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EDUCATION AND QUALITY OF LIFE

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Abstract

The basis of today's civilization is that in the education system that requires each individual through knowledge and skills, he would actively participate in the general and economic development. The importance-based society is a modern society, in addition to the value of the total production, it is on the basis of knowledge and innovation, which can be said that the application of knowledge and innovations has a dominant role in the creation of the common wealth. The higher level of education of the population is a precondition for economic growth in the context of sustainable development. Educational programs should enable future generations to gain knowledge, skills and competencies in accordance with the needs of labor market and the new challenges in the global scientific and technological development. Good knowledge is based on the new economic order and the chance to create a new idea. The education system should be set to create individuals who have the knowledge, are able to use it in their work and create more value. Data shows that educational structure of the labor force in the Republic of North Macedonia is unsuitable for needs of the business. The paper will first look at the structural tendency in the educational of labor force, and second, incomes, employment and unemployment rate according to the educational structure.

Keywords: Education, Labor Force, Employment, Unemployment, Labor Market, Human Capital

1. Introduction

Education increases work productivity and it is considered that investments in this field increase efficiency and operational effectiveness rather than investment in physical capital. The change of the global economic structure, and especially the entry in the era of information revolution, has led to creation of societies in which knowledge and skills, training and continued education are considered one of the greatest values. In today's modern society with advanced technology, education and expertise are one of the most important factors and drivers of economic and social development.

The accumulation of knowledge, skills and abilities that the employee possesses in the form of capital increases productivity and can more effectively use the capital and technology. According to Romer (1990, p. 72), "... new knowledge is transformed in products with practical value". Romer (1990) further separates human capital from the total labor force and population and sets it as a distinct internal (endogenous) factor that affects economic growth and development along with technology. Similarly, Shultz (1982, p. 19) considers that "main factors that affect the production and improvement of the economic condition of the population are not space, energy, and arable land but the human being."

Accepting the human as capital basically changes the way of analyzing the impact of development factors. The concept of human capital found practical application after economists included it in the economic analysis as a factor of production. Since then, the definition of human capital has begun developing and to date still pervades in order to measure the capital possessed by man, affecting economic growth and development.

This paper aims to portray a certain conditions of the labor market in the Republic of North Macedonia. In doing so, it will study the influence of education over employment and income of a family unit by using secondary sources. In the end, the paper should give an overview of the structure of the labor force, the level of net salary of the employed and the rate of employment and unemployment according to the level of education in Republic of North Macedonia.

2. Changes in labor force

Global changes affecting all segments of life impose the need for changes in the quality of the labor force. In the last few decades, the labor market has undergone drastic overturning. Namely, a re-qualification of the labor force from agriculture in industrial activities was imposed and today, it transforms from an industrial society into a "service" society. Simultaneously, re-qualification goes in the direction of service activities. The need to change the skills, knowledge and competencies and inevitable change of the education system is increasing. Changes in the content and character of the labor force can be divided into three groups: changes in the relation between physical and mental labor; changes in the relation between productive and non-productive labor; and changes in the relation between the structure of qualifications and education.

Labor force may not always respond to workplace demands that lead to shortages of labor in different sectors. Especially this problem affects the young population (15-29 years). In the Republic of Macedonia, the average unemployment rate for young people is 40.58%, ie 2.0 times the rate of the mature population (state in 2016). The transition from manual to mental work leads to an increase in demand for a workforce that will have soft skills such as teamwork, communication skills, negotiation skills, transition from production skills to preparatory skills, maintenance, design and programming and so on. Simultaneously, there is a change of jobs, new jobs are created, similar to the new social changes. The Internet as a global infrastructure and a market by itself, introduces "internet jobs" that allow earning on a "distance", the work is not related to the place of residence, work when needed, variable-time work. Technology advancement imposes a need for a labor force that will have knowledge in the field of informatics, technology, engineering, electronics, mechatronics, etc.

Transition into an information society based on knowledge and the job change leads to the appearance of a state of insecurity in the labor force. Namely, a large part of the adult population remains without work, the workplace is no longer safe, and as a result, there is the uncertainty about the future. The race for job and the need to prove itself additionally affect the mental, physical, health condition which is reflected on the motivation, social activities, the possibility and the ability to execute work requirements in a high quality manner. Especially an aggravating factor is the loss of the job and the duration of unemployment, which entails loss, reduction in skills and ability to work.

Creating new jobs directly affects the reduction of unemployment and depends on the existing socio-economic and demographic conditions. Taking into account the global tendency and job insecurity, new jobs and working conditions are much different. The changes are reflected in creating work from home, temporary work, indefinite working hours, reduced work time or part time work. Such a situation has imposed the need for a higher level of human capital, innovation and adaptability.

