



IMPACT OF POVERTY ON THE HUMAN DEVELOPMENT INDEX IN BULGARIA (FOR EXAMPLE OF SOUTH CENTRAL REGION)

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ABSTRACT

The circle of issues, concerning the fixing, measurement and analysis of the relation: poverty of human development index, is outlined in this paper. The assumption that in the modern world poverty isn't a concept associated with the shortage of income is grounded. At its core the poverty is an expression of lack of opportunities for the person.

Key words: poverty, human capital, human development index, comparative analysis

INTRODUCTION

During the last few years a series of theoretical studies, in which were supported by numerous empirical evidence in the economic, social and political spheres, revealed a different image of Bulgaria, which dominate the "black" and the "gray". It is primarily for the recruitment scope and depth of a few standout trends. *In the first place* increasing marginalization that affects more large groups of people in most areas of society can be drawn. Final expression of the trend is the gradual and permanent exclusion of individuals of normal living conditions. They live in conditions of shortage of material goods, services and goods of first necessity, having critical importance to their quality of life. In this case the question is not about individuals, but about entire social groups living in conditions of constant shortage of material resources; in constant fear of how they will survive. To the list of some ethnic minorities gradually join unemployed young people aged 18 to 26 years, the elderly, single parent households, the unemployed, people with special needs. *In the second place* we can point out the new forms of social vulnerable position. Among them, the most massive are the specific groups of "energy" poor people,

excluded from the banking system (lack of access to basic banking services, greater indebtedness), workers in the informal economy, single mothers, increasing the number of persons with disabilities and those suffering from chronic diseases. These social groups continually lag behind the dynamics of their full inclusion in society. This is not only a question to marginalization and social exclusion, but also attaining the necessary level of possessing specific qualifications required for participation in the contemporary labour market. To summarize, one of the fundamental questions formulated in the late twentieth century in front of us in a national and regional scale is reproduced. Is really the developing economy an objective? Is it not just one of many tools that provide a certain way and quality of life? Or in other words, what is the real wealth of nations – the economic prosperity or the development of man himself? Does the economic growth almost automatically improve the lives of individuals? What is the relation (nature, direction, strength) between the economic growth and the quality of life? Studies have shown that it is not one-way; it is also ambiguous – the development of the economy often has no direct impact on the quality of life. An attempt will be made to get answers to questions by examining the relationship and dependence between the level of poverty, measured by the Human Poverty Index (HPI) and the Human Development Index (HDI) according to the

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example of the South Central Region in Bulgaria in the period 2009-2013. In the present study our efforts are aimed at defining and calculating the wealth of such specific territorial entities such as regions. For this purpose, we apply the methodology developed by UNDP to calculate two indicators, but at regional level. By using the available theoretical and experimental foundation the developed research strategy was focused on: (1) an analysis of the sources and the structure of human capital at the regional level; (2) an assessment of human capital using synthetic indicators - Human Development Index and the Human Poverty Index (3) assessment of the peculiarities of calculating the values of HDI and HPI and their dynamics for the South Central Region in Bulgaria during that period of time. The developed strategy allowed us to formulate the main purpose of the study, namely the formation of the overall scientific concept of correlation between poverty and human development index. Within the framework of this report the following research objectives stood in front of:

1. Disclosure of the peculiarities of the two indicators - the human development index (HDI) and Human Poverty Index (HPI).
2. Construction of a methodology for fixing, diagnostics and measurement of the HDI and HPI.
3. Application of the methods for calculate the human development index and human poverty index as in the example of the South Central Region in Bulgaria in the period 2009 – 2013.

In the capacity of basic hypothesis of this study is the assumption that in the modern world the poverty is not an expression of lack of income, because in essence it shows lack and insufficient opportunities for the individuals. In the process of realization of the objective we will investigate whether there is a correlation between the Human poverty index and the Human development index in one of the six statistical regions of Bulgaria according to the Nomenclature of Territorial Units for Statistics (NUTS). Methodology and methods of the study are consistent with the type of the statistical information available in the regions at NUTS 2 level by the European Statistical Office (Eurostat).

Characteristics and main theoretical models for the study of the poverty

The history of the theoretical study and the empirical measurement of poverty can be traced back to ancient Greece. The interest in it is completely understandable, because poverty is perceived as the most important social problem, in which all significant existential

questions and challenges to the social sciences are focused virtually. Understanding the nature of poverty and the reasons for its perseverance are related to the establishment of relationships, dependencies and influences with respect to material prosperity, the behaviour of the individual and the state of society. This research approach will allow us not only to construct public policies leading to the reduction of poverty, but also the disclosure of the prospects for the necessary reforms (in their depth) in society.

