

LIFELONG LEARNING AS A FACTOR IN THE DEVELOPMENT OF HUMAN CAPITAL: INDIVIDUAL AND SOCIETY IMPLICATIONS

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The current paper focuses on the theory of human capital, examining the motives of individuals to invest in developing their skills and seeks to explain the importance of human capital in terms of society development implications. Education and training are considered the most widespread and most important way of developing human capital. At the same time, they are an integral part of an individual's lifelong learning. The benefit of investing in human capital is gained not only by the individual but also benefits society in the form of positive externalities, i.e. the impact of higher human capital on the well-being of others.

Keywords: human capital, investment, lifelong learning, costs and benefits of education

Introduction

Human capital appears to be a key factor in increasing the country's economic performance. Still, its development also has a broader impact on the development of relations in society. Human capital can be defined as a production factor that gives each individual and organization or company a specific character.

These are innate and acquired characteristics, abilities, skills and many other characteristics of an individual or company. Individuals use their skills and knowledge in everyday life, which is an essential aspect of developing their further social life. Lifelong learning is one of the most critical factors in the latter. They are also individuals who invest their human capital in a company or organization and determine their further success or direction.

The increasing importance of human capital is mainly caused by rapid technological development and the everyday use of information and communication technologies. The ITCs have become an integral part of the daily life of individuals and part of production processes based on robotization and artificial intelligence (Orbánová, 2015).

From a historical point of view, the first economist who talked about human capital was A. Smith (1776). According to him, this term expresses the acquisition and use of abilities. However, the concept of human capital can be defined in different contexts, and many authors and institutions deal with this issue. The current paper addresses some of them.



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One of the OECD studies defines human capital as: "the knowledge, skills, abilities and characteristics of an individual that facilitate the creation of personal, social and economic well-being" (OECD, 2007). Foltínová (2013) explains the concept of human capital as one of the economic growth factors representing individuals' innate and acquired productive abilities. These abilities then directly affect the individual's life and significantly impact the entire society. Krauszová & Szombathyová (2009) define human capital as the functional value of an individual and, at the same time, as the existence of specific properties that an individual can develop and socially use in a certain way.

Other authors describe human capital as the sum of individuals' abilities, knowledge and skills, which increase their productivity and subsequently bring them a return comparable to returns from alternative forms of capital. An increase in the individual's productive abilities is then subsequently reflected in the improvement of his earning potential and in better opportunities to find employment (Čaplánová & Martinčová, 2014).

The theory of human capital defines human capital as a set of particular productive abilities of an individual composed of parts. One is innate, and the individual must acquire the other by gaining general and specific knowledge and experience. Part of the theory of human capital is the expanded concept of human capital, which distinguishes:

a) basic human capital, which represents the productive characteristics of an individual and his abilities (for example, physical strength, creativity, ability to communicate or technical skills of an individual),

b) extended human capital includes characteristics that develop, strengthen and enable the individual to use his basic human capital (for example, the ability of the individual to clarify his educational needs and coordinate his educational activities or personal characteristics) (Dudová, 2011).

Garry S. Becker - one of the main representatives of the concept of human capital - defines the concept of human capital as the sum of an individual's innate abilities and knowledge, as well as the experience and skills that an individual uses in practice. However, Becker presents this concept on two levels, which are closely related. These are the general human capital that an individual can use in various areas (for example, physical strength) and specific human capital that an individual can use only in one area or a particular company. This difference between general and specific dispositions is crucial for the individual's practical life (Becker, 1993).

For comparison, we can cite the definition of human capital from the point of view of the organization according to Charvát (2006), who compares human capital to the organization's ability to effectively recruit employees and also effectively ensure their development and progress in the long term and help create and support motivational systems. Finally, we can define human capital as one of the determinants of economic growth alongside capital, technological progress, and work.

Almost all definitions of human capital by different authors have common features related to the fact that it is possible to distinguish the sources of human capital and its use. We can understand the sources of human capital on two levels. In a narrower sense, we assume only an individual's formal education as a source of human capital. In a broader sense, we also include the sources of human capital, the overall upbringing of the individual, and the overall influence of culture or education on the individual (Dobeš, 2001).