This rapid development has great impact especially on the labor market. Older people, less educated people who do not have enough knowledge, skills and abilities to adapt to new demands on the labor market, are left without work. This applies to all workers who, for various reasons, are unable to improve themselves, upgrade their knowledge or acquire new knowledge.

Accordingly, the readiness of society to adapt to the changes depends on the level of education of the labor force (human capital). Investments in education are investments in improving the economic security of the individual, increasing income, reducing poverty, and so on. The need for prioritizing investment in education and training of the labor force is imposed, if considering that fastest development of human resources is achieved through investment in labor force education.

One of the most important economic characteristics of the population is economic activity. An important feature of the labor force situation is the age distribution of the labor force. Changes in the demographic structure of the labor force will lead to changes in total human capital in the form of experience.

Table 1. Working age population and labor force by level of education

	Working age population		Labor force	
	2008	2016	2008	2016
Total	100.00	100.00	100.00	100.00
Without education, Incomplete primary and lower secondary education, and Primary and lower secondary education	46.37	36.66	30.76	20.70
3 years and 4 years of secondary education	42.88	46.03	53.84	54.47
Higher and university education	10.75	17.31	15.40	24.83

Source: Republic of Macedonia State Statistical Office (2009, 2017)

Table 1 shows the structure of the population fit for work in the Republic of North Macedonia and, in particular, that in 2008 the share of the population without education, uncompleted primary education (46.37%) is the greatest, while smallest is the share of the population with higher education (10.75%).

In 2016, there is an improvement in the educational structure of the population fit for work. Noticed is an increase in the share of the population with higher education to 17.31% or 6.56 percentage points and reduction in the share of the population without or uncompleted primary education to 36.66% or 9.71 percentage points in relation of 2008.

Education expressed through the knowledge, skills and abilities of a person can help him through his work to realize his potentials and develop them, which will lead to greater economic and social benefits and, conversely, the lack of education can cause social and economic problems. Knowledge was said to be "set of ideas, intuition, skills and teachings that are used to create new values" (Cvetanović and Despotović, 2014, p. 5). Increasing the level of education creates greater conditions and opportunities for increasing the creativity and entrepreneurial spirit of the individual that will positively influence the employment. The impact of education at work is no less important; on contrary it covers all forms of vocation education which are in direct relation with the work and occupation that is performed (Jakimovski and Nospal, 2005).

3. Education as a basis for creating human capital

The origins of the thought about the value of human beings or the beginnings of the concept of human capital and the human influence in the overall development can be traced back to Adam Smith, who determined the value of labor, the value of the product and the wealth of man. According to him, "the value of any commodity, therefore, to the person who possesses it, and who means not to use or consume it himself, but to exchange it for other commodities, is equal to the quantity of labor which it enables him to purchase or command" (Smith, 2012 p. 34). The time needed to acquire knowledge, skills, abilities and experience expresses the value of the product in which labor is based. Accordingly, the wealth of man depends on how much a person can afford to enjoy all the things necessary for living and those who give him pleasure and which are a result of labor grounded in the product, i.e, time needed for the worker to acquire skills, abilities and work experience.

Mill (1848) further develops the notion of previously accumulated wealth which he adds to the other primary factors for production. Such accumulated wealth as a product of previous work is named as Capital. According to Mill (1848), the labor of man is equal to capital, and investment in labor is equal to investment in capital. Only man with his knowledge and skills creates material wealth and then uses it for further functioning.

Schultz (1961) writes on the benefits of investing in ourselves as this increases the chance for progress and wealth. Investment in people's education largely determines the future of mankind because knowledge, according to him, is the key to future economic ventures. Improving the quality of the population and advancing knowledge are key factors in improving the well-being of the population (Shultz, 1982).

Becker (1994, p.17) emphasizes the value of education in a very straightforward manner: "education and training are the most important investment in human capital". He goes further in the analysis of human capital, proving that higher education increases productivity and at the same time income by saying that "human capital analysis suggests that education increases income and productivity mainly because it provides knowledge, skills, abilities and a way of analyzing problems" (Becker, 1994, p. 19). The essence of Becker's human capital theory is that all education-related activities, experience, training that a man gets include costs and benefits that can be analyzed from an economic point of view. The benefits of these costs can not be seen at the moment, but are mostly seen later in life, so these costs can be said to be an investment. Such investments are long-term investments that require not only money investments but also time investment in learning, time that for individuals who decide to go to education is a period in which they do not earn, unlike the individuals who decided to work. But, individuals who decide to invest in education later in life return those investments by working on better paid work positions. Therefore, investments in human capital are investments or costs that return later in life.

Fraumeni (2012) for the first time introduces the term "productivity of human capital" by extending the concept of the impact of human capital on productivity, including the current and future productivity of labor. According to Muskic and Mladenovic (2015), the growth of human capital can be explained through implementation of technical and technological innovations, i.e. a society with greater human capital can better keep pace with technological developments. Societies with low human capital can not be bearers of innovation and development, they can only be users of new technologies, but also to be users, it is necessary to possess a certain level of human capital, i.e., a certain level of education and knowledge in order to be able to apply new technological advancements.

