HUMAN DEVELOPMENT INDEX AS A MEASURE OF HUMAN DEVELOPMENT

Abstract: Human development is “a process of expanding the real freedoms that people enjoy” (Sen 1999: 3). Therefore, widening of people’s choices should be the goal of the public policies aiming at human development promotion. In order to assess the level of human development, to compare it with other countries’ achievements, or to evaluate different policy proposals, decision-makers have to rely on an accurate indicator of human development. Since gross national product (GNP) and gross domestic product (GDP) could not serve this function, the human development index (HDI) has been introduced as a more adequate measure. The aim of this paper is to discuss whether human development index reflects the basic tenets of human development. The arguments presented lead to the conclusion that the HDI does not fully reflect the ideas of human development. Since human development is much broader concept than any individual indicator could capture, country’s level of development should be assessed by the combination of different indicators.

Key words: human development, human development index.

Introduction

The United Nation Development Programme (UNDP) has been preparing Human Development Report (HDR) from the year 1990, with the goal of “putting people at the centre of the development process” (HDR 2009). The Report has been publishing an index of socio-economic progress titled Human Development Index (HDI). According to HDR from 2009, Spain is a country with high
human development, with the HDI of 0.955. This value of the HDI places Spain on the 15th position among 182 countries. At the same time, the third ranked Iceland has the HDI of 0.969. Does this information tell us anything about the differences in the level of people’s real freedoms, as defined by the human development approach, in these two countries? Furthermore, Niger records HDI of 0.340, and it is the last ranked among the countries with low human development. Are policymakers in Iceland more than twice better in providing human development than their colleagues from Niger?

The aim of this paper is to give an analytical framework for answering these and similar questions. Its goal is to discuss whether human development index reflects the basic tenets of human development. In tackling this issue, defining the concept of human development, as well as the human development index is essential.

Firstly, human development approach will be explained in the first section, and then the HDI presented within the second section. Next, in the third section, it will be determined how precise HDI reflects the level of human development. Finally, the main findings of this paper will be summarised in concluding remarks.

What are the Main Tenets of Human Development?

This section aims at presenting the main tenets of human development. Firstly, there will be given a short historical perspective of the emergence of a new paradigm within the developmental discourse, and then its foundations in the moral philosophy will be outlined. Secondly, the basic insights of human development concept will be explained.

Besides its numerous other meanings, the term development is defined as “a multi-dimensional and multi-sectoral process, involving social, economic and political change aimed at improving people’s life” (Alkire and Deneulin 2009: 4). It should be noticed that the process of improving people’s life may take a number of different routes. Economic growth has been predominant preoccupation of policy makers for decades, and the gross domestic product (GDP) and/or gross national product (GNP) have been of their strongest interest.

However, economic growth does not necessarily correspond with the improvement of life conditions. It was proven that GNP is
not able to capture things which make life worthwhile. First of all, it is noticed that relatively high level of GNP per capita is not followed by the high quality of life expressed in terms of life expectancy, adult literacy, and infant mortality (Sen 1999; Haq 1995). For instance, while Saudi Arabia had fifteen times higher GNP per capita than Sri Lanka, people from the latter country on average lived longer, were in greater number literate, and the infant mortality in this country was on the lower level (HDR 1990). Furthermore, GNP measures economic growth, but does not tell anything about its distribution, character or quality (Ul Haq 1995). For example, after the introduction of neo-liberal policies during the Pinochet regime (1973-1980), Chile has experienced a period of high economic growth, but however, it still remained “a relatively inequitable country in terms of income distribution” (Spence 2009: 85). Moreover, GNP is a one-dimensional measure, which “fails to capture the cultural, social, political and many other choices that people face” (Ul Haq 1995: 127). In addition, economic growth which was supposed to be a means for improving people’s life (Srinivasan 1994; Streeten 2003) actually became an end in and of itself (Sen 1999; Ul Haq 1995).

