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The Importance of Employee and Resident Competences in the Context of Enterprise and Regional Management

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Abstract

The aim of this elaboration is to emphasize that possessing competent employees and residents is a necessary condition of skillful, efficient enterprise and regional management leading to their development. Achieving this goal which refers to two perspectives: microeconomic (enterprise viewpoint) and macroeconomic (regional point of view) required using the proper data. Thus, the results of research project called the Study of Human Capital in Poland conducted jointly by the Polish Agency for Enterprise Development and the Jagiellonian University (Centre for Evaluation and Analysis of Public Policies) have been used in the part concerning employees' competences. The part dedicated to residents' competences has been based on the selected information written down in development strategies of particular regions (voivodeship). All the mentioned above information was downloaded from the websites of particular institutions in February 2015.

Keywords: competences; employees; residents; enterprise management; regional management.

Introduction

In the light of numerous socio-economic research results, the dynamics of particular countries development including Poland, is determined above all by the dynamics of regions (being part of a certain country) development and the dynamics of enterprises development located in these countries. These companies in turn need suitable conditions and resources in order to function properly. Undoubtedly, one of the resources is human capital whose importance has recently been increasing at a very fast pace. It is manifested by, among others, elaborating and implementing operational programmes co-financed by the European Social Fund, whose aim is to enhance human capital. In 2004-2006 it operated under the name the Sectoral Operational Programme Human Resources Development and then between 2007 and 2013 the Operational Programme Human Capital, whereas in the programme period 2014-2020 it will be the Operational Programme Innovation and Knowledge. There are two things which demonstrate clearly how important the human capital is for the socio-economic development: the amount of financial means allocated to realize the projects within mentioned above programmes and the slogan under which all the ventures financed from the Operational Programme Human Capital operate, which is 'The Man – the best investment'.

In the context of the above considerations many questions arise: what in general is human capital? is there a homogenous, precise definition of this capital? how is it possible to assess its value? The attempts to answer these particular and similar questions have been made for over last five decades. The term human capital appeared in the public debate in the 60s of the 20th century mostly due to works written by J. Mincer [1], T. Schultz [2] and G. Becker [3]*. Before such a concept had usually been rejected or criticized. It was rejected making use of arguments that people cannot be the capital because they were not subjected to trade exchange [4], on the other hand it was criticized as this concept bears traits of treating people as slaves or machines [5]. The result of the debate on the essence and role of human capital carried out by mentioned above economists, but also the other ones (among others the following economists took part in the discussion: B. Weisbrod [6], H. Uzawa [7], R. Nelson and E. Phelps [8], Y. Ben-Porath [9]) was establishing the Theory of Human Capital. G. Becker, the Nobel Prize winner, considered to be the founder of this theory, made an attempt to explain such empirical phenomena as: decreasing salary growth connected with age, negative correlation between unemployment rates and the level of skills, changes of jobs and taking part in trainings happening more often among younger workers, but also positively diagonal income distribution, especially among highly qualified people and professionals. Simultaneously, there were some attempts made to define human capital. With full responsibility it can be said that the result of these attempts is as follows: there are as many definitions as the number of researchers who dealt with this issue. Probably one of the most simple and simultaneously complex definition reflecting the essence of the problem is the definition created by OECD according to which 'human capital is knowledge, skills and competences and other attributes embodied in individuals that facilitate the creation of personal, social and economic well-being' [10]. Also worthy of note is the fact that in this definition, as well in many others, the element called the competence appears.

The aim of this elaboration is to emphasize that possessing competent employees and residents is a necessary condition of skillful, efficient enterprise and regional management leading to their development. Achieving this goal which refers to two perspectives: microeconomic (enterprise viewpoint) and macroeconomic (regional point of view) required using the proper data. Thus, the results of research project called the Study of Human Capital in Poland conducted jointly by the Polish Agency for Enterprise Development and the Jagiellonian University (Centre for Evaluation and Analysis of Public Policies) have been used in the part concerning employees' competences. The part dedicated to residents' competences has been based on the selected information written down in development strategies of particular regions (voivodeship). All the mentioned above information was downloaded from the websites of particular institutions in February 2015. The empirical part of the elaboration was preceded by the presentation of definitions and the competence classification together with the authors' remarks and reflections with regard to the issues being the topic of this article.

Definition and the classification of competences

The word 'competences' has recently become very popular. There are undoubtedly a lot of reason of its popularity. One of them seems to be the fact of making higher education popular and common. The level or length of education slowly stops giving evidence of human capital level. The competences become then the key ingredient of this capital which let function skillfully and adapt to new situations in rapidly changing competitive environment [11]. The review of literature on the subject allows to draw a conclusion that the word 'competences' is understood in different ways. The selected definitions were presented in table 1.

* It should be emphasized here that the debate was inspired by the views of the following economists: W. Petty, A. Smith, J.B. Say, F. List, A. Marshall, I. Fisher.

