SOME COMMENTS ON THE CONCEPT OF HUMAN CAPITAL, ITS VALUE AND REPRODUCTION

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Abstract

Individuals generate, retain and use their knowledge and skills (human capital) and thus create intellectual capital. Their knowledge and skills are enhanced by the interactions between them (social capital) and generate the institutionalized knowledge and skills possessed by an organization (organizational capital). An overarching concept is intellectual capital, which is defined as the stocks and flows of knowledge and skills available to an organization. The intellectual capital is therefore formed by human capital, social capital and organizational capital. All the concepts were defined from point of view of organization, but to a certain extent they can be related to the whole society. The value of the human capital is increased in the process of developing knowledge, professional and social skills and in the process of acquiring experiences. All the processes depend on time and thus on age of individuals and therefore the value of human capital is influenced by the age structure of labor force. The innate abilities, knowledge, skills, experiences and approaches are considered to be the human capital only, if they are used in the values production. From this perspective it is necessary to see the human capital reproduction. There is a tendency in the literature to confuse the human capital reproduction rather with the potential workforce reproduction, i.e. potential workforce having acquired and ascertainable knowledge and skills. Such reproduction of the potential workforce may be a certain precondition of the human capital reproduction, but - because of definition of the human capital as entity used for values production - it is necessary to understand the human capital reproduction differently from the understanding usually applied in the practice.

Keywords: human capital, intellectual capital, social capital, organizational capital, human capital value, age structure, human capital reproduction.

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1. Human capital concept

The term of human capital is a neologism used more frequently in theory of human resource management since 1990s, though it was used for the first time in the beginning 1960s. It is possible see that it became a relatively popular and fashionable term. Unfortunately, many people didn't understand it right and therefore it is often not used correctly, especially in the Czech Republic. Most frequently it is used as a synonym of human resources, employees, labor force or even of labor resources population (people in the working age) generally. Originally the term was used in connection with the shift from understanding employees as the cost item of organization to understanding them as the assets, the most important part of wealth of organization, the disposable capital, which value is possible to increase, e.g. through investing in employees training and development. The term human capital in their original conception related solely to human resource management in organization, but it is possible to use it as well in connection with the human resource management in some other unit, e.g. in a region or a state. But it is not quite correct, because the original meaning of the term is lost.

What is the human capital?

In connection with the concept of human capital there is necessary to mention concepts of intellectual capital, social capital and organizational capital. Individuals generate, retain and use knowledge and skills (human capital) and create intellectual capital. Their knowledge is extended, increased and enlarged and thus enhanced by the interactions with the other individuals (social capital) and it generates the institutionalized knowledge, which is possessed by an organization (organizational capital).

The term human capital was used first time by T. W. Schulz in 1961. He developed and explained his concept in 1981 as follows: "Consider all human abilities to be either innate or acquired. Attributes which are valuable and can be augmented by appropriate investment will be human capital," (*Schulz, 1981*).

Bontis, Dragonetti, Jacobsen and Roos suggested a more detailed definition in 1999: "Human capital represents the human factor in the organization; the combined intelligence, skills and expertise that gives the organization its distinctive character. The human elements of the organization are those that are capable of learning, changing, innovating and providing the creative thrust which if properly motivated can ensure the long-term survival of the organization," (*Bontis, Dragonetti, Jacobsen & Roos, 1999*).

Some authors state that human capital is to a large extent non-standardized, existing and tacit in heads of individuals, dynamic, dependent on context and conditions, possessed by people and embodied in them. These characteristics make it difficult to evaluate, measure, and appraise human capital. The features of human capital that are so important, so crucial to organizational performance are the flexibility and creativity of individuals, their ability to gain and develop knowledge and skills over time and to respond in a motivated way to different contexts and stimuli. The knowledge, skills and abilities of individuals are factors that create value and therefore it is necessary to aim at tools and means of attracting, recruiting, retaining, developing and maintaining the human capital that the individuals represent.

