

**THE INFLUENCE OF EDUCATION AND HEALTH CARE ON ECONOMIC GROWTH AND SOCIAL DEVELOPMENT – SEVERAL THEORETICAL-SOCIOLOGICAL EXPLICATIONS**

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**Abstract**

The correlation explicitly contained in the title, in reality, is a problem that is subject to serious and sharp opposing discussions, from the foundation and the first theoretical and empirical steps of sociology as a general social science, and especially from the founding of economic sociology as one of the multitude of special sociologies. At the same time, this correlation is a fundamental problem of theoretical and empirical research and of two other special sociologies - the sociology of education and medical sociology. So, the problem of research (theoretical and empirical) is already long defined, the scientific - theoretical and scientific - empirical approaches and research are carried out with a level of frequency that very strongly indicates its social importance. The unanimity and compactness of the findings derived from the scientific - theoretical, and especially the scientific - empirical studies of this correlation, as well as the number of these sociological scientific - theoretical and scientific - empirical studies and findings, all together, with their organic uniqueness and homogeneity, build and radiate the theoretical and empirical research base and framework of a completely real-formed and defined correlation, including as an object of first-degree importance for economic sociology as a special sociology. In reality, this is a double correlation, set up through a kind of interim correlation. Indeed, there is a whole wealth of diverse, including divergent, theoretical points of view and empirically based findings and conclusions that argue and document the social importance and the research theoretical and empirical attraction of these correlations.

**Keywords:** *Economic sociology; Education; Health care; Economical growth; Social Development; Index of human capital.*

**INTRODUCTION**

The theme of this text in reality is a problem for which serious, sharp and contrasting discussions are conducted, both intradisciplinary and interdisciplinary, including sociological discussions. The problem has long been set, the scientific - theoretical and especially the scientific - empirical approaches and research are carried out with a level of frequency that very strongly indicates its social importance. This text represents a certain sociological

perception on this topic, with this theme focused specifically on the point of view of economic sociology, as one of the multitude of special sociologies. Of course, from the standpoint of economic sociology, there are practically possible a number of specific theoretical and empirical approaches to this topic. All this, ultimately, is determined by the immediate professional, that is, the sociological and economic-sociological interest of the author of the text, as well as the actuality of the particular elements and aspects of the topic that is written in the particular social moment.

In this sense, the author of this text, sociologically, that is, economically-sociologically, is determined, solely on the theoretical and sociological level, to exemplify only a few, in any case, completely relevant sociological, that is, economic-sociological elements and aspects of the entire complex of such elements and aspects of this topic. The author of this text is firmly convinced that this practical operationalization is completely valid and relevant, just like the multitude of other such economic-sociological operationalizations on the topic. This is also shown by the numerous bibliographic units, some of which are referenced in this text, which in the analysis of this topic generally focus on the explication of the same specific elements and aspects of the topic that are focused in this text. The mentioned specific operationalization for which the author of this text defined, practically means exploring the selected elements and aspects of the defined topic to begin focusing on the importance of equal or unequal distribution of the gross domestic product (GDP), that is, of the newly created value, for the total social development, that is, the quality of social integration and cohesion and, ultimately, the level and quality of social capital. And only then, in this text, on the concrete example of the World Bank's Human Capital Index and through this mechanism, to explication the importance of the quality of the education system and the quality of the health care system for productivity as one of the most essential factors of the economic growth. In doing so, the theory of human capital, the theory of signaling theory and the theory of screening will be competitively crossed.

### **ONE POSSIBLE THEORETICAL-SOCIOLOGICAL OPERATIONALIZATION OF THE TOPIC**

Not primarily from a strictly narrower economic approach, but from a certain more thorough and broader economic and sociological perspective, the influence and factorization of economic growth in relation to the overall social development is essentially set, defined, investigated and considered as its redistribution through the institutions, bodies and mechanisms of state interventionism (Grant, 2017). This initial theoretical conclusion inevitably, without doubt and without any residues and dilemmas, explicitly explains the general theoretical and ideological, and even ideological, shaping and profiling of this text as theoretical and ideological (Neo)Keynesian and as ideological left. State interventionism, by definition and by rule, must completely and effectively balance the very large inequalities created by the market distribution of the newly created value, that is, the gross domestic product, inequalities that seriously endanger social integration and cohesion (Ajefu, 2015). That is the basis, essence and general content of the welfare state, that is, of the social state. State interventionism, that is, the state of welfare, does not accept the postulates of market fundamentalists that the inequality of the market distribution of the newly created value, according to its internal and organic legitimacy, will lead to an appropriate level of total social development, that is, to the level of social welfare (Bergqvist, 2013). The political and ideological impartial, realistic and objective calculation of the coefficient of inequality in the

market distribution of the newly created value ultimately should firmly and irrevocably show how much the level and comprehensiveness of the application of state interventionism in the overdistribution of the primary, market distribution the newly created value; that distribution which in a specific economic and sociological case is highly unequal, highly unjust and socially highly unacceptable and unbearable (Stiglitz, 2015; Andersen, 2015). Such a coefficient that measures and shows the degree of inequality in the distribution of the newly created value, that is, measures it and shows the degree of inequality of the citizens' incomes, is the Gini coefficient, according to its creator Corrado Gini (1884-1965), an Italian demographer, statistician and sociologist, and this coefficient is the most commonly used coefficient for this purpose (Greselin, 2018).