Table 1: Definitions of the word ‘competences’

Author/Authors	Year	Definition
R. Boyatzis	1982	The potential existing in each person leading to such a behaviour which enables people to be effective or perform well (meet the requirements) in certain jobs within the framework of surrounding organizations and therefore leads to the desired output. Competence is built of three elements: motivation and traits of character, self-assessment and the social role, skills
D. Thierry, C. Sauret	1994	The ability of an employees to perform in order to reach a desired goal in certain conditions, by the means of particular measures
C. Lévy-Leboyer	1997	The set of behaviours based on integrated use of abilities, personal traits and also acquired knowledge and skills in order to complete a complex mission of a company, which should become employees’ mission due to working in the spirit of its strategy and corporate culture
A. Gick, M. Tarczyńska	1999	Knowledge, skills, behaviours, attributes and attitudes which make people stand out due to their highest effectiveness
M. Armstrong	2000	Potential contributing to reaching certain (desirable) results
J. Bjornavold, P. Tissot	2000	The validated personal skills to use know-how, qualifications and knowledge in order to meet the current and future professional challenges
S. Whiddett, S. Hollyforde	2003	The set of individual characteristics consisting of motivation, traits of character, skills, self-assessment connected with functioning within the group and knowledge which was acquired by this person and is used on a day-to-day basis
M. Bukowski	2003	Employees’ abilities to use their knowledge in particular situations
A. Pochtowski	2003	The whole of durable of human characteristics creating a cause and effect relation with high or above average work results achieved by him/her, which are universal in their nature. Knowledge and skills belong to the group of key competences, whereas attitudes, motives and values belong to the group of distinguishing competences
G. Filipowicz	2004	Predispositions with regard to knowledge, skills and attitudes enabling to perform occupational tasks at appropriate and satisfying level
T. Rostkowski	2004	All the employees’ traits, knowledge, skills, abilities, ambitions, values, operational styles whose possessing, developing and using by individuals enables and leads to the corporate strategy realization (of the company where they are employed)
Project Tunning	2005	The dynamic combination of attributes – traits, skills and attitudes. What students can do finishing certain stages of education can be called competences. These are both knowledge and practical, intellectual and interpersonal skills, but also ethic values. Competences can be either assessed or developed, but it is impossible to state clearly if someone acquired them or not. Competences developed by the means of practice or education constitute a kind of continuum

European Parliament	2008	The evidenced ability to use knowledge, personal abilities and skills, social and methodological abilities/skills demonstrated at work or learning process, but also in a professional or personal career. Competences are described in the categories of responsibility and autonomy
Study of Human Capital	2011	Knowledge, skills and attitudes connected with performing particular things, irrespective of the way they were acquired and whether they are somehow validated

Source: Own elaboration on the basis [12, 13].

Apart from ambiguity and complexity of a discussed term, which therefore means creating different classification criteria for competences (table 2), it can be undoubtedly stated that competences are dynamic as they can develop due to knowledge growth, skills or willingness to act. The development of competences translates into the quality of performed tasks – the higher level of a certain competence acquisition, the higher effectiveness with respect to a specific work area, in which this particular competence is crucial*.

Table 2: The classification criteria for employees’ competences within the organizations

Classification criterion	Competence types	Interpretation
Source of acquiring competences	Formal	validated and confirmed by a diploma or a certificate
	Real	shown and visible while working
Professional scope	Narrow	narrowed down to a precise occupational field, function, role, post
	Wide	concerning a few domains, occupational groups
Accessibility	Own	available and potential competences of own human resources
	Borrowed	acquired thanks to ‘borrowing’
Purpose	Key	joint for all the workers, occupational group
	Specialized	specific for each post, function or role
Range of management	Operational	necessary for line managers in everyday work
	Strategic	indispensable for higher level of management
Time horizon	Current	required ‘here and now’
	Desirable	demanding in a certain time perspective, specified in advance
Measurement	Easily measurable	easy to observe and measure
	Hard to measure	e.g. the ability to take decisions of strategic importance; the effectiveness can be assessed in the future
Accuracy of defining	Defined in general	e.g. computer literacy means proficiency at using PC computer and basic software
	Defined in detail	e.g. computer literacy means proficiency at using Linux, Unix
Velocity of influence	Narrow	necessary for a particular post
	Wide	enabling effective performance in the widely understood social environment

* It is worth emphasizing here that in neuropsychology a competence development model by J.C. Maxwell is used, which distinguishes four levels: unconscious incompetence (*I don’t know what I don’t know or I can’t do*), conscious incompetence (*I know what I can’t do*), conscious competence (*I can if I pay attention*), unconscious competence (*I can, although I don’t think of it*) [14].

Purport	Occupational	indispensable for effective performance in particular occupations
	Social	fostering teamwork
	Entrepreneurial	business awareness, e.g. success and profit oriented
	Conceptual	essential for the highest level of management, e.g. the ability to foresee, systems thinking
Accuracy and specificity of assessment	Assessment on the basis of a narrow and general scale	e.g. someone possesses competences or does not possess ones
	Assessment on the basis of a detailed scale	e.g. I level – lack of competences II level – someone possesses competences, but rarely takes advantage of them III level – someone uses competences in everyday practical performance IV level – someone uses competences in order to complete their jobs very well V level – someone uses competences in a creative way
Contents	Integrated	competences are closely interrelated, e.g. oriented on building teams – communication – leadership – values and cultural norms
	Weakly integrated	e.g. the ability to anticipate - leadership
Ownership	Individual	competences belong to an individual person and can be used at any time and any place
	Collective	belong to a team and are useful in a specific organization, are a result of individual competences synergy

Source: Own elaboration on the basis [15].