It needs to emphasize, that those are the people, who are in this capital possession and that they decide, when, how and where it will be exerted and thus contribute to attaining an aim. The decision that people can make concern with the way, to what extent they will be willing to engage, to commit in their role performance (in connection with job it means approaches and attitudes to a way of job performance and effort, to innovative and productive behavior). They can also decide, whether or not remain in the organization.

Social capital

Human capital is the most important component of intellectual capital. Another component of intellectual capital is social capital. It consists of the knowledge resulting and derived from networks of relationships within an organization and as well outside of it. Social capital was defined in 1996 by R. Putnam as "the features of social life – networks, norms and trust – that enable participants to act together more effectively to pursue shared objectives," (*Putnam, 1996*). The World Bank proposed another definition in 2000: "Social capital refers to the institutions, relationships and norms that shape the quality and quantity of a society's social interactions… Social capital is not just the sum of the institutions that underpin a society – it is the glue that holds them together," (*World Bank, 2000*).

Social capital originates and grows to a large extent as a result of conversion, modification, socialization of a part of human capital, it means, knowledge and skills hidden in heads of individuals (in other words, tacit knowledge and skills). They are consequently changed in the explicit, visible and to a certain extent free accessible collection of knowledge and skills. It is realized in the process of knowledge management aiming at the conversion of tacit knowledge into explicit knowledge. Consequently, those are processes and ways of developing knowledge and skills through the mediation of interactions between people, mutual impact, receiving and acquisition experience to be changed into the common property of a group of people (e.g. employees of an organization).

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Organizational capital

Organizational capital consists of the institutionalized knowledge and skills possessed by an organization, which are stored in databases, manuals, etc. There is as well possible to see a synonymous term structural capital, but many authors prefer term organizational capital, because it clearly informs that those are the knowledge and skills that the organization really and actually owns.

Intellectual capital

Intellectual capital is the overarching concept and it consists of human capital, social capital and organizational capital. It is defined as the stocks and flows of knowledge and skills available to an organization. They can be regarded as the intangible resources associated with people and together with tangible resources (money and physical assets) comprise the market or total value of an organization. Intellectual capital is developed and changed in the course of time. People interacting a working commonly play very important role in those processes.

Human capital importance

Theory of human capital lays emphasis on the added value that people contribute to an organization. As already mentioned, the concept of human capital regards people as the assets, wealth, competitive advantage, and emphasizes that every investment of organizations into people will bring very positive effect.

Application of the theory of human capital in the other, non-organizational units (e.g. in regions or states) has a positive impact on the orientation on education and training and on the investment into education and training and as well a positive impact on advancement and competitive ability of those units.

2. Human capital value and age of its bearers

Starting consideration

Human capital, as defined, is constituted from innate abilities and acquired knowledge, skills, experiences and approaches (behavior). It means that process of developing knowledge and professional and social skills and obtaining experiences increases the human capital value. However, the process is a function of time and there is possible to articulate a hypothesis that the process is function of age, too. Consequently, there exists a relation between human capital value and age structure of its bearers, i.e. labor force of an organization or of the other unit. It is possible to develop the hypothesis that the human capital value of a certain unit is increasing if the share of older, more experienced labor force is increasing, too.

Exploring the hypothesis

There exist some research results about relation between age of individuals and their performance level, which make the case for the mentioned hypothesis. One of the research results was the long-term research of employees' performance level realized by Dr. Otto Fürer from Unilever Company (Switzerland) that brought very interesting results about relation between age and performance level of employees (Figure 1).

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Figure 1: Relation between age of employees and their efficiency/performance level (Fürer, O.: Figure presented during lesson at the Strategy Institute, University of Economics Prague in 1992 and given to participants, Unilever, Switzerland)

There is possible to notice a considerable difference in relation between age and performance level in the category of manual laborers on the one side and in the category of creative professionals performing a demanding or managing work. While the top of performance level of the first category occurs around 30th year of age, in case of the second category it is around 55th year of age.

Let us as well notice, that the performance level of creative professionals increases in connection with acquiring knowledge and experience, consequently, that the human capital value they represent increases. It is possible to see as well, that the performance level of the creative professionals category after the top decreases relatively rapidly, however still in the age of usual pensioning their performance level is comparable with the performance level of individuals in the 30th years of age of the same category.