The problems of the social inequalities and poverty are particularly complex, contradictory and specific in Bulgaria. What it is their specificity?

After 1989 (a period which can be characterized as a deep systematic crisis), a shift towards democracy and market economy was realized. We are faced with questions such as: (1) Why in practical higher levels of national income and household income, the poverty rate is higher? (2) Is it a real fact that of the level of poverty and the inequities is an inevitable consequence of transition to a market economy and the destruction of the socialist state? (3) Is it true the allegation that increasing the level of poverty is the result of errors related to resolving the political, macroeconomic and social issues that could be avoided if the subjective factor had taken other decisions? Or maybe there is a possibility that the serious problems of poverty and inequalities were inherent to 1989 year, but these problems have been skilfully camouflaged by virtue the requirements of the dominant ideology and the lack of data, institutions and a system of public policies necessary for the effective measurement and monitoring of the indicators and indices of poverty?

The basis of the answers to these questions is finding a solution to for empirical studies of poverty. Its essence consists in the development of a system of indicators and indices that allow the connections, dependencies and influences between the level of poverty and the degree of welfare to be analysed. In our view, this can be a first step, because the question is not only to measure the poverty, but above all the consequences for the development of man to be determined.

Under development, we understand realization the planned in each individual abilities, talents and predispositions that in the conditions of insufficient freedom of choice can't occur.

A number of studies reveal sidedness of the approach that development is measured and assessed only on GDP, leaving a side of dimensions of human existence such as:

- The political and economic freedoms and opportunities;
- The level of social protection of individuals and the vulnerable social groups;
- Equal access to healthcare systems and education, etc.

Actually the level and growth of GDP per capita are extremely important factor for development, but it is not sufficient, because the end result is first and foremost the broadening of the spectrum of human possibilities. The human development is a fundamental right of the people and it should be seen as a process. The problem which we place as the first one is based on statistical data in order to the following research questions to be analysed:

1. How low is the low level of poverty in the south central region?
2. What are the social factors lowering economic mobility, or a person's ability to adapt to changing economic conditions?

Today there are numerous interpretations of poverty, which naturally leads to different approaches to the understanding of its causes, the essential features and tools to overcome.

Some authors believe that the most important is poverty be considered in its moral and ethical context, urging the monstrous and unacceptable for the twenty-first century manifestations of the images of life of people existing in a serious and unacceptable living conditions. Other authors in their, political populist style present for supporters of the radical solving the problem of poverty at the expense of carrying out spectacular, but unrealistic programmes for state support of those in monetary crisis populations. Third authors - from the position of the economic analysis of causality factors of poverty, identify material indicators on the border of poverty determine the groups of poor and non-poor population. Fourth group of authors, turn their eyes to the real picture of poverty in the country with its regional diversity, the place of the poor in the social structure, their actual capacity to realize their vital daily needs and life chances for a better life.

And finally, after the 90-ies years of the twentieth century, more and more often the researchers prominence the concept of poverty as a regular phenomenon accompanying the development of each type of society,

regardless of the local culture and the stage of its development. These empirical conclusions are reflected in the widespread notion of "structural poverty". This is recognition of poverty in its capacity of immanent characteristic of society as a social system. This is a problem that is impossible to be solved only by economic means. Against the background of these "relative" poverty interpretations clear and strict definitions of types of poverty may be offered - it is the ultimate insufficiency of the existing material values, goods and financial means which are necessary for the normal life of the individuals and their families. At that as a poverty threshold the statutory level of funding per person, family for a certain period of time is proposed to be adopted. This level provides physiological minimum necessary for life. Traditionally, poverty is considered in one-dimensional perspective, namely its capacity of the income deficit, state of deprivation of financial resources. From this perspective, the reduction of the poverty rate represents the efforts aimed to increase the income and focus on the economic growth. It is obvious that the income approach to poverty does not reveal its nature, extent and depth. The overcoming of the indicated deficit requires the application of a different approach. One of the opportunities for examination is the theoretical model for the study of poverty proposed by Amartya Sen¹. More specifically it comes about the concept of social exclusion. Within the framework of the mentioned concept the main features of modern poverty are outlined. At first place at poverty is not lack of anything concrete. These are the poor living conditions. The low income is just one of many factors constituting the lack of capability deprivation, e. g. the minimum acceptable level of living. For example, the exclusion of the opportunity to participate in the labour market or getting credit for developing of own business leads to economic impoverishment, and then to deprivation². At the second place, the output characteristics of

¹Amartya Kumar Sen (3 November, 1933) is an Indian economist, known for his work on famine, human development theory, welfare economics and underlying mechanisms of poverty. In 1998 he received the prize for Economic Sciences of the Swedish bank in memory of Alfred Nobel for his contributions to the application of the mathematics in economics.