A very interesting classification of competences was presented and subsequently used in the conducted research by the authors and managers of the project called ‘The Study of Human Capital’, who divided competences into a dozen or so types with regard to different spheres of work (table 3).

Table 3: The classification of employee competences in the project ‘The Study of Human Capital’

Types of competences	Dimension of behaviour	Subdimension of behaviour
Artistic (ART)	artistic and creative skills	---
Office (OFF)	organization and conducting office work	---
Availability (AVL)	availability	willingness to travel often flexitime
Physical (PHY)	physical fitness	---
Interpersonal (PER)	contacts with other people	team work (cooperation)
		establishing contacts with people easily
		being communicative and expressing thoughts
		solving conflicts between people

Language (LG)	knowledge of foreign languages	---
Managerial (MNG)	managerial skills and organization of work	assigning tasks to other employees
		coordinating work of other employees
		disciplining other employees
Cognitive (COG)	seeking and analysis of information, and drawing conclusions	summarizing long texts fast
		logical thinking, analyzing facts
		continuous learning of new things
Computer (COM)	working with computers and using the Internet	basic knowledge of an office suite like MS Office
		knowledge of specialized programmes, the ability to write programmes, the ability to design websites
		browsing the Internet and e-mail literacy
Mathematical (MAT)	performing calculations	performing easy calculations
		performing complicated calculations
Self-Organization (SLF)	self-organization of work and showing initiative, timely execution of tasks	taking decisions independently
		entrepreneurship and showing initiative
		creativity
		resilience to stress
Technical (TEC)	technical imagination, handling and repairing technical devices	using technical devices
		repairing technical devices
Occupational (OCP)	knowledge, skills and attitudes determined by specific work in certain occupations	---

Source: Own elaboration on the basis [12].

The concept of competences, precisely saying, social competences and the ways of verifying them, has been for a few last years the subject of hot debates in the sphere of higher education due to the implementation of national qualifications framework (NQF). These competences, constituting one of three learning outcome categories, were specified for eight areas of knowledge/education. In the light of legal provisions they encompass among others: understanding the need of lifelong learning and the need of upgrading occupational skills and personal competences, the ability of cooperation and teamwork, the ability to prioritize to complete a particular task, the ability to identify and resolve dilemmas connected with performing a certain job, the ability to think and act in an entrepreneurial way [16].

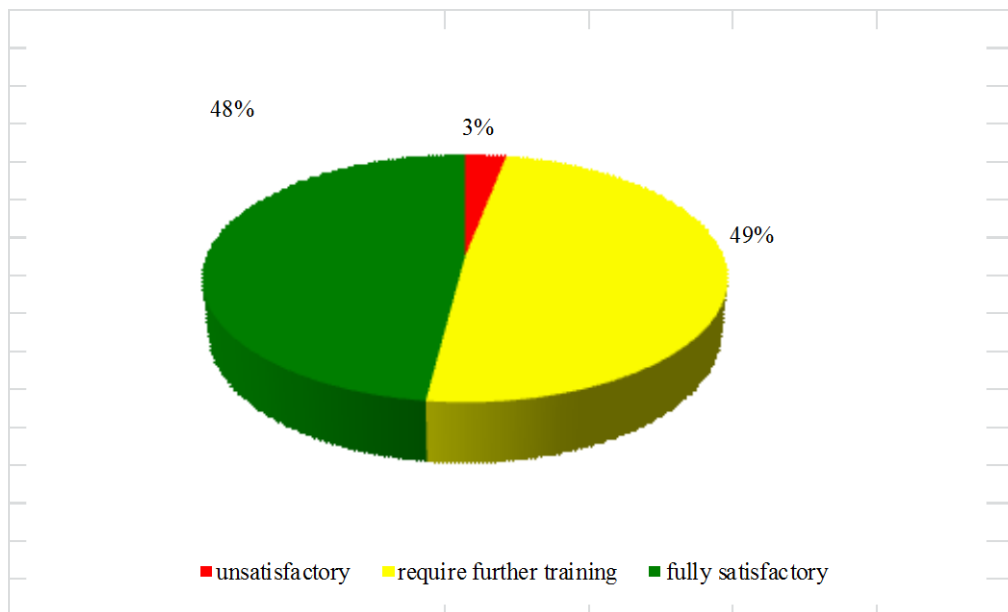
As it has been mentioned before, the word ‘competences’ has recently been becoming more and more popular. Numerous training sessions, seminars and courses concerning competences co-financed from the European Social Fund can serve as the best example. Apart from the subject matter of conducted professional trainings and courses it should be noticed here that a widespread popularity, frankly speaking even a fashion, causes that the word „competences” seems to be abused and misused.