Unfortunately, it is necessary state that the opinions of people (including graduated managers) about the relation between age and performance level or between age and human capital value reflects situation existing at the turn of 19th and 20th century, when the manual component in the work of people was dominating and the experiences proved that the top of performance level was around 30th year of age. But the character of work has substantially changed since that time: the manual component of work is continually decreasing and the intellectual, creative component is becoming more and more important.

In the connection with the systematic enrichment of work with intellectual and creative components and with the decrease of manual components importance the course of performance level is shifting from the traditional curve, which is typical for manual labor with the top around 30th years of age, to the curve typical for course of performance level in the category of creative professionals. In addition, the creative component of work is increasingly possible to see (passing away the traditional creative professionals) as well in the work of supervisors and managers and even in the work of individuals performing customary administrative and manual work. After all, the modern approaches to managing people, e.g. delegation and empowerment, stress on autonomy of employees and their training and development, their participation in decision-taking, concept of performance management,

concept of talent management and other modern management techniques – those all are symptoms of changed character of work.

The work of all employee categories in the 21st century is undoubtedly more complicated and concerning abilities more demanding. The more is work complicated and concerning abilities demanding, the longer time an individual needs to acquire skills and experiences necessary for its effective performance. Those are just experiences and intellectual, emotional a political (interpersonal) maturity, which plays an enormous role. The maturing of individual is longer and therefore the top of performance level is shifting to the higher age. The above presented figure based on long-term study shows clearly that people now reach the top of intellectual, creative abilities in around 55 years of age. It is also confirmed by the fact that the individuals, who obtained the Nobel Prize for discoveries and inventions, had made the discoveries and inventions nearly exclusively in the age over 45 years. If we examine biographies of the most famous managers of the world, we can see that they only exceptionally reached their "starry greatness" in age under 40 years, but rather in the higher age. And they reached their "starry greatness", because they had in their teams not only so called dynamic younger people, but first of all experienced and deliberate collaborators with a trustworthy judgements.

Briefly, all categories of work in the 21st century need knowledge, experiences and emotional and interpersonal maturity. It is not enough to pass a school preparing individuals for workman's or non-workman's professions. It needs to pass sufficiently long "school of life".

Unfortunately, the approach to employment of the higher age individuals is influenced by something, what is possible to characterize as a stupidity of employers and managers. In fact, it is stereotyping strengthened by the rather stupid American film and TV serial stories, which don't reflect the American reality at all. The employers and managers suffer from an irrational myth that younger people are dynamic, courageous, enterprising, flexible, unconventional, that they like change, have better ability to learn and strive for education, there is possible to bring them up our wishes, they are prospective employees and it needs to offer them a chance. On the other hand, the older people are pedant, conservative, overcautious, unaccommodating, non-prospective, they are not willing to change anything and they don't want to learn. As university teacher with a long experience with young and older students I know that the mentioned characteristics are not function of age at all. I was examining the results of my students for a long time, because it served as a material for adjustment of contents and style of my teaching. I have to say that those were very interesting data. During the last years of my activity I registered that among students with the best results (top ten, or top twenty) dominated regularly so called distance or part-time students, that is students on an average ten and more years older than the full-time students. In addition, the so called students of the third age (retiring individuals) belonged to the top results students, too. I had as well very good experiences with students of MBA program, when participants were often individuals over 50 years of age. Their approach to study made my work substantially more easy – in spite their considerable workload in their jobs. All the seminaries with them were very inspiring and active. Just in the MBA courses I had a possibility to compare abilities and approaches of the different age individuals and the outcomes of the comparison didn't bear witness about better abilities and approaches of young and rather unripe individuals.

Consequently, there is a question: Is the employing young individuals so advantageous and employing older individuals so disadvantageous?

The Cranfield Project on European/Global Human Resource Management had in its questionnaire a question, if organizations aim at recruiting older people (50 years and older). The research results from the end of 1990 are quite interesting.