It does not even have to be any hard and excluded scientist-theoretical and scientifically-empirical functionalist in order to derive the key conclusion in this context. Namely, in order for any social community to function successfully, it must necessarily achieve the required level of social integration and cohesion (Sato, 2011). And this goal can not be achieved at all on the basis and within social divergences and inequalities, as well as on the basis and within the conflicts that are immanently challenging these divergences and inequalities. In any case, the level of social divergences, inequalities and conflicts must be reduced in order to achieve the required and necessary level of functionality of the social community. This conclusion, completely, perhaps even primarily, applies to those social divergences, inequalities and conflicts that have an economic-sociological, or socio-economic nature (Berger-Schmitt, 2000).

Exactly Thomas Piketty (1971) in his famous work "Capital in the Twenty-First Century", first published in 2013, scientifically empirical over a period of 250 years-the period of capitalism, the period of the capital nature of total social reproduction, explication, argued and proved that only in the period of the true functioning of the state of welfare (1945-1970), as well as in the periods of the two world wars, the level of inequality of distribution, that is, the redistribution of the newly created value was at the level of social and socio-economic but acceptability and tolerability. Piketty, empirically unequivocally found that throughout this period of 250 years the level of return on capital was above the level of the rate of economic growth (Piketty, 2013).

Of course, in this wider theoretical and conceptual context, the question of the importance of education as a factor of economic growth and of the overall social development and welfare should be put also. Speaking in a certain form of a summary, it can be emphasized that in the wider scientific and professional literature without dilemmas the thesis and the conclusion from numerous expert and scientific papers and research on the great importance of education prevail as one of the factors of economic growth and social development. In this sense, the scientific-theoretical and scientific-empirical conclusions are underscored that there is no state that can achieve sustainable economic and social growth and development without sustainable investment in human capital. Among other things, education enables people to understand themselves and the world in which they exist, education gives the quality of their lives and enables the achievement of social welfare for society and for people as subjects of social relations. Education raises the level of human productivity and its creativity through the diverse and numerous processes of social reproduction and at the same time promotes entrepreneurship and technological achievements. It plays a very crucial role in ensuring economic and social progress and in the distribution of the newly created value, as well as the amount of people's income (Aghion, 2009; Kobzev Kotaskova, 2018).

Just like the relation to the importance of the education factor for economic growth and the overall social development and welfare of the citizens, and the attitude towards the health care factor,<sup>1</sup> that is, factor of the health of the citizens of one social community, the scientific-theoretical and scientific-empirical findings and conclusions are quite precise and concrete: it is a very important factor of economic growth and the overall social welfare. Again speaking at the level of the summary, it must be emphasized that there also numerous professional and scientific literature that explores, argues and proves this causal relationship and effect: the changes in the health condition of the people in correlation with economic growth and social development. In this context, it may be very interesting, indicative and meaningful to explore the correlation between raising the quality of public health systems, reducing mortality in society, especially in infants and children, and economic growth, including calculated as a gross domestic product per capita. Public health, which reflects infant and adult mortality, affects economic performance through investment in human capital, the accumulation of physical capital, population growth, productivity and female participation in the workforce (Bloom, 2008; Lange, 2017).

This established theoretical and conceptual context of socio-economic consideration of the problem of the impact of education and health care requires the explication of the issue of priorities imposed by the labor market. The modern economy, like the overall social reproduction, is reproduction essentially defined as a reproduction of capital relation. All resources that enter and are used in that reproduction inevitably capitalize, ie become capital. From its subjective theoretical, conceptual and ideological side, modern neoliberalism, that is, modern market fundamentalism, quite strongly and continuously, imposes the need, even the necessity, of specific flexibility in the labor markets. Essentially speaking, it should represent deregulation, liberalization and globalization of labor markets, with a crucial goal to achieve a high level of competitiveness on the labor markets, thus reducing the market price of labor, which, the market price of labor, is indisputably a factor of global competitiveness of economic entities. The factors education and health care scientific-theoretical and scientific-empirical are explored explicitly through this prism. So, in the neo-liberal way, these factors must be so theoretically, conceptually and practically set up and used in the function of maximally appropriate and successful response to the demands of the labor markets (Bernal-Verdugo, 2012). This theoretical, conceptual and practical approach may be manifested in the most obvious way through the specific dogmas of the knowledge economy, the "dual" education system, the Agenda 2010, the Hartz Labor Market Reform, the Riester Pension Reform System, all in the Federal Republic of Germany, all that is transmitted and contained in the Lisbon Strategy 2010 and then in the Europe 2020 Strategy of the EU (Cohen 2011; Sasajkovski, 2011; Sasajkovski, 2013).