The importance of employees’ competences in the opinion of entrepreneurs

It is obvious, especially for people managing smaller or bigger teams of people, that appropriate company and institution’s tasks realization and completion, and therefore their development, is conditioned by employment of workers with suitable competences. Nowadays, teamwork is getting more and more important, which means that a perfect vision of organization development will not be implemented without commitment of competent employees. Undoubtedly,

a number of presidents, directors, managers learned their painful lessons while implementing their own visions of development. The barrier was the shortage of competent people among the currently employed workers and moreover, difficulties in finding new employees with desirable competences and skills*. In order to realize what the scale of the problem is, in this part of the elaboration, first of all the assessment of competences level of currently employed people made by Polish entrepreneurs was presented. Furthermore, employers' requirements with regard to candidates' competences sought while looking for workers were described. The source of information were, in the first place, the results of research project conducted within the third round of the Study of Human Capital in Poland. The data presented here reflect the employers' opinions expressed by them in 2012.

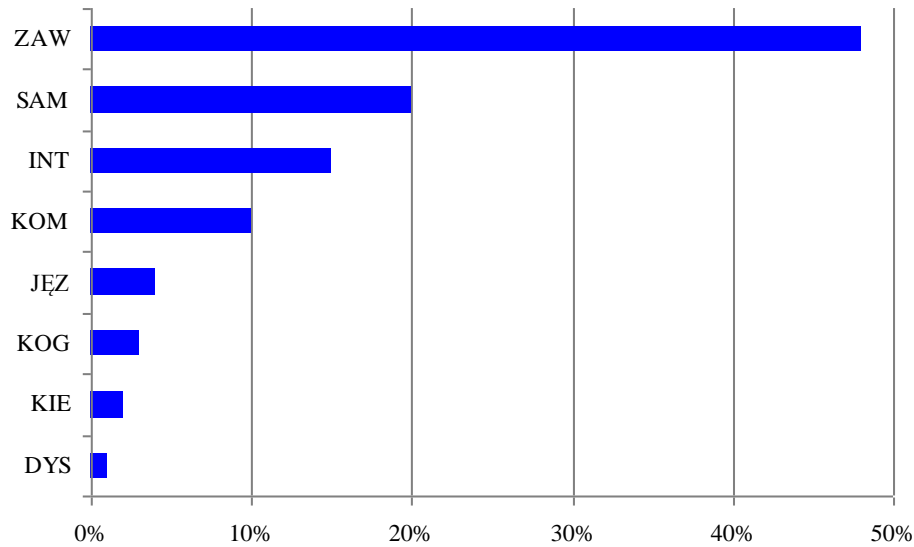
Nearly half of Polish entrepreneurs is fully satisfied with their employees' competences. The same number recognizes the need to enhance the employed workers' competences. The dissatisfied constitute only 3 % of the whole number of entrepreneurs (Fig. 1). It is not surprising that the evaluation of competences is so high as it can be expected that employers took on the workers who met their requirements. In general, the owners of micro- and small companies are more satisfied with their employees' competences and a similar situation takes place in the case of entrepreneurs operating in the manufacturing sector (industry, mining) and the tertiary industry type (personal services – trade, hotel and catering industries). On the other hand, the representatives of bigger businesses which mostly operate in specialized services and public services (education, healthcare, social services) more often emphasize the need to train their employees in order to improve their competences.



Picture 1: The evaluation of competences level of the currently employed people
Source: Own independent elaboration on the basis [17].

* In 2012 76 % of Polish entrepreneurs found seeking appropriate employees difficult. The problem concerned mostly micro- and small businesses functioning in building and transport sectors, whereas relatively the smallest problems appeared in the case of employers from big and large organizations and education sector (both public and private). Due to the lack of candidates in certain areas the recruitment was difficult as regards the following occupational groups: qualified blue collar workers (construction workers, electricians, drivers, metal, machinery and related trades workers), professionals (science and engineering professionals, health professionals, people dealing with information and communications technology, professionals holding positions related to economics and management) and employees in the sector of services (sales representatives, personal services workers) [17].

In the context of the above information a question arises: what competences are missing? The entrepreneurs usually point out to the lack of three competences: occupation-related ones thus specific to certain jobs and closely related to the character of the activities performed in specific occupations (48 % of respondents), self-organization skills so connected with organizing own work, showing initiative, timely execution of tasks and stress resistance (20 %) and interpersonal concerning contacts with people – both with colleagues and customers (15 %). The need of upgrading and enhancement of employees’ occupation-related competences is recognized mostly by employers from the public service sector, whereas the employers from production sector and personal services usually think that self-organization skills should be developed and trained. Moreover, the representatives of companies which provide people with services point out to the lack of interpersonal competences which are indispensable in a service sector.