Country Share in % Country Share in % Country Share in % Traditional market economies Norway 3.58 Transforming countries Switzerland 13.69 Belgium 3.19 Germany East 7.50 Spain 12.93 Germany West 2.58 Bulgaria 2.67 2.56 Ireland 10.76 Sweden Estonia 1.83 Denmark 10.10 Finland 2.07 Czech Republic 0.53 Austria 10.00 Portugal 1.78 **Other countries** 9.99 United Kingd. 1.27 Israel Italy 11.86 France 1.14 Australia 7.50 Cyprus 5.00 North. Ireland 0.74 4.37 4.98 Greece Japan Tunisia Netherlands 3.85 3.13

Table 1: Share of organizations (%) aiming at recruiting older individuals (over 50 years), (The Cranfield Project on European/Global Human Resource Management 1998-2000. Cranfield, Centre for European/Global HRM 2002)

Note: The table covers only countries participating in the survey in the 1998 – 2000 period.

The data of the table could seem unimportant, but it is necessary to take into account that those were organizations, which aimed actively at recruiting older individuals. It doesn't mean that the rest of organization refused older individuals. The National Reports of several countries (Netherlands, Belgium, Scandinavian countries) stressed that a relatively low share of such organizations is a result of fact that in these countries there is any discrimination (including age discrimination) in sphere of employment illegal and that organization employ people solely on their abilities. The reports as well mentioned that many organizations would find any aiming at any age category as discrimination of the other categories and consequently they have no programs asked in the questionnaire. In any case, the position of the Czech Republic was very startling.

Looking the table there is necessary to raise a question why the relative high percentage of organizations in several countries aims at recruiting older people. Let's review some literature and research results. The British Chartered Institute of Personnel and Development (CIPD) examined this problem very intensively and here are the conclusions:^{*)}

- Age is poor predictor of job performance.
- It is misleading to equate physical and mental ability with age.
- It is misleading to equate personality features with age.
- More of the population at present is living active, healthy lives as they get older.
- Age can be only rarely a real and acceptable demand to employees.
- Outmoded and unaccountable practices concerning recruitment, selection, promotion, training and development, dismissal and retirement are damaging both for society and organizations.

^{*)} See the CIPD Internet home page, or Armstrong, M.: Řízení lidských zdrojů. Praha, Grada Publishing 2002, p. 762.

Literature brings also some other arguments, which can besides be reached using simple ,, draught horse ". *Employees in older age use to be:*

- More experienced, more informed, they have more complex and more rich knowledge and skills;
- More stable and in atmosphere being not well disposed towards employing older people they value more their jobs and they are more committed and loyal to employers;
- Their performance is more well balanced and more reliable;
- Better team players and more efficient in project teams;
- More judicious, less rash, they are able to judge better any threatening risks and they don't succumb to different fashions and aberrations
- Better negotiators, trainers, coaches and mentors;
- More often a source of acceptable and efficient ideas;
- More experienced in interpersonal relations, which influences positively atmosphere on the place of work and creates preconditions for restricting occurrence of conflicts;
- More informed about organization life, customs and practices, they possess what is called political intelligence;
- People with more extensive net of useful contacts inside and outside of organization, they have better ability to form different coalitions aiming at carrying out things;
- People, who don't cause so many industrial injuries and accidents.

There is possible to appreciate another feature of older people, i.e. they are not (in comparison with young people, first of all new graduates) characterized so much by the overgrown self-importance causing wrong decisions and very often enormous damages. Another advantage of older employees bears upon the fact that they are aware of their age for which diseases and worse health is more frequent and therefore to maintain their job they strive minimalize the occurrence of their absence from work caused by illness. And many other arguments there could be found in literature and practice.

One of the arguments, which can be taken as a warning against waste of talents and human capital represented by older age individuals, consists in the fact that the characteristic feature of human resources in 21st century is systematic, life-time learning. The life-time learning means systematic development and enrichment of knowledge, skills and personality of individual. The process is running during time and it means that there is a larger cumulation of knowledge, skills and abilities at all among older individuals. The new concept of talent management is besides based on this reality.