So, when it comes to education and health care as factors of economic growth and overall social development, one essentially neoliberal position is imposed, and in a special way and in a specific direction-connecting education with the needs and demands of the markets on labor. In doing so, education means the skills - the skills for performing certain occupations, it means the acquisition of skills, the skills strictly required by the labor market,

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<sup>1</sup> At this place is needed one explanation. In economic and sociological literature, as well as in other appropriate literature, health care is more commonly used than health protection-for example, Obama care, not Obama protection. That's why in this text we are talking about health care.

that is, the primacy is given to the skills and not the knowledge in a certain field. In any case, there must be a strict distinction between knowledge and skills (Baartman, 2011).

### **WORLD BANK GROUP: INDEX OF HUMAN CAPITAL**

The question of the development of human capital is one of the more inclusive and more essential issues the World Bank is working on. This conclusion is necessary as the starting point because, in analyzing this issue of human capital development, the bank puts this question exactly in the framework of the correlation which is actually the topic of this text—the factorization of health care and education in terms of economic growth and the total social development and social welfare. The Bank has produced an index of human capital that more specifically contains, quantitatively measures and expresses the correlation between education and health care, as an independent variable, and the productivity of the next generations of workers as a dependent variable. So, the Bank from the complex of factors of production and economic growth separates the factor of productivity, a factor which in any case represents one of the most important and the most powerful factors of economic growth (Nakamura 2018). Essentially speaking, this index should show what level of productivity should be expected from young generations, generations in school age, when they come to the supply side of the labor market, and depending on the level of quality of the education system and the health care system through which they pass. It must be very strongly emphasized that this index is not an index of human resources, it is an index of human capital (Zakaria, 2011). And, among other things, through this index countries can estimate how much revenue is allocated due to deficits and losses in terms of human capital and the faster they can turn these weaknesses and losses into profit.<sup>2</sup>

On the basis of the importance of skills, health, knowledge and adaptability, human capital, or the people, can be more productive, flexible and innovative. Human capital is the central driver of sustainable growth and the reduction of poverty. Investments in human capital have become even more important by changing the nature of the work. Despite the significant progress, however, the significant shortfalls in investment in human capital leave the world economy unprepared for the challenges it faces (Pelinescu, 2015). Therefore, the World Bank launched the Human Capital Project (HCR) to mobilize efforts to overcome these shortcomings. The goal of the project is to create a global society in which all children will go to school ready to study, the time spent in school to be filled with quality education, and those children to grow up, to live and work as healthy, qualified and productive people.<sup>3</sup>

The Bank's human capital database provides data on each of the components of the human capital index at the country level, as well as for the total index divided by gender for each country. The index measures the amount of human capital that a child born today can expect to reach up to the age of 18 years, given the risks of poor health care and the poor education that is likely to prevail in the country where he lives. The index is designed to emphasize that improving the quality of health care and the quality of education strongly shape the productivity of the next generation of workers, and with the index estimating what level of productivity will have childrens born today when they come to the labor market depending on

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<sup>2</sup> <http://www.worldbank.org/en/publication/human-capital>

<sup>3</sup> “World Bank. 2018. The Human Capital Project. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/30498> License: CC BY 3.0 IGO.”

the quality the health care and the quality of education they will receive over the next 18 years.<sup>4</sup> Components of the index are: Income Group; Probability of Survival to Age 5; Expected Years of School; Harmonized Test Scores; Learning-Adjusted Years of School; Fraction of Kids Under 5 Not Stunted; Adult Survival Rate. The Republic of Macedonia has a total index of 0.53. The lowest amount of the index is 0.29 (Chad), and the highest amount of the index is 0.88 (Singapore).<sup>5</sup> For comparison, the results of some other countries in a certain way close to the Republic of Macedonia (close territorial or as states emerging from the socialist-self-righteous and socialrealistic social system) are presented: Serbia 0.76; Croatia 0.72; Slovenia 0.79; B&H 0.62; Montenegro 0.62; Kosova 0.56; Albania 0.62; Bulgaria 0.68; Romania 0.60; Greece 0.68; Hungary 0.70.