The systematic development of the theory of human capital became the center of the debates in the sixties of the twentieth century when economists began carrying out a deeper

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analysis of the issue of human capital. American economists J. Mincer, Th. Schultz and G. Becker define the creation of human capital as a particular activity of individuals who act in their own interests. Among the prominent representatives of the theory of human capital is M. Friedman, who considered human capital a key source of economic growth.

In general, human capital theory examines individuals' motives for investing in the development of that individual's capabilities and tries to explain the importance of human capital regarding societal development implications. For instance, we can cite the provision of health care or education, as well as achieving economic growth or the functioning of the labour market (Privara, 2021, 2022).

The basic principle of the theory of human capital is the principle of methodological individualism, which assumes the dependence of social decisions on the decisions of individuals. A very significant finding of the theory of human capital is the fact that human capital brings the owner a return comparable to any other investment. It follows that most of the costs of creating human capital should be borne by the individual who will receive income from its use (Čaplánová, 1999).

Based on the theory of human capital, we can also claim that the level of education and also its quality that an individual acquires leads to the growth of his human capital and, at the same time, leads to his productivity growth, which in turn leads to an increase in the earning capacity of the individual in the period when the individual is economically active. Consequently, it follows that it does not have to be the period immediately after the studies end (Čaplánová, 1999).

Research Results

Investments in human capital

By investments in human capital, we understand those activities that create either a permanent or repeated (that is, not a one-time) impact on our monetary income or psychological satisfaction by developing and increasing the value of each individual's resources with the help of these activities. It is, therefore, an investment of monetary and non-monetary means that will benefit us in the future either in monetary or non-monetary form. Investing in human capital improves our skills and human resources, thereby increasing our financial income and psychological satisfaction.

An investment in human capital can be either one-time or long-term activity. Still, the result of this activity will always be reflected in the longterm, regardless of what kind of investment it is. Several studies in different countries show that the volume of investments in human capital is directly proportional to the development of costs and revenues that flow from education.

Investments in human capital differ from each other by:

- form (for example, it is education at the workplace, school education, travel for work opportunities, etc.),
- the size of the impact on our income and consumption,
- the size of the investment volume, the rate of returns and especially the intensity of the link between the investment and its return (Kameníček, 2012).

Investment in human capital is realized at different levels. The individual levels differ mainly in the number of people invested in and the entity that makes the given investment. It follows that investments in human capital can be implemented at the level of the individual,

the level of the company, and the level of the entire society. The return on the investment should be a return that is at least comparable to the return on alternative investments. As a rule, however, this yield is higher than the yield from alternative investments and may not always be quantified in money. From the individual point of view, we can consider non-monetary returns the esteem and respect of his surroundings, while for society, it can be, for example, positive externalities (Dobeš, 2000).

In general, we can conclude that most authors agree on the answer to the question of what is the most important form of investment in human capital - it is education and training.

Another essential factor that largely affects investments in human capital is the individual's family environment and the overall social environment in which he is located. The family environment has a significant influence, especially on abilities, knowledge, habits and values that an individual forms during life. In practice, this means, for example, that children who are guided to develop their abilities and skills throughout their lives due to family influence are subsequently able to learn new things better and faster even during compulsory schooling and in general throughout their lives.

Thus, parents significantly influence their children's education level and have an impact not only on their education but also on their future employment and family life in adulthood. The number of family members can also have a specific influence on developing the level of education. Usually, smaller families invest higher amounts per member in the education and training of their children. Multi-member families with more children must limit the mentioned investments to a minimum (Kameníček, 2012).

Investments in human capital from the perspective of the individual

By investing in human capital, an individual increases his professional skills and abilities and develops his creativity and potential, which is then reflected in his daily life and helps to improve his income (Lisý et al., 2016). The most significant influence on the accumulation and size of an individual's human capital is certainly his background and the environment in which he grew up and lives, his family and people with whom he is in daily contact, and last but not least, the individual's hereditary dispositions. These and many other factors significantly impact an individual's human capital and the possibilities of investing in it.