²Deprivation (loss, privation) - inability of individual or social group to meet their basic needs due to lack of access to basic material goods and social resources: food, housing, medical care, education, etc. Within the limits of the social analysis, in a broad sense, the deprivation is defined as inequality of access to social goods, i. e. it covers not only poverty, but also other forms of social ill-success.

the relative abilities that lead to the formation of a sense of self constituting a person as poor. The poverty appears when there is no opportunity to follow accepted social practices without infringing the poor men's rights. At the third place, the social policy can lead not only to social exclusion but also to unfavourable inclusion. In this context, to be poor doesn't mean that the individual is deprived of income or resources, because the analysis of basic human needs is in the centre of research interest. The approach defines the relationship between the needs (food, housing, medical conditions, education and care of public) and the assessment whether people have access to them. In this way the people who have insufficient access to basic needs are considered poor.

Human Poverty Index

The human poverty index (HPI) was developed by the United Nations in addition to the Human Development Index. For the first time it is recognized as a part of the Report on Human Development in 1997. The value of this index was used as an additional measure of living standards in specific country. It should be noted, however, that in 2010, HPI was replaced by another indicator - the multidimensional poverty index (UNDP, 2013). While the purpose of the Human Development Index is to take into account advances in certain areas of economic life by the human poverty index focuses on the unrealized opportunities and deprivation. It was developed in two versions – Human Poverty Index for developing countries (HPI-1) and Human Poverty Index for countries of the Organisation for Economic Cooperation and Development and Eastern Europe (HPI-2). The human poverty index measures the degree of deprivation in the basic dimensions of human development, specified in the concept of human development. The development objectives according to the concept are the human choice and the favourable environment which allows the people to have a healthy and creative lifestyle. The main elements of the selection according to the concept are the following three options: (1) an opportunity for a long and healthy life; (2) the ability to acquire knowledge; (3) the ability to access the resources needed to maintain a decent standard of living.

The index HPI-1 is defined as the composite index for measuring deprivation in three main categories – a long and healthy life, knowledge and a decent standard of living (1, 2, 3, 4).

The index HPI-2 is defined as the composite index for measuring deprivation in four main

categories - namely a long and healthy life, knowledge, a decent standard of living and the social exclusion (1, 2, 3, 4).

The measurement of poverty in the South Central Region of Bulgaria is carried out using suggestions from the United Nations approach. This choice is justified by the fact that the index consist of a limited number of indicators, making it statistically sound. The four dimensions of poverty: a long and healthy life, knowledge, a decent standard of living and social exclusion are components of the regional calculations Human Poverty Index (RHPI). RHPI provides information about the status of a particular region in terms of the level of poverty.

Human Development Index

The concept of sustainable human development is formulated in the Programme for United Nations Development Programme (UNDP), in which the personality of each individual is brought to the fore, both at national and international level. Ultimate aim is the Human Development while economic growth is seen only as a means to achieve the objective. The level of human development is explained not by the abundance of goods and the degree of enrichment of the material and the spiritual life and the improvement its quality. The main strategic instrument of the concept of human development is the Human Development Index (HDI), which was developed in 1990 by Pakistani economist Mahbub ul-Haq³. His idea was radical: the social development should be assessed not only in the national income, as it has long been practiced, but also for the achievements in education and health that can be measured. At the base of the index are pledged real numerical indicators derived from official sources, so it is assumed that the index is relatively objective and submit verification. The significance of HDI diagnose and fix the level of welfare of population in the country, as well as the existing in it opportunities for vital needs and priorities. The most important criteria for human development are: life expectancy at birth, level of education and decent (in material terms) lifestyle. According to the methodology of UNDP until 2010, The Union Human Development Index represents

³Studies of the Pakistani economist Mahbub ul-Haq (February 24, 1934 - July 16, 1998; PhD) date back to the 1968, when he analyzed the data for the economic boom of Pakistan and revealed that they didn't automatically lead to the welfare of the people.

the geometric mean value of these three important indicators:

- 1) Index of expected average life expectancy at birth of the population (Life expectancy at birth);
- 2) Index of the level of education (Education index);
- 3) Index of real GNI per capita in at purchasing power parity in \$ (Gross national income).