It must be noted that this index is, in essence, very obviously a completely reliable indicator and the dynamics of the amount of the key indicators that related to the variables of the quality of the health care system and the education system-the dynamics of the decrease or increase of the mentioned qualities.

At the same time, at the theoretical level, and at least elementary, it must be pointed out that the theory of human capital, in particular the theory of Gary Becker (Teixeira 2014; Goldin, 2014), including the World Bank's human capital index based on this theory, has its own opposition to the theory of signaling (Spence, 1973; Connelly, 2011) and in the theory of screening, a theory to which and Joseph Stiglitz (Huang 2006) belongs. All of these theories are basically theories that fit within the theories of asymmetric information in the markets, in particular the labor markets (Kahn 2013). Quite simply speaking, it is necessary to point out that these two in a certain way the opposing theories of the theory of human capital, basically cast doubt on one of the basic postulates of the theory of human capital, the postulate according to which the level of education, the primary the level of the higher education, one-way must positively influence and determine the level of productivity, and thus the level of salary. The individuals who, on the side of the offer, come to the labor markets, with their diploma of higher education signal a certain level of quality and quantity of knowledge and skills, signal a certain level of productivity according to education and signal a certain amount of salary. The asymmetry of informations primarily consists in the fact that the other side of the labor market, the demand side, does not possess other essential information on the supply side, apart from the information on the formal level of education, and the demand side has no insight into the truth and in reality the quality of the formal education and the quality of knowledge and skills that the supply side actually has. The demand side does not have other information on the supply side, of which inevitably depends the real level of productivity that should be expected on the supply side. Here, as an opposition to the theory of human capital, the theory of screening is drawn that wants to overcome this lack of the theory of human capital, the lack of the acceptance of the validity and relevance of the signaling through the formal diploma of higher education, some level of productivity that this diploma implies and signalization of the amount of salary to be obtained on the basis of that diploma. The screening implies the necessity of the demand side, in addition to providing information on formal higher education, to obtain complete information about the whole complex of performance on the supply side, a complex of which, ultimately, depends on the real level of productivity and a complex of which, ultimately, depends on the deserved and appropriate salary amount. By the way, the

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<sup>4</sup> <https://datacatalog.worldbank.org/dataset/human-capital-index>

<sup>5</sup> <https://www.worldbank.org/en/data/interactive/2018/10/18/human-capital-index-and-components-2018>

mentioned A. Michael Spence and Joseph E. Stiglitz, together with George A. Akerlof in 2001, received the Nobel Prize in Economics, primarily for their research in labor markets, research focused through the prism of asymmetric information that they have received the entities that appear on the supply side and on the demand side of those markets.

## **CONCLUSION**

The problem of the factorization of education and health care in terms of productivity and economic growth, further and in terms of overall social development and welfare, is one of the central economic and especially economical-sociological issues. In particular, education provides a basis for development, on the basis of which global economic growth and global social development and welfare have been built. This is the key to increasing economic efficiency and social consistency. By increasing the value and efficiency of labor, it helps to reduce the poverty rate. This increases the overall productivity and intellectual flexibility of the workforce. Education is at the core of building the competitiveness of countries on world markets, which are currently characterized by changing technologies and methods of production. By increasing the integration of young people with different social or ethnic backgrounds in social life, education contributes significantly to building the integration and cohesion of the nation and interpersonal tolerance. In reality, during the twentieth and the beginning of the twenty-first century, education, knowledge and skills became the key determinants of the productivity of one employee and the national economy as a whole. These two centuries can be called centuries of "age of human capital" (Becker 2002) in the sense that the primary determinant of the standard of living of countries is the determinant of the level of successful development and utilization of knowledge and skills, in unity with the development of health care for their citizens. Historically, the progress of citizens' health on one country is due largely to adequate food and high-quality health care, and this fundamental correlation is further strengthened on a daily basis. Particularly chronic diseases undermine the level of productivity and thus causes major losses in the economic and overall social reproduction. It is essential, primarily through the necessary and diverse social investment in the development of health care, and in particular in the development of children's health care, to achieve the diseases that affect the productivity of economic and overall social reproduction not be passed on to the next generations. Good health improves learning and work capacity, which dramatically improves income and welfare at individual, household and national level, even and if the effects of an aggregate level may be more difficult to distinguish. Naturally, at the same time, the need for adequate investment in the development and upgrading of the healthcare institutions, that is, in the development of the health infrastructure, must be emphasized. But on the other hand, the two-way link between the level of economic growth and the quality of health care must be emphasized: economic growth positively influences the quality of health care and improves the health of citizens. Economic growth increases food availability, makes the health care system more accessible and increases and facilitates the demand for health care.

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