For example, we can cite a situation where an individual will meet people who have attained a lower or a similar level of education as himself. Then the individual may not have the effort or motivation to achieve higher education and will feel satisfied with his education. On the contrary, if an individual lives in an environment where people with higher education and qualifications surround him, he will be motivated to improve his education to match them to better fit into the society of these people (Vodák-Kucharčíková, 2007). Investments in human capital from an individual's point of view are very important for him and the entire society, benefiting both.

Investments in human capital from the perspective of the company and society

Every organization can only be successful if it can respond flexibly to changes. However, the flexibility of the organization or company depends on the flexibility and preparedness of the workers, who are not only ready for changes but also willing to accept them.

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Koubek (2015) states that if an individual wants to become a high-quality workforce in modern realities, he must not only deepen but also expand his acquired skills and abilities and, therefore, always learn something new.

At the same time, the author also defined the most important reasons why companies should invest and devote time to the education of their employees and the development of their skills if they want to succeed in the market.

These reasons mainly include:

- a very large and rapid inflow of new knowledge and information, which causes already acquired information to become obsolete among employees,
- frequent changes in technologies and also in the organization of companies, to which employees have to adapt more often,
- rapidly changing human needs, which also have an impact on changes in the goods and services market, and which require a more flexible response from companies and their employees,
- increasing emphasis on the quality of goods and services,
- new management methods such as delegation of powers,
- the development of new information technologies that employees must master and adapt to,
- high-quality education and the development of employee qualifications also contribute to building the company's reputation. Consequently, it is easier for the company to find new and better employees.

The main reasons for training employees of the company are the deepening and expanding of already acquired abilities and skills, as well as the creation and acquisition of new abilities and skills to achieve the company's desired goals. Within the company, human capital can be acquired in two ways: research and subsequent development.

By research, we mean receiving entirely new information that is not part of the employee's current knowledge. By development, we mean the subsequent improvement, deepening and even complete assimilation of the acquired knowledge. During exploration, the employee creates general intellectual capital, while specific intellectual capital is created during development. The principle of the golden middle way also applies to human capital when the best and most effective solution is a combination of these two methods (March, 1991).

Education within the company can be carried out, for example, by retraining an employee, deepening and expanding his qualifications within the framework of new technologies or other changes in the labour market (Sirkeci et al., 2018).

Another method of education is employee retraining when the emphasis is on the employee's skills that he will need in another job position in the company. If we are talking about a completely new company employee, we will understand his integration as the employee's adaptation (Šikýř, 2016).

We refer to methods intended for training workers directly at the workplace or within the company as on-the-job methods and include here, for example:

- a) coaching, which we discuss in more detail in the new approaches to investing in human capital section,
- b) employee briefing, which takes place in the form of a one-time training of the worker so that a particular work procedure is explained to him by his superior or a more experienced worker,

- c) assistance, when a specific worker assists a worker who has more experience in the given field and thereby learns from him and helps him in performing his work,
- d) meetings, which are an excellent means of providing feedback and discussing problem areas and determining the future direction of the company,
- e) mentoring, which represents the process of self-selection of a mentor–instructor, who subsequently guides the worker in the long term and leads to a certain goal,
- f) lastly, it entrusts the worker with a certain duty or task.

On the other hand, we have methods referred to as off-the-job methods. Unlike on-the-job methods, these methods are implemented outside the workplace and not within the company. Off-the-job methods include, for example:

- a) workshops,
- b) brainstorming, which is carried out in the form of an exercise within the group, and each participant must comment on the given topic under discussion,
- c) lectures,
- d) e-learning, i.e. education carried out through computer technologies,
- e) simulations, by which we mean the artificial modelling of a specific situation that may arise in the workplace,
- f) last but not least, there are various types of centers intended to educate managers or workers (Koubek, 2005).

However, these methods of training employees are no longer sufficient in some cases, and new approaches to investing in human capital are increasingly coming to the fore. If a company invests in human capital, it improves its productivity, flexibility, performance and the ability to innovate, as employees are the crucial component of the company (Kurucová, 2009).