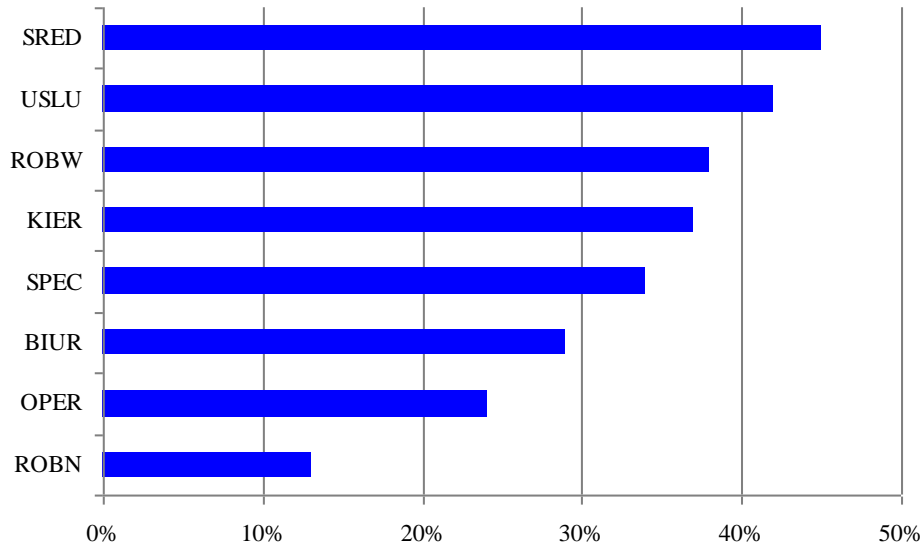
ZAW – occupational, SAM – self-organization, INT – interpersonal, KOM – computer, JEZ – language, KOG – cognitive, KIE – managerial, DYS – availability

Picture 2: Skills deficiencies of the currently employed workers*

Source: Own independent elaboration on the basis [17].

The businesspeople seeking employees point out to some deficiencies to candidates applying for a job (among others, lack of experience; lack of required qualifications, licenses, certificates; lack of motivation), but in general they pay attention to the lack of appropriate competences. In 2012 the problem was signaled by 36 % of Polish entrepreneurs and this accusation concerned mostly candidates for technicians and service workers (Fig. 3).

* The lack or insufficient level of competences of currently employed workers is described in the literature on the subject as the *skill gap* [23].



SRED – technicians and other medium-rung personnel, USLU – service workers, ROBW – skilled workers, KIER – managers, SPEC – professionals, BIUR – clerical support workers, OPER – operators and assemblers, ROBN – unskilled workers

Picture 3: The percentage of employers pointing out to lack of appropriate competences of candidates who would like to work in a certain occupation or on a certain post

Source: Own independent elaboration on the basis [17].

Polish employers above all require from the candidates who want to work in certain occupations and on particular posts self-organizational competences (54 % of respondents), interpersonal (42 %) and occupational (40 %) so these are the same competences the entrepreneurs point out to while estimating their employees’ shortages. However, it should be emphasized that the employers’ demand for certain competences is determined by the type of job, which they seek the workers for, and the sector in which the company operates. Therefore, in the case of white-collar workers self-organizational and interpersonal competences are required more often, and as concerns blue-collar workers – occupational skills. In the production branches (the secondary sector of economy) more stress is put on occupational competences, and in the tertiary/service industry the emphasis is on interpersonal competences and computer literacy. The entrepreneurs pay attention to the same competences although in a different order while assessing the candidates’ lacking competences in certain jobs or on particular posts (lack of occupational competences – 54 %, lack of self-organizational competences – 31 %, lack of interpersonal competences – 14 %).

Table 4: The competences required from candidates applying for jobs in certain occupations or on particular posts (in %)

Competences	Managers	Professionals	Technicians	Clerical support workers	Service workers	Skilled (blue-collar) workers	Operators and assemblers	Unskilled (elementary) workers	Total
DYS	16	7	13	14	12	8	16	13	11
INT	61	48	55	60	65	20	32	26	42
JEZ	10	12	10	10	8	0	6	0	6
KIE	31	2	1	1	0	0	2	2	1
KOG	2	12	16	21	11	10	8	11	12
KOM	12	20	13	31	5	4	1	3	9

SAM	62	52	57	45	46	56	57	74	54
ZAW	50	45	30	14	41	55	34	19	40

DYS – availability, INT – interpersonal, JEZ – language, KIE – managerial, KOG – cognitive, KOM – computer, SAM – self-organization, ZAW – occupational

Source: Own independent elaboration on the basis [17].

Table 5: The lacking competences of the candidates in certain occupations or on particular posts (in %)*

Competences	Managers	Professionals	Technicians	Clerical support workers	Service workers	Skilled (blue-collar) workers	Operators and assemblers	Unskilled (elementary) workers	Total
DYS	0	1	4	43	2	1	9	0	3
INT	3	11	13	23	36	1	13	30	14
JEZ	3	6	10	34	9	0	1	0	5
KIE	35	0	7	0	0	1	0	0	2
KOG	2	12	9	19	5	9	6	0	8
KOM	9	25	11	7	2	2	2	0	7
SAM	34	34	16	38	36	32	32	33	31
ZAW	48	34	56	17	51	62	71	51	54

Source: Own independent elaboration on the basis [17].

The place of residents' competences in the regional development strategies

The first decade of the 21st century in the European Union was a period of the Lisbon Strategy implementation, whereas the second decade undoubtedly will become the time of implementing the priorities described in the strategy Europe 2020. In the assumptions included in both strategic documents a lot of attention was paid to the importance of human capital development – in the Lisbon Strategy the attention was attracted to the necessity of creating the knowledge-based economy, whereas in the strategy Europe 2020 among three most crucial priorities was smart growth, thus the development of economy based on knowledge and innovation [19]. Generally speaking, the issues brought up in the 'old' and 'new' EU strategies are reflected in goals and objectives described in particular regional development strategies to higher or lesser extent [20]. Therefore, in the further part of the elaboration an attempt was made to indicate how the need of human capital development and particularly increasing residents' competences was exposed and displayed in goals, priorities and performance of certain regions[†]. The strategic documents of the regions became the source of information.

