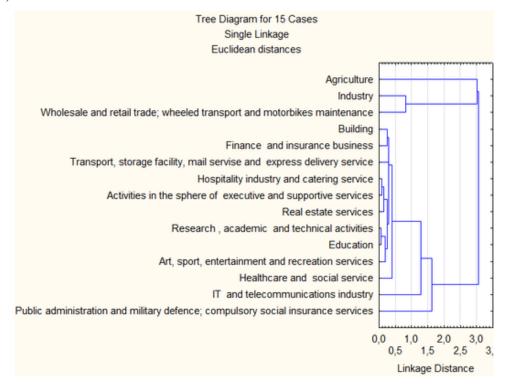


Figure 3. The result of the hierarchical classification

Table 5 Summary of characteristics of clusters in the labour market in Ukraine, 2017

Type of economic activity	Number of unemployed '000 People	Vacancy rate '000 People	Salary with bonuses for foreign language competence in UAH	Case	Cluster	Distance
Agriculture	2,75910344	-0,373075989	0,3333893	1	1	0,00
Industry	1,28830032	2,23287039	0,0494394351	2	2	0,24
Building	-0,486674121	-0,373075989	0,0494394351	3	4	0,27
Wholesale and retail trade; wheeled transport and motorbikes maintenance	1,06498467	2,67200991	-0,611048801	4	2	0,24
Transport, storage facility, mail service and express delivery service	-0,259508194	-0,280625564	-0,76124008	5	4	0,25
Hospitality industry and catering service	-0,52517682	-0,396188596	-0,737386171	6	4	0,18
IT and telecommunications	-0,629134109	-0,425079354	1,70313376	7	3	0,47
Finance and insurance business	-0,436620612	-0,422190278	-0,195637393	8	4	0,14
Real estate services	-0,683037888	-0,416412127	-0,814248767	9	4	0,25
Research, academic, and technical activities	-0,55597898	-0,404855823	-0,473402911	10	4	0,04
Activities in the sphere of executive and supportive services	-0,5405779	-0,378854141	-0,814248767	11	4	0,23
Public administration and military defence	0,641454973	-0,315294473	2,70747168	12	3	0,47
Education	-0,509775741	-0,35863061	-0,473402911	13	4	0,03
Healthcare and social service	-0,401968182	-0,33840708	0,433045631	14	4	0,50
Art, sport, entertainment and recreation services	-0,725390857	-0,422190278	-0,395303446	15	4	0,13

Source: built by Statistica

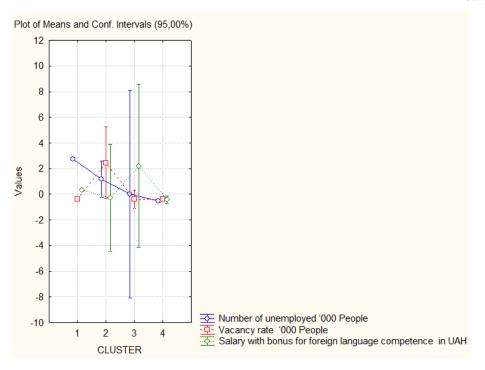


Figure 4. Graph of average and confidence intervals for variables in each cluster

4. Conclusions

Communicative competences are the factor of human capital, which leads to productivity and competitiveness increasing at micro and macro levels and it ultimately increases the efficiency of an economic entity's activity at any level, having a synergistic effect of action, it improves the social and economic status of the identity, stimulating the development of professional skills and competencies. It should become one of the main prerogatives of public administration. On the other hand, according to the results of researches of domestic and foreign scientists, it has been established that the acquisition and improvement of communicative competences, especially a combination of them with foreign languages, the applicant increases the cost of his labour in the market and receives more benefits in acquiring professions, which can be embodied in raising earnings in cash equivalents, opportunities for further intellectual development and improvement of personal and professional skills, the possibility of combining several positions and faster career promotion.

Under the present economic situation, the creation of conditions for the development of professional skills and competencies are of great importance, but also the application of policy, restrictive methods. Migration processes that have become active in Eastern Europe have a negative impact on the formation of a nation's intellectual fund. One of the reasons for this process is the extremely low labour costs in the labour market comparing to European ones. Government and business must work together in order to develop communicative

skills of the population, taking into account international experience. Their development has a direct impact on the prosperity of the state and its role on the international scene. To do this, it is necessary to develop a Strategy for Enhancing Communicative Skills and Developing New Approaches to Linguistic Education Policy. Enterprises should be encouraged to invest into the development of communicative competences of workers through incentive methods, including financial incentives. On the part of educational institutions, schools, and centres, they should plan to use a range of free resources to support the development of communication skills that are accessible locally, through the Internet, international cultural centres and institutes, charitable foundations and organizations for international exchange and education.

The financial factor is the most important one. Therefore, dissemination of the promotion of the necessity to develop professional skills and competencies and to provide the conditions for knowledge acquisition among the poorest layers of the population will allow correct social policy and increase the index of human capital of the country in a whole. At the moment, the development of Internet technologies, the process of acquiring knowledge is becoming simpler. Creating a methodological basis and a bank of free Internet services will give an impetus to non-teaching time education for all segments of the population.

Further studies in the field of knowledge economy require the development of methodological tools for the formation of remuneration systems of enterprises based on the assessment of the communicative competences of workers.

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