For the training process of employees to be effective, it is necessary to avoid possible mistakes that may occur during this process. The mentioned errors are specified in more detail by Urban (2017) and, who notes the three most common errors, which are:

- a) limited opportunity to independently try the procedure that is the subject of education,
- b) insufficient information and details about the topic of education,
- c) directing training to areas in which employees have sufficient information instead of those they lack.

Urban (2017) claims that the learning process in a company can only be effective if the company avoids these three main mistakes. Thus, human capital is considered a source of long-term competitive advantage for a company when it uses the talents and skills of its employees as its competitive advantage. Investments in the human capital of employees often become more important for the company and have a better impact on the economy than investments in machinery and equipment.

In addition to the company's human capital, social capital is also very important. Under social capital, we mean communication between employees, partner relationships at the workplace, trust between employees or work ethic (Mihok et al., 2004).

The company can also invest in human capital in various rehabilitation stays by providing the possibility of regular medical check-ups and thus by maintaining the good health of workers or by providing funds for, for example, meals or travel. Another form of investment is preventing accidents at the workplace by ensuring that the company offers the

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most reliable protection means at the workplace and many other methods of investment (Vodák & Kucharčíková, 2011).

New approaches to investing in human capital

We are increasingly encountering situations where traditional and customary ways of investing in the human capital of employees, such as training or retraining courses, are no longer sufficient for developing companies, and new methods and approaches to investing in human capital are increasingly appearing.

The mentioned new approaches emphasize the broadest possible range of skills and knowledge employees need to fill the job they are applying for, and at the same time shape the value sides of the employee, his personality and adaptation to the values of the company he works for or wants to work for. They try to prepare employees to be flexible and ready for changes (Koubek, 2007). The most important new approaches to investing in human capital include time management, coaching and team building.

Time management means the effective distribution and management of time as an economic resource of the company and also deals with a person's activity. For time management to be effective, it is crucial to clarify the company's goals and priorities – what is essential and what is less critical in achieving the company's goals (Koubek, 2007).

Coaching is an activity that finds application in fulfilling tasks during work and ensures the active solution of these tasks. In coaching, individual steps and procedures are precisely determined. According to Urbana (2004), coaching is a sure way of leadership that does not focus on mistakes that have already happened but on the opportunities offered to the company on the market. Coaching can be used in several areas within the company. One of them is the development of employees or teams within the company. It can also be used as a tool for a particular way of running a company. The coaching process is carried out by the manager, who must correctly use various communication tools and implement multiple activities that help to carry out coaching.

Teambuilding focuses on interpersonal relations at the workplace, team bonding and the overall improvement of workplace relations and on preventing problems that may arise, for example, in the framework of communication at the workplace or in the area of team cooperation. Teambuilding tries to arouse the need and interest in teamwork in individual workers. It includes various physical and mental activities, the most important goal of which is building team cooperation and also shows the importance of adapting to collective decisions (Koubek, 2007).

Specific nature of human capital

Human capital is complementary to technology to some extent. It means that the owner of human capital can use it most effectively if he has a place where he can use his potential. Human capital is non-transferable. That means that it is tied to the bearer of this human capital. The physical mobility of the individual thus defines the mobility of human capital. This specificity slows the allocation of human capital to areas where it could be better used.

Human capital is difficult to store. Here, the lifespan of human capital is thus defined by an individual's lifespan. In practice, this means a constant need to reproduce human capital. Human capital is universally irreplaceable. So, it cannot be exchanged for any other goods, nor any other human capital. The only income that flows for an individual from

human capital is the rent that the individual receives for renting it. For the economy, income is the goods and services produced by the human capital.

Another specific feature is the return on investment in human capital, which is usually long-term, as the investment is usually not associated with a particular person. Investment first flows into institutions that produce human capital, and only these institutions subsequently form human capital in individuals.

The last specific feature of human capital is its measurability, which is challenging. The main reason human capital is difficult to measure is that the process of creation and subsequent use of human capital is usually long-term. Another reason is the attachment of human capital to a specific individual – the bearer of human capital (Foltínová, 2013).

The relationship between education and human capital

Education and training are the most widespread and significant ways of developing human capital. At the same time, they are an integral part of the lifelong education of an individual. The importance of human capital is currently constantly growing due to growing technological progress, the ever-increasing complexity of production processes and also the increasingly used information technologies as means of communication.