The hierarchization and the degree of goals, priorities and actions specification described in the regional development strategies are very diversified. It causes that the issue of human resources development and therefore increasing the residents' competences was articulated in more or less detailed way at different levels. Taking into consideration only the content of regional strategies and the level of records a conclusion might be drawn that the discussed issues are appreciated most in Wielkopolskie Region. In the strategy of this voivodeship increasing residents' competences and employment was written down as a strategic objective number 7. Moreover, the necessity of development of citizens' competences was literally mentioned in two regional strategies, namely Podlaskie voivodeship and Śląskie voivodeship although at lower level (level of

* The lack or insufficient level of competences of candidates is defined in the literature on the subject as the *skill shortage* [18].

[†] The term „region” is used in this elaboration meaning ‘voivodeship’.

operational objectives). In the strategic documents of remaining regions a lot records were indirectly devoted to the analyzed matters. It means that the strategies did not concentrate literally on competences, but on development of human resources in a broad sense, taking particularly into consideration the quality of education and adjusting education to the needs of economy. In order to present the records devoted to the development of human capital and the place of residents' competences in the regional development strategies a table was constructed in which suitable entries were indicated and their level of importance specified (table 6).

Table 6: The residents' competences described in the regional development strategies

Region*	Goals assigned to human capital development and upgrading residents' competences	The general number of goals stated in regional development strategies
DLŚ	<ul style="list-style-type: none"> • Goal 1: Development of economy based on knowledge • Goal 6: Increasing employment and workers' mobility • Goal 8: Increasing the level of education, lifelong learning 	Goals – 8
K-P	<ul style="list-style-type: none"> • Strategic objective: Economy and jobs • Strategic objective: Active society and efficient services • Strategic objective: Innovation 	Strategic objectives – 8
LBL	<ul style="list-style-type: none"> • Strategic objective 3: Selective increasing knowledge potential, qualifications, technological advancement, entrepreneurship and innovation of the region <ul style="list-style-type: none"> • Operational objective 3.2: Assisting the fields of studies at higher level, which are of special importance for the future regional labour market and having unique importance beyond regions • Operational objective 3.4: Development of education system adjusted to the specific nature of the region 	Strategic objectives – 4 Operational objectives – 19
LBS	<ul style="list-style-type: none"> • Strategic objective 1: Competitive and innovative regional economy <ul style="list-style-type: none"> • Operational objective 1.3: Enhancing the quality of education and adjusting it to the needs of the regional labour market • Strategic objective 3: Social and territorial cohesion of the region • Operational objective 3.1: Increase of accessibility and attractiveness of education in educational institutions 	Strategic objectives – 4 Operational objectives – 22
ŁDŹ	<ul style="list-style-type: none"> • Strategic objective: Economic cohesion <ul style="list-style-type: none"> • Operational objective 2: Modern human capital and labour market • Strategic objective: Social cohesion <ul style="list-style-type: none"> • Operational objective 5: High standard and access to public services 	Strategic objectives – 3 Operational objectives – 9
MAŁ	<ul style="list-style-type: none"> • Area 1: Economy of knowledge and enterprise <ul style="list-style-type: none"> • Direction of development policy 1.1: Development of intellectual capital • Direction of development policy 1.4: Development of vocational education and employment support 	Areas – 7 Directions of development policy – 30
MAZ	<ul style="list-style-type: none"> • Strategic objective: Improving the quality of life and using the human and social capital to create innovative economy <ul style="list-style-type: none"> • Direction of operations 18: Development of human and social capital 	Strategic objectives – 3 Directions of operations – 36