Many employers or managers think that people of higher age are not prospective, because they will retire after few years and consequently they will work for them the relatively short time only. However, from this point of view young people beginning their careers are much less stable and prospective. Some studies proved (including study of university graduates organized in Poland in 1980s, in which author of the text participated) that people at the beginning their careers, it means during about ten years after finishing preparation on job, are characteristic with an increased turnover, because they accelerate their careers in this way, increase their income, acquire more experience from different environments and – properly speaking – increase values of their labor forces. Their unstability is influenced as well by their personal situation. They are in the age, when they are founding their families and trying to produce the necessary material condition for the families. Consequently, they – for example – go to regions, where exist better chance to get dwelling.

Their personal priorities can be – and often are – in a certain contradiction with needs of their employers, especially with the need to stabilize human resource. So, the orientation on the so called "young and dynamic working collective/team" means at the same time a relatively high level of turnover and a certain danger of outflow of organizational know-how into other organizations, i.e. certain serious impact on the organizational competitiveness.

So called "young and dynamic working collective/team" – regardless of lack of experience and difficulties with receiving them from older, more experienced employees – brings also some another dangers. First of all, it is a danger of interpersonal relations erosion in such collective consisted of only young, dynamic and usually on career oriented individuals. It leads to a certain internal competitive environment, which can interfere in collaboration and teamwork and results in undesirable competitiveness or even in mutual dirty tricks. It is understandable that such atmosphere has unfavourable influence on performance. And such young, homogeneous working collective in any case don't bring an advantage resulting from employee diversity, which is contemporary in the center of theory and practice interest as an important source of innovation and performance improvement.

It is self-evident, that there could be possible to find many other arguments about advantage or disadvantage of employing older people and about advantage or disadvantage of orientation on so called "young and dynamic working collective/team". Nevertheless, it is not purpose of this text. It should only draw attention to harmfulness of some myths and fashionable trends in employing people and of attitudes to people as effective labor force, i.e. human capital. It depends on employers and managers, whether they will reflect upon such concerns and use their senses, or whether they will be drifted on fashionable wave, which can cause the seasickness in organizations or also crash on cliff of hard reality of competitiveness.

Why some foreign or international firms operating in the Czech Republic do prefer young employees? The first and deciding reason consists in the fact that they struggle for maximum competitiveness to have a competitive advantage. Consequently, they are interested in the costs minimization, including payroll. The Czech Republic is interesting for them, because of cheap and skilled labor force (as soon as the Czech wages and salaries get nearer to the level existing in the West Europe, they leave for another countries). And it is clear that the younger, less experienced employees are cheaper in comparison with the older and more experienced. The younger individuals are also easily manipulatable, they are willing to accept different demagogical rhetoric of commitment, time flexibility etc. They are more sensible to all possible attributes of membership in prestigious international firm, which are costly insubstantial. The firms speak demagogically about such phenomena as a greater flexibility and dynamism. But in backwardly there exists an expenditure saving and easier manipulability. Or as the case may be willingness to be at disposal 24 hours every day and 7 days for every week.

The second reason is connected with the common notion of foreign investors, entrepreneurs and managers that older people in the former socialist countries are to the certain extent infected by the approach to work that they adopted under conditions of former régime, so that they could be carriers of infection of such approach. Consequently, it is much better no to employ them. I have often heard such opinions from managers and other people especially in the U.S.A., but as well in the West Europe. Preferring youth, so called "people not influenced by socialism", who are rapidly able to be adapted to the needs of international firms, was – and possibly is – some stake on certainty in their notions.

The third reason probably has, or at least until recently had, well-founded. There exists a notion that younger people are able to communicate better in foreign languages and are able to operate with modern information technology. But some data from different studies about learning among adult individuals shows that the language courses and computer operation courses are most demanded kind of learning even among people in older age, especially among people performing non-manual jobs.

It means the long-term studies of relations between performance and age of the labor force and review of published opinions on employing people of different age give the evidence the human capital value is substantially influenced by age of labor force and that the share of the older individuals among labor force influences the human capital value positively. Consequently, from the point of view of human capital value, there is no rational reason to overvalue the importance of younger individuals and to undervalue the importance of individuals in the higher age, especially in age over 50 years.