These facts are then reflected in increased demands on the workforce. It follows from the above that individuals with higher education and qualifications and better skills can achieve much higher productivity at a specific production technology level than individuals with lower education and qualifications. The relationship between education and human capital is manifested in the fact that human capital and investments in this capital are also necessary to obtain higher education. On the other hand, human capital development is carried out through various types of education.

The ability of society and individuals to benefit from the educational level of the economy is thus largely dependent on human capital – abilities, talents, skills and, last but not least, on the education of individuals. Governments are motivated to deal more and more with possibilities in increasing the level of human capital and its creation (Orbánová, 2015).

This idea is also confirmed by the results of the international research on using adult competencies in work and employment (PIAAC, 2013). PIAAC is a program dealing with cognitive competencies. It is also a means for monitoring adult literacy and, last but not least, a tool for identifying the causes and consequences of acquisition and loss of competencies. The research deals with individuals aged 16-65 in at least 4500 respondents.

One of the findings of this research was that over the past four decades prior to the study, employment in the manufacturing sectors had been declining and was being replaced by increasing employment in the service sector.

Many economists have discussed the fact that these two categories are closely related. One of them was A. Smith, who argued that labour productivity increases with the acquisition of new machines and that education contributes to increasing workers' skills.

He equated and compared the worker to an educated individual with an expensive machine.

He also claimed that the skills and abilities that education will bring to an individual must bring at least a good profit; that is, such a profit as physical capital of the same value would bring him (Orbánová, 2015).

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Benefits of human capital

The benefit from investments in human capital is not only obtained by the individual, but the benefit of human capital is also a benefit for society in the form of positive externalities, i.e. the impact of a higher human capital of an individual on the well-being of others. Education benefits the individual through new information and knowledge, which can be used in other areas. Each new insight or experience then increases the value of his human capital and enables him to succeed better in his professional and personal life. It also contributes to the higher well-being of society as a whole.

Education and its essence

Fundamental knowledge in the education field is to determine the difference between education and training. By the term education, we understand a specific process during which knowledge and skills are acquired. Also, under this term, we include the approach or method by which this knowledge and skills were developed. The result of this process is the education just acquired.

Another concept that is closely related to education and training is the qualification – knowledge and skills that are directly related to the performance of a particular profession and are made up of elements that do not flow directly from education but are formed based on work experience associated with, for example, the length practice (Krebs, 2007).

Vomáčková & Barták (2007) consider education a positive externality since the benefits that flow from education can also be obtained by those individuals who no longer participate in the other phases of the educational process. In this case, we say that it is an external use.

Lifelong learning

In connection with the importance of education as a determinant of human capital, the need for lifelong learning is increasingly coming to the fore in practically all developed countries associated with the OECD, especially in the EU. The European Commission's memorandum on lifelong learning defines lifelong learning as an activity that is targeted, has a continuous character and aims to improve the skills, abilities and competencies of individuals, and at the same time recognizes the following categories of educational activities:

- a) formal learning is carried out by educational institutions and institutions intended for professional training, and this education aims at obtaining officially recognized documents and also at obtaining a qualification,
- b) non-formal learning takes place outside of formal education in addition to primary education and professional training and, as a rule, does not end with obtaining an official document,
- c) informal learning does not need to be registered by the individual at all, as it is not targeted and takes place naturally in everyday life.

The European Commission defines this term as a specific concept that includes all education systems. These systems are formal, non-formal and informal learning and include education levels like pre-school, primary, secondary and higher education and further learning. The OECD's approach to lifelong learning mainly emphasizes the effort to work on lifelong learning for children from the youngest age. It enables both employed and

unemployed people who need to retrain or achieve a higher qualification to have the opportunity to do so (Dudová, 2011).

Additional education

By further education in the conditions of the Slovak Republic, we mean education that expands, deepens and complements already acquired education. It also helps individuals retrain and achieve their goals and prepare to achieve a certain level of education (Dudová, 2011).