	<ul style="list-style-type: none"> • Direction of operations 20: Development of scientific areas important for the region 	
OPO	<ul style="list-style-type: none"> • Strategic objective 1: Competitive and stable labour market • Operational objective 1.1: Improving the quality of education and adjusting the educational offer to labour market needs • Operational objective 1.2: Supporting lifelong learning 	Strategic objectives – 10 Operational objectives – 33
PKR	<ul style="list-style-type: none"> • Strategic objective 1: Development of competitive advantage on the basis of creative specializations as a sign of building state and international competitiveness • Priority 1.2: Science, research and higher education <ul style="list-style-type: none"> • Direction of operation 1.2.2: Reinforcing the quality of education within existing and new fields of studies • Direction of operation 1.2.3: Development of educational system at higher level reinforcing regional specializations • Strategic objective 2: Development of human and social capital as the innovative factors of the region and improvement of the quality of citizens' life <ul style="list-style-type: none"> • Priority 2.1: Education <ul style="list-style-type: none"> • Direction of operation 2.1.1: Improving the quality and accessibility of educational services • Direction of operation 2.1.2: Creating an attractive educational offer adjusted to changing regional labour market, technological change and the needs of key economic sectors of the region • Direction of operation 2.1.3: Shaping and promoting attitudes connected with lifelong learning 	Strategic objectives – 4 Priorities – 19 Directions of operations – 64
PDL	<ul style="list-style-type: none"> • Strategic objective 1: Competitive economy • Operational objective 1.3: Developing occupational competences and support for occupational activity of the region residents 	Strategic objectives – 3 Operational objectives – 15
POM	<ul style="list-style-type: none"> • Strategic objective 1: Modern economy <ul style="list-style-type: none"> • Operational objective 1.2: Competitive higher education • Strategic objective 2: Active residents <ul style="list-style-type: none"> • Operational objective 2.1: High level of employment • Operational objective 2.3: Effective system of education 	Strategic objectives – 3 Operational objectives – 10
ŚLS	<ul style="list-style-type: none"> • Strategic objective B: Śląskie voivodeship as a region with high quality of life and with common accessibility to high standard public services • Operational objective B.2: Development of residents' competences, skills and growth of citizens' activity 	Strategic objectives – 4 Operational objectives – 13
ŚWK	<ul style="list-style-type: none"> • Strategic objective 3: Concentrating on building human capital and a basis for innovative economy of the region • Operational objective 3.1: Fostering accumulation of human capital 	Strategic objectives – 6 Operational objectives – 20
W-M	<ul style="list-style-type: none"> • Strategic objective 1: Economic competitiveness growth • Operational objective 1.2: Companies innovation growth • Operational objective 1.3: Increasing the number of jobs • Strategic objective 2: Social activity growth <ul style="list-style-type: none"> • Operational objective 2.2: Increasing accessibility and the quality of public services 	Strategic objectives – 4 Operational objectives – 10
WLP	<ul style="list-style-type: none"> • Strategic objective 7: Increase of residents' competences and employment • Operational objective 7.1: Improving conditions, quality and 	Strategic objectives – 9 Operational

	<ul style="list-style-type: none"> accessibility of education • Operational objective 7.4: Development and promotion of creative and innovative attitudes • Operational objective 7.5: Reinforcing vocational and technical education and improvement of labour market organization • Operational objective 7.6: Development of lifelong learning 	objectives – 65
ZPM	<ul style="list-style-type: none"> • Strategic objective 5: Building an open and competitive society • Direction objective 5.1: Staff development of innovative economy • Direction objective 5.3: Development of lifelong learning • Direction objective 5.4: Development of vocational education in accordance with the needs of economy 	Strategic objectives – 6 Direction objectives – 33

DLŚ – dolnośląskie (Dolnośląskie Region or Lower Silesia), K-P – kujawsko-pomorskie (Kujawsko-Pomorskie Region or Kuyavia-Pomerania), LBL – lubelskie (Lubelskie Region), LBS – lubuskie (Lubuskie Region), ŁDŹ – łódzkie (Łódzkie Region), MAŁ – małopolskie (Małopolskie Region or Lesser Poland), MAZ – mazowieckie (Mazowieckie Region or Mazovia), OPO – opolskie (Opolskie Region), PKR – podkarpackie (Podkarpackie Region or Subcarpathia), PDL – podlaskie (Podlaskie Region), POM – pomorskie (Pomorskie Region or Pomerania), ŚLS – śląskie (Śląskie Region or Silesia), ŚWK – świętokrzyskie (Świętokrzyskie Region), W-M – warmińsko-mazurskie (Warmińsko-Mazurskie Region or Warmia-Masuria), WLP – wielkopolskie (Wielkopolskie Region or Greater Poland), ZPM – zachodniopomorskie (Zachodniopomorskie Region or West Pomerania).

Source: Own independent elaboration on the basis [21].

Conclusions

It is not a secret that that a direct stimulus to create the Treaty of Lisbon was a need to reduce the distance between European economy and American one*, whereas the basis for formulating a European strategy, namely Europe 2020, was the necessity to overcome a financial and economic crisis and competing not only with the USA, but also or maybe in the first place, with China†. In connection with the above, the first of three priorities brought up in the new European strategy concentrate on smart growth and therefore basing economic development on knowledge and innovations.

The key to the smart growth is undoubtedly the development of human capital. This issue has been recognized and noticed by local authorities of the regions, which devote a lot of attention to it in the regional development strategies. The goals directly and indirectly connected with increasing residents' competences described in the regional development strategies give hard evidence for it. In these documents it is repeatedly emphasized that the growth of citizens' competences in not only a target, but an indispensable condition of further regional development. Competent residents are simultaneously competent workers of enterprises and institutions located in the region. And it should be remembered that the lack or insufficient level of competences of the currently employed and future employees is undoubtedly the most serious obstacle and barrier of contemporary companies and institutions development. This situation means in this respect the necessity of covering additional costs by the employers. If the employers decide to increase the workers' competences, they have to allocate a certain amount of money and/or spend time on additional

* In 2000 the average value of GDP *per capita* in the UE reached the level 69% of GDP *per capita* in the USA. Besides, in two biggest European countries, namely, Germany and France, the mentioned above European average was higher by only 4 and 3 percentage points respectively [22].