To conclude, human capital is the basis of economic growth because knowledge, skills, competences and other attributes enable a person to progress on an individual level, and in general, affects the development of the country he lives in. In addition to the economic aspect, the greater human capital entails better general well-being of man, improved health and better inclusion in society. If we consider human capital as "everything that a man owns" and which at a given moment in his life he will use it to cope and to obtain the greatest benefit for himself, then we can say that education is a key moment and the most important process through which the person is built and human capital is created. The formation of attitudes and views of the world is a result of the education process; the higher the level of education the greater knowledge, higher quality in the performance of the tasks, broader world view, greater security in keeping the job, more quality life, greater social inclusion, while the low level of education entails, in addition to the low standard of living, less quality life and social exclusion. Finally, education can be understood as preparing the individual for life in society as well as for its professional and social functions.

4. Education and quality of life

According to Berenger and Verdier-Chouchane (2007), the relation between education and life quality is reflected in a qualitative aspect that includes quality of education, environmental quality, and the degree of exploitation of child labor. There are several scholars that emphasize the connection of education with employment and well-being. For example, Moretti (2004)

analyzes the benefits of investments in higher education, while Ferrante (2009) analyzes the link between education and life satisfaction.

The influence of education on income was studied by many scholars, such as, Becker (1964, 1967); Psacharopoulos, and Harry (2004); Card (1999); De Gregorio and Lee (2000), noting that education affects income, higher education brings higher incomes and that education is the most powerful tool to reduce income inequality. Education has undoubtedly influenced major incomes, but higher incomes also influence opportunities to provide quality education.

Table 2. Employed by level of education and by net-pay

	< 325 Euro		326-488 Euro		>489 Euro	
	2008	2016	2008	2016	2008	2016
Total	100.00	100.00	100.00	100.00	100.00	100.00
Without education, Incomplete primary and lower secondary education, Primary and lower secondary education, and Secondary education	82.85	82.95	48.71	35.65	33.49	31.59
Higher and university education	17.15	17.05	51.29	64.36	66.51	68.41

Source: Republic of Macedonia State Statistical Office (2009, 2017)

Table 2 shows the distribution of employed persons in the Republic of North Macedonia by their level of education and net-salary. The data shows that of the employees who receive net salary up to 325 euro, 83% have no completed primary or secondary education, and only 17% have higher or high education. Of the employees receiving net salary above 489 euro, 68% have completed higher or high education and only 32% have only primary or secondary education.

Individuals with higher education do not earn more just because of the diploma they hold, but because of the quality of the work they perform. And because of the quality of work they earn more (Gillies, 2011). Higher quality in performing work tasks resulting from education, besides higher salary, is a prerequisite for employment and getting a better job. This can be seen through the employment rate according to school preparation.

Table 3. Activity rate of the population by level of education

	Employment rate		Unemployment rate	
	2008	2016	2008	2016
Total			33.76	
Without education, Incomplete primary and lower secondary education	14.51	14.98	38.25	26.18
Primary and lower secondary education	24.79	24.42	41.78	29.44
Secondary education	47.31	51.01	33.06	23.69
Higher and university education	63.38	65.38	21,14	19.35

Source: Republic of Macedonia State Statistical Office (2009, 2017).

Table 3 shows that the employment rate of persons without education and uncompleted primary education is the lowest (14.98%), followed by employees with primary education (24.42%), compared to 65.38% with higher and higher education. Accordingly, the risk of employment decreases with an increase in the level of education, thereby increasing the possibility of poverty reduction. Or can say that a higher degree of education entails a higher living standard because the individual with higher salary can afford to enjoy more benefits and pleasures.

5. Conclusion

In general, it can be said that in the Republic of Macedonia, there is an improvement in the educational structure of the population fit for work, whereas in the urban areas, compared to the rural areas, the level of education is higher.

Introduction of compulsory secondary education in 2008 can be considered as one of the reasons for improving the educational structure of the population fit for work. The education policy should be targeted and adapted to future job requirements and aligned with the policy of economic and social development of the society.

Successful and sustainable development encompasses the existence and keeping of all activities, especially the activities that affect economic development. In this context, the role of the state is to provide conditions for the development of a quality education, acquiring knowledge about new technologies, enabling retraining and appropriate training for everyone according to the needs.

Developing more complex jobs will stimulate greater youth involvement. Education creates a labor force that can adapt to new jobs more complex and better paid. Hence, the dual role of education is seen, on the one hand, as the imposed necessity for a higher level of education, and on the other hand, as the influence of the higher education level on the economic growth. A well-educated workforce can affect greater economic growth, which opens up a greater opportunity for greater investment in education.

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