According to the Decree of the Ministry of Education of the Slovak Republic No. 42/1996, "the purpose of further education is the continuous deepening, improvement and expansion of the professional and pedagogical competence of teaching staff in accordance with the latest progressive scientific knowledge, social needs and requirements of pedagogical and professional practice"

According to Act NR SR no. 386/1997 Coll. on further education, "further education is part of the education system of the Slovak Republic in addition to education at primary schools, secondary schools and universities, and its implementation is a public task".

Pavlov (2002, p. 6) distinguishes the following types of further education:

- a) the education that an individual needs to achieve a certain level,
- b) professional education and renewal, expansion and deepening of an individual's skills and knowledge,
- c) civic and interest education of the individual.

Adult education

This term includes all aspects of education and training, all activities related to adult learning, which have either personal or professional reasons. It includes general and professional education and company education in lifelong learning. Adult education is implemented in different forms and different facilities. For example, we can cite various private and public institutions providing education, business or companies, non-profit organizations and, last but not least, multiple types of associations (Dudová, 2011).

Open education

Open education means a type of education that focuses on students and removes possible barriers and issues for students. Under the mentioned barriers, we understand various social, administrative or educational obstacles and health problems. Its goal is to convey to the individual responsibility for the content, methods, place, pace of study and the form of securing the study throughout his life (Dudová, 2011).

Distance Education

Distance education represents a specific educational technology closely related to open education. This connection lies in the fact that distance learning provides for the requirements of open education. Distance education focuses on forms of study based on the physical separation of students and individuals dealing with the organization of studies. Distance education can be applied either in the entire learning or teaching process or only in its part (Dudová, 2011).

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The cost of education

The costs of education can be expressed either in the form of monetary resources or as real resources that are necessary for the educational process (e.g. time of students and teachers, materials and books or buildings and places for learning). Since these resources are limited, it is essential to sacrifice alternative ways of using them and always choose the method that will bring the highest benefit.

Under the opportunity costs of education, we understand all the resources needed to mediate education services. We can divide them into private opportunity costs (for example, the cost of study aids and books or fees during studies) and social opportunity costs (for example, the cost of teachers and school staff's salaries) (Čaplánová, 1999).

The concept of monetary costs is much narrower than alternative costs. The alternative costs are the monetary resources and all possible resources we will spend to achieve a specific output.

Hence, when we cannot express the cost of education in monetary form, we have to estimate its value. For example, we can cite the time a student spends on his studies, which we can understand as the lost profit the student could get if he went to work instead of studying. However, since the quantitative expression of alternative costs is often uncertain, problematic and challenging to quantify, various studies and analyzes of education costs consider only monetary costs (Čaplánová, 1999).

Benefits obtained from education

The size of the benefit from the education is different concerning the institution where the learning will take place. These benefits are different for primary schools and universities. It is necessary to realize who will benefit from the education of a certain individual/student. First of all, he himself will benefit, and the size of this benefit will depend on his personality characteristics. Secondly, the benefits of the individual's education will also reflect on the people close to him, mainly his family and friends, and the whole society.

It follows that it is essential to distinguish between the private and social benefits of an individual's education. We can understand it easier in a situation where a student becomes, for example, a programmer. When working for his profession, the student will receive a higher salary, becoming his benefit of education.

However, suppose this student as a programmer invents a certain program or antivirus that will be beneficial for the entire society. In that case, all who will benefit from his education will also benefit from the antivirus, making it a social benefit of education.

However, the theory also assumes the existence of the third group of persons who benefit from an individual's education, namely persons who provide services related to education (for example, administration or teachers). The benefit lies in the fact that these persons will implement the types of decisions within the educational institution that will primarily maximize their benefit as workers and not as students/clients.

However, we should note that we cannot attribute differences between individuals solely to differences in their education. In practice, this means that if a university graduate has a higher salary than an individual who only graduated from high school, it does not necessarily mean that this is due to the achievement of a different level of education. This problem was elaborated on in 1997 by HR Bowen in his work Investing in Education (Čaplánová, 1999).