Therefore, the developmental route required reconsideration. Firstly, the idea that the satisfaction of the basic needs is primarily the objective of development emerged in the early 1970s which resulted in formulation of the basic needs approach. This concept focuses on the minimum requirements for a decent life, such as health, nutrition and literacy, and then it considers the goods and services needed to realize it (Deneulin 2009). It is in line with Rawl’s primary goods approach (Rawls 1975). However, serious objections are made to this concept (Sen 1979). In particular, it does not take into account the diversity of human beings who have very different needs (Sen 1979).

Finally, a new concept that puts people’s real freedoms in the centre of attention appeared in the early 1990s. This new approach is titled human development. As Amartia Sen and Mahbub Ul Haq pointed out, human development is about people realizing their potentials, increasing their choices and enjoying the freedom to lead lives they value.

Although human development brings fundamental differences into developmental discourse, its basic ideas are not a novelty. In
fact, the literature on human development often refers to the works of Aristotle, Smith and Kant. In particular, the insight that economic development is only a means for reaching valuable ends, is based on Aristotle’s premise that wealth is not a good in itself, but that “it is useful for the sake of something else” (Sen 1989: 4). Moreover, Sen’s distinction between functionings and capabilities, I explain in more detail later, has also its roots in the works of Aristotle (Aristotle 2002). Furthermore, the point that development has to be done for people, not only by the people is founded in Kant’s practical imperative. This is why in the human development approach health and education have an intrinsic value, not only instrumental usefulness. Such approach is in contrast with, for example, the concept of human capital – the concept which sees investments in health care and educational systems as a means for reaching higher productivity. Finally, Smith’s insight about the impartial spectator as the only appropriate judge of the propriety of one’s sentiments (Smith 2009) can be found in Sen’s tendency to define an objective measure of human well-being as a contrast to subjective indicators such as, for instance, happiness or satisfaction with one’s life (Sen 2009; Sen 1999). This is also in line with Sen’s concept of choosing a life that one has reason to value, explained in more detail later. Nevertheless, the authors on human development have enriched these basic ideas and formulated an advanced understanding of socio-economic progress.

Sen points out that development is “a process of expanding the real freedoms that people enjoy” (Sen 1999: 3). Under the substantive freedoms Sen means the capabilities “to choose a life one has reason to value” (Sen 1999: 74). A person may value a number of different so called doings and beings which Sen calls functionings. For example, one may value to be adequately nourished, while the self-realisation is the valuable functioning for someone else. However, an individual is not always capable of enjoying the functionings she values, and then she faces unfreedom. For instance, someone who values adequate nourishment may not be capable of achieving this being because she is lacking financial resources. There is a need for conversion factors to translate a doing/being that one values

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2 Practical imperative: “So act as to treat humanity, whether in their own person or in that of the other, in every case as an end withal, never as a means only.” (In Ul Haq 1995:17)
to her *capability* to enjoy it. *Capability* therefore “refers to the alternative combinations of functionings that are feasible for her to achieve” (Ibid: 75). Moreover, in reaching the substantive freedom, a person has to be an *agent* of her own life – has to have an “ability to pursue and realize goals she values and has reason to value” (Alkire and Deneulin 2009: 22). It should be noticed that when speaking about the functionings that *one has reason to value* human development approach introduces value judgments. On the one hand, some people may value certain doings/beings that are harmful, such as drug consummation for example. Since this is not in line with human development paradigm, people should not be allowed to make such choices. On the other, one could value a doing that is not approved of in the society she belongs, but it would be the expression of her real freedom (such as for example women wishing to take part in the community’s decision-making process). Therefore, only *impartial spectator* could objectively judge what one has reason to value.