3. Human capital reproduction

Human capital is a vital source of values production. But the innate abilities, knowledge, skills, experiences and approaches (behavior), that define it, are changing into human capital only, when they are used for the values production, when they are invested as a capital.

Human capital is in any case confused with what is known as labor resources consisted of population in working age and economically active population in post-working age - i.e. with potential labor force - because human capital is only a part of labor resources. There is a certain parallel with money. Money is changing in capital, if they are invested, i.e. used for values production. Money that we have home in drawers is simply not any capital.

Abilities, knowledge, skills and experiences of individuals, who don't participate in the values production, lie fallow and therefore they don't represent any human capital in accordance with the concept of human capital, they are at least some potential human capital.

Problem of human capital reproduction

If the human capital consists of innate abilities and acquired knowledge, skills, experiences and approaches (behavior) that are used for values production, then - strictly understanding – the human capital reproduction is realized in the process of its using, i.e. in the process of work. People possessing certain innate abilities and in process of education and preparation for job acquired knowledge and skills are entering process of work and their abilities, knowledge, skills and behavior are changing into human capital. The abilities, knowledge, skills and behavior possessed by people can in the process of work if not used lose (narrow reproduction), maintain (simple reproduction), but most frequently enrich and develop because of acquiring working experiences, interaction with other employees and organized or not-organized training and development (extended reproduction). Human capital reproduction is essentially a qualitative reproduction, reproduction of quality. Consequently, in the interests of performance improvement and organization prosperity it is necessary to aim on extended human capital reproduction, it means on investment into people. This investment is not only investment in their training and development, but as well investment in the employee welfare and in employee relations. Recently there is as well possible see an increasing interest in so called quality of working life, which covers all aspects of work that increase job satisfaction, job attractiveness and stimulation and last but not least reaching the balance between working and non-working life. The increasing stress on the quality of working life contributes significantly to the extended reproduction of human capital.

Relation between labor resource reproduction and human capital reproduction

It was already said that it is impossible to confuse labor resource reproduction with human capital reproduction. The labor resource reproduction in the form, how it is seen by for example demography, has its quantitative and qualitative aspects. Demography focuses more on the analyzing its quantitative aspects and only marginally it is engaged in the qualitative aspects in the form of statistically ascertained and ascertainable characteristics of finished formal education and its structures. Human capital reproduction, as it follows from its definition, is necessary the reproduction of quality, it means abilities, knowledge, skills, experiences and approaches. Only small attention is devoted to quantitative aspects, because the reproduction of quality doesn't depend very on number of employees. The extended reproduction of human capital can occur even under condition of stagnation or reduction in number of employees, that is bearers and owners of human capital. Human capital quality simply don't depend on the quantity of its bearers. After all, it is also documented by the considerable tendencies to the lean organizations and the following changes in quantitative structures of their employees.

As it was already suggested, human capital reproduction starts to occur in the moment, when labor resources (individuals) enter the process of work. Labor resources quality, their abilities, knowledge, skills and behavior formed by hitherto upbringing, education, training and acquired experiences (particularly those are working experiences of individuals, who were temporarily out of human capital – e.g. unemployed or women after maternity leave – and they renew their participation in the process of work), in the moment of entering human capital thus form a basis for the human capital reproduction. Therefore the quality of labor resources (potential human capital) is important for the human capital reproduction and equally important are all the activities that improve labor resource quality, i.e. secure the qualitative aspects of their reproduction. First of all it is system of education and its contents.