The benefits brought by education have their own form, which can be divided into direct and indirect benefits of education. We will consider a higher income of an individual as a direct benefit of education. Many studies support that individuals with higher education have higher earnings on average than those with lower education levels. If we wanted to compare this relationship from the point of view of countries with different economic development, we would find that in countries with a lower level of economic growth, the impact of education on the volume of an individual's earnings is much higher.

However, as we have already mentioned in previous chapters, it is not easy to find out what share the individual's higher education level has on the earnings volume. There are also theories arguing that the reason for higher earnings in certain occupations is the monopoly that exists in certain countries for these occupations. Therefore, we will consider higher earnings as a direct benefit of education, which, however, is affected by certain factors that can reduce this benefit. Among these factors, we can include unemployment, the size of the level of the tax burden or even if the individual would die at a productive age, significantly reducing his income from education).

Indirect benefits from education include the ability of an individual to handle various situations in everyday life (for example, when communicating with the authorities - preparing a tax return or using the achievements of modern technology). Another indirect benefit may be that individuals with a higher level of education also receive higher non-monetary benefits from employment compared to individuals with a lower level of education. It means that they get, for example, a company car, the opportunity to travel abroad more often as part of business trips or training, and generally have more freedom in their job position.

In the case of indirect benefits of education, we can therefore say that companies or facilities want to invest more in those individuals who have a higher level of education, as there is a much greater probability of return of the spent funds in the form of productivity growth. We can also remind that not only the individual benefits from his learning but also other individuals (Čaplánová, 1999).

In connection with the measurement of benefits from investing in human capital, we can mention a study prepared by the Institute of Financial Policy in 2011, which compared the costs and benefits of investing in education in Slovakia. It states that economic benefits from education flow not only to individuals but also to the state. When educated people enter the labour market, they have higher wages, paying higher taxes and contributions.

Also, more of them are working, so there are fewer unemployed people, which leads to, for example, lower benefits for the unemployed. On the side of public costs, there are the direct costs of the state for education and lost taxes and levies during studies. If all the benefits and costs are included in the calculation, we can assess whether education is a good investment from the individuals' and society's point of view.

The concept of net present value (ČSH - net present value) is suitable for this, which is mainly used in evaluating the profitability of various projects and represents the difference between the current value of future income and expenses. Since such data was unavailable for Slovakia, IFP used the OECD methodology to calculate the net present value of an investment in education from the perspective of both the individual and the state. The results are therefore comparable to values published by the OECD for many other countries.

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The study further concluded that the main advantage of secondary education lies in a higher chance of employment. Higher education further increases the chance of employment and mainly affects a higher salary.

Conversely, on the side of people's costs, there is higher income tax, higher levies, lost wages during studies and direct education costs. When trying to assess the benefit of studies, it is necessary to take into account that we cannot precisely separate the value of the study itself from the signalling advantage of the diploma (i.e., employers can pay more to graduates just because they are more likely to be more innovative, as they passed the selection process when completing their university studies).

The study (IFP, 2011) states that investment in education brings high returns in all OECD countries. It applies to both individual and company returns. The total net income (individual + state) in the case of a man who completes both high school and university compared to a man with only primary education exceeds USD 500,000 in Slovakia, similarly to Italy, Great Britain and Portugal. The OECD average is over USD 345,000.

The net income of individuals from higher education is significantly higher (USD 150,000) than from secondary education (USD 72,000), as secondary education has become the norm in OECD countries. Together with Portugal, Slovakia has the highest private return on investment in education. The return for individuals is higher in Slovakia than the return for the state, similarly to most OECD countries. Also, in most countries, additional higher education yields a higher return than further secondary education. The exception is Slovakian women, for whom a high school education already provides significantly better employment in the labour market than women with primary education.

Conclusion

The study concludes that it is worthwhile for people in Slovakia to postpone work and go to study. It applies to women and men, to secondary and higher education.

In several countries, individuals need higher education to benefit financially from their studies entirely. In Slovakia, even secondary school education brings a considerable return, especially in finding a job. People are thus quite economically motivated to sacrifice their current income and go to study.

The higher return on individual investment in Slovakia compared to abroad is mainly due to the relatively higher wage differential between university and secondary school graduates due to the smaller share of university graduates in the total population.

From a financial point of view, society also gains from the higher education of its residents.

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