In 2010, the methodology for calculation of HDI underwent changes. Today the union index represents geometric mean value of the indicators (5, 6, 7, 8, 9):

- 1) Index of the expected average life expectancy at birth of the population;
- 2) Index of education, which includes sub-indices: (a) mean years of schooling and (b) expected years of schooling;
- 3) Income index.

According to the methodology employed, when performing estimation of individual sub-indices, fixed standards of minimum and maximum value are used.

In addition to the summary indicator HDI, which is calculated on the basis of statistical data in the particular country and has no internal disparities three new indicators were introduced:

- 1) Human development index, adjusted for socio-economic inequality;
- 2) Index of gender inequality;
- 3) Multidimensional poverty index.

The high level of confidence in the United Nations or eventually to its specialized structures, including UNESCO and UNDP, as well as methodological grounds make HDI one of the most authoritative standard classifications, which are based many researchers around the world.

Important results

We applied consistent the methodology and methodology for calculating the regional indexes of human development and poverty in respect on real data (10) for the South Central Region in Bulgaria in the period 2009 – 2013. The results obtained show interesting trends in the values of both the HDI and the HPI in a regional aspect. From **Table 1** it becomes clear that for the period of study, there is an increase in value of the regional Human Development Index. Opposite direction is the trend for the index of poverty in the South Central region during the five-year period. We visualize the results in Figure 1 using appropriate statistical methods for testing the presence of dependency dynamics between two variables and statistical package SPSS, Version 22.

Table 1. Human Development Index and Human Poverty Index in the South Central Region in Bulgaria during the period 2009 – 2013

Year	2009	2010	2011	2012	2013
HDI	0,767	0,769	0,770	0,769	0,772
HPI	30,78	34,22	39,33	39,28	40,98

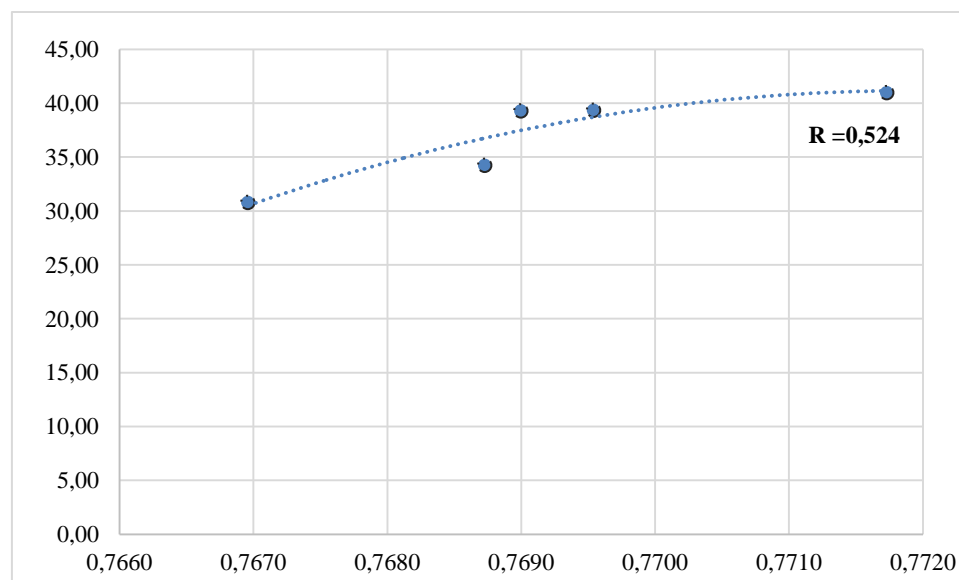


Figure 1. Dependence between the values of the human development index and the human poverty index in the South Central Region during the period 2009 - 2013

The results obtained are statistically significant, which allows us to confirm that hypothesis of the study. With reason we can accept the assertion that in this case poverty cannot be accepted as a concept, reflecting the lack of income.

CONCLUSION

Poverty is a complex social problem that is particularly important for human society. Specifically the poverty in Bulgaria is characterized by new forms and the inherent specificity caused by the history, traditions and changes in society. As a result of the survey in this work may be presented the following important conclusions:

1. The report outlined a different approach to the study of human capital in Bulgaria in the regions.
2. Disclosure is the possibility for an expert assessment of the structure of the human capital at the regional level through two indices – the human development index and the human poverty index.
3. The research framework allowing the registration and evaluation of the HDI and HPI in their two dimensions is outlined: static and dynamic.

For us as researchers it is very important to note that the extending of the study is a prospective direction in the use of other global indices in order to deepen the analysis by applying a systematic approach.

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