† The rapid and long-term economic growth of China is accompanied by active educational and scientific policies of the state. This area has been announced by the Chinese authorities a strategic priority for the following decade which is supposed to give China a possibility to reach a higher level (based on technology) of development and competitiveness [11].

training activities (e.g. in-house trainings or off-the-job trainings, coaching, mentoring). If the employers do not decide to upgrade the workers' skills to a desirable level required in a certain occupation or on a particular post they have to expect that realization of some tasks by the organization will be impossible, particularly implementation of different innovations (e.g. organizational, production ones). It is also important that the people employed in certain occupations who perform tasks not matching and corresponding to their competences can feel dissatisfied what has a negative impact on their work motivation and thus decreasing its quality and generates losses for employers [24].

Summarizing, it is worth emphasizing that changes on the labour market going along with demographic changes cause that the human life cycle is mostly determined by the cycle of work activity, in which adaptability connected with willingness of increasing competences, namely acquiring knowledge, improving and mastering skills, and modifying attitudes, becomes the basic characteristic. In such circumstances it is extremely important to build awareness and lifelong learning culture and above all orientating education towards providing suitable occupational competences and shaping desirable self-organizational and interpersonal ones. These competences are nevertheless needed and useful currently and will be indispensable in the future – irrespectively of changes taking place within different sectors and branches and no matter if these sectors are to decrease, shrink or new ones will emerge.

References:

1. Mincer J. (1958). Investment in Human Capital and Personal Income Distribution, *Journal of Political Economy*, No. 66, pp. 281-302.
2. Schultz T. (1961). Investment in Human Capital, *American Economic Review*, No. 51, pp. 1-17.
3. Becker G. (1962). Investment in Human Capital: A Theoretical Analysis, *Journal of Political Economy*, No. 70, pp. 9-49.
4. Savvides A., Stengos T. (2009). *Human Capital and Economic Growth*, Stanford University Press, Stanford, p. 12.
5. Becker G. (1993). *Human Capital. A Theoretical and Empirical Analysis*, with Special Reference to Education, 3rd ed., The University of Chicago Press, Chicago, p. 6.
6. Weisbrod B. (1962). Education and Investment in Human Capital, *Journal of Political Economy*, No. 70, pp. 106-123.
7. Uzawa H. (1965). Optimum Technical Change in An Aggregative Model of Economic Growth, *International Economic Review*, pp. 18-31.
8. Nelson R., Phelps E. (1966). Investment in Humans, Technological Diffusion, and Economic Growth, *American Economic Review*, No. 56, pp. 69-75.
9. Ben-Porath Y. (1967). The Production of Human Capital and the Life Cycle of Earnings, *Journal of Political Economy*, No. 75, pp. 352-365.
10. *The Well-Being of Nations. The Role of Human and Social Capital*, OECD, Paris 2001, p. 18.
11. Górniak J. (2011). Kapitał ludzki [in:] *Bilans Kapitału Ludzkiego w Polsce*, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa, pp. 15-17.
12. Strzebońska A., Dobrzyńska M. (2011). Kompetencje jako przejaw kapitału ludzkiego [in:] *Bilans Kapitału Ludzkiego w Polsce*, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa, pp. 23-25.
13. Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning, 2008/C 111/01.
14. Kanarski L. (2005). *Przywództwo we współczesnych organizacjach*, Dom Wydawniczy Elipsa, Warszawa, p. 155.
15. Walkowiak R. (2004). *Model kompetencji menedżerów organizacji samorządowych*, Wydawnictwo Uniwersytetu Warmińsko-Mazurskiego w Olsztynie, Olsztyn, p. 23.
16. Regulation of the Minister of Science and Higher Education of 2 November 2011 on National Qualifications Framework for Higher Education, Dz.U. z 2011 r., Nr 253, poz. 1520.
17. Kocór M., Strzebońska A., M. Dawid-Sawicka. (2013). *Pracodawcy o rynku pracy*, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa, pp. 72-85.

18. McGuinness S., Bennett J. (2006). Examining the link between skill shortages, training composition and productivity levels in the Northern Ireland construction industry, „International Journal of Human Resource Management”, Vol. 17, No 2, pp. 265-279.
19. Europa 2020. A European Strategy for Smart, Sustainable, and Inclusive Growth, KOM (2010) 2020 final version, European Commission, Brussels 2010, pp. 5-6.
20. Zimny A. (2012). Zarządzanie rozwojem polskich regionów w świetle celów strategii Europa 2020 [in:] Determinanty rozwoju regionów w Europie, red. K. Pająk i T. Różański, Wydawnictwo PWSZ w Piile, Piła, p. 202.
21. Regional development strategies.
22. Balcerzak A.P., Górecka D., Rogalska E. (2008). Taksonometryczna analiza realizacji strategii lizbońskiej, „Wiadomości Statystyczne”, nr 6, p. 78.
23. Hogarth T., Wilson R. (2001). Skills Matter. A Synthesis of Research on the Extent, Causes and Implications of Skills Deficiencies, Department for Education and Skills, Nottingham.
24. Czarnik Sz., Kocór M. (2011). Diagnoza niedoborów i luk kompetencyjnych [w:] Bilans Kapitału Ludzkiego w Polsce, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa, p. 17.