However, there is a problem. There are confused very often two different concepts: education or culture and its level or extent and grade of finished school education. There exists a considerable tendency to measure the education/culture level/extent based on the shares of university-educated persons or persons with secondary education in total population or in some age contingent of total population. From here there is only small step to efforts to increase such shares expecting that it improves the population quality, labor resources quality and consequently as well quality and value of human capital. However, there is a question if the converse is not truth. Many studies support an opinion that human abilities and thus the ability to learn have a distribution in population, which is very similar to the curve of normal distribution. Increasing shares of individuals with secondary and university education in successive generations lead inevitably to a situation, that not only the most talented individuals, but also less and less talented individuals enter and pass the secondary schools and universities, and consequently, contents of education and evaluation of students have to accommodate to such situation. In addition, the mass character of education in schools, particularly universities, suffer from limited financial resources and it increases number of students per one teacher. It is impossible to apply an individual approach to students, individual developing talents and therefore it has negative consequences for quality of graduates and forming intellectual élites. The situation deteriorates also the quality of the potential human capital and as well the mention starting conditions for human capital reproduction. The all situation is deteriorated by the practice that the system of public schools financing motivates them rather to maintain their students - irrespective to their results. Concerning the private schools there is a tendency to give a diploma or degree to everybody, who has paid scholl-fee.

Problem of measuring and appreciating human capital and its reproduction

There is possible to find number of attempts to measure, to quantify human capital and its changes, it means its reproduction. If we remind of the human capital definition as a set of innate abilities, knowledge, skills, experiences and approaches (behavior), we can see that those are features or attributes which are impossible to quantify and which are possible to classify to a certain degree only. But there is a problem of classification inherent in the fact that it provides a gigantic opportunity for subjectivism, and in addition, the above mentioned features or attributes are difficult to find out. Let us realize that all they are stored in heads of individuals and they come to light – but not fully and not distorted – only at that time if they are – possibly accidentally – called up by some situation, in our case working situation. Their demonstration is thus considerably influenced by situations and conditions, but as well not infrequently by people willingness to demonstrate them or share and transmit them. Abilities, knowledge, skills and experiences represent namely a competitive advantage not only for organizations, but as well for individuals.

If the state, value of human capital is difficult to measure or appreciate, then even more difficult is to measure or appreciate its reproduction. The reproduction namely takes place in hiding, in heads of individuals; it is an evolutionary process, which need not demonstrate at all for a long time.

Intra-generation and inter-generation forming human capital and its reproduction

Innate abilities, approaches and behavior of people are cultivated by upbringing and education, it means by acquiring attitudes, knowledge and skills in families, in the system of education or outside of it, by acquiring experiences and in process of interaction with other individuals. It all is in progress during time and it is a life-time business. Consequently, it is possible to suggest that the human capital quality is a function of age to a certain degree. After all, we have already discussed the problem. Therefore it is possible to conclude about crucial role of the intra-generation component of human capital reproduction. The unwillingness of employers to employ individuals in older age thus can result in the narrow reproduction of human capital and bears witness of their insufficient knowledge and insufficient managerial thinking. The unwillingness to invest into employees training and development bears also witness of the insufficient managerial thinking.

Human capital formation and reproduction has as well an inter-generation component. Generations, which becomes of a part of human capital after finishing preparation for job have a little different knowledge and skills, including the interpersonal, and probably they have also different attitudes and behavior. New attitudes, information, approaches, new technologies application etc. are reflected in upbringing in families and in system of education and as well the methods of education and approach to the young people passing the system of education are changing. Sometimes there is possible to hear or read a little superficial opinion that new generations possess better knowledge and skills, but they indeed are equipped rather with an another structure of knowledge and skills. There is a question, whether the generations exchange has on human capital always only a positive impact, in particular, when we take account of the above mentioned mass production of individuals with the secondary and university education.

4. Conclusion

From the above-mentioned discussion it follows that not only the human capital, but as well its reproduction are phenomena, which sizes are difficult to determine and it is impossible to measure and quantify them using methods applied in population statistics or in other disciplines. We know only, what the quality of human capital and its reproduction consists in and in the interests of development and improvement of human capital quality and in the interests of its extended reproduction we should aim on activities that contributes to the aim, i.e. improvement of quality of upbringing and education young people and on employees

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training and development, support of acquiring new experiences, support of sharing knowledge and skills, full utilization of potentials of people, and last but not least, improvement the working life quality. However, we have to forget an "accounting" approach to these activities, because we are able to measure the expended costs, but we are not able ascertain in full any final effect of the costs and thus measure it.

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