Furthermore, Ul Haq argues that the aim of development is “to create an enabling environment for people to enjoy long, healthy and creative lives” (Ul Haq 1999: 14). He explains that development should be analysed “in terms of people” (Ibid: 16). In that context, *human development* is “a process of enlarging people’s choices” (HDR 1990: 10). For achieving this goal, the basic requirements of human development paradigm – equity, sustainability, productivity and empowerment, must be satisfied. First of all, people should enjoy “*equitable access to opportunities*” (Ul Haq 1999: 17, emphases added) and in particular to political and economic opportunities. In addition, human development paradigm recognises that future generations of people have the right on equal opportunities and at least the same level of well-being as present. Therefore, *sustainability* of development has to be achieved. Moreover, *productivity* is seen as an essential precondition for enlarging people’s choices. An increase in productivity “requires investments in people and enabling the macroeconomic environment for them to achieve their maximum potential” (Ibid: 19). In that sense, economic growth is perceived as “a subset of human development models” (Ibid). Finally, the *empowerment* of the people – enabling them “to exercise choices of their own will” (Ibid: 20), is seen as the crucial factor for widening people’s choices.
At this point it is necessary to show the relationship between the human development and the concepts of freedom and human rights. It should be notices that freedom in the context of human development is a positive liberty – a person’s ability to be or do something, which is in contrast to negative liberty defined as freedom from interference by other people. Sen points out five distinct types of freedom: political freedom, economic facilities, social opportunities, transparency guarantees and protective security, where “each of these distinct types of rights and opportunities helps to advance the general capability of a person” (Sen 1999:4).

*Human rights* are the rights possessed by all persons, by virtue of their common humanity, to live a life of freedom and dignity. (Akire 2010: 33). The Universal Declaration of Human Rights adopted in 1948 sets out the rights to food, health, housing, an adequate standard of living, education, protection of the family, democracy, participation, the rule of law and protection against enslavement, torture, cruel or inhuman or degrading treatment or punishment. As it could be noticed, the concept of human rights specify a set of rights which are in line with the main tenents of human development concept. However, human development is more flexible than human rights concept since it does not have a fixed set of capabilities.

To sum up, the widening of people’s choices, in other words – the *expansion of their capabilities to choose doings and beings they have reason to value* should be the goal of the public policies aiming at human development promotion. In order to assess the level of human development and compare it with other countries’ achievements, or to evaluate different policy proposals, decision-makers have to rely on an accurate indicator of human development. The human development index (HDI) has been introduced to serve this purpose.

**What is the Human Development Index (HDI)?**

The Human Development Index (HDI) was formulated during the preparation of “*Human Development Report* under the sponsorship of UNDP in 1989” (Ul Haq 1999: 14). The aim of HDI introduction is to offer the alternative indicator to GNP, then to measure the stock of human development, furthermore, to be a tool for focusing objectives, and finally, to be the indicator that reflects the
impact of public policies (Raworth and Stewart 2002). It was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country. HDI is a measure that indicates a country’s average achievements in three dimensions of human development: *long and healthy life, knowledge and a decent standard of living*.

In the period 1990 – 2010 the HDI was composed of: *health*, as measured by life expectancy at birth; *knowledge*, as measured by the adult literacy rate (with two-thirds weight) and the combined primary, secondary and tertiary gross enrolment ratio (with one-third weight), *income*, as measured by GDP per capita in purchasing power parity (PPP) terms in US dollars. The HDI was then calculated as a simple average of the dimension indices. The maximum value of HDI is 1 and the minimum is 0. Countries are divided into four groups according to the level of the HDI. The counties with the HDI that exceeds 0.900 are consider to have a very high human development, while those with the HDI between 0.800 and 0.899 are of the high human development. A country belongs to a group of medium level of human development if its HDI is between 0.500 and 0.799, while human development is on a low level in the countries with the HDI below 0.500.

However, in the year 2010 certain changes were introduced. Health is still measured by life expectancy at birth, but the measurement of the achievement in knowledge is changed. Now it is measured by combining the expected years of schooling for a school-age child in a country today with the mean years of prior schooling for adults aged 25 and older. The income measurement has also changed from purchasing-power-adjusted per capita Gross Domestic Product (GDP) to purchasing-power-adjusted per capita Gross National Income (GNI). Finally, the aggregation method is also changed – HDI is now the geometric mean of the three dimension indices.

The indicators were changed for several reasons, as indicated in the HDR 2010. First of all, adult literacy is an insufficient measure for getting a complete picture of knowledge achievements. By including average years of schooling and expected years of schooling, one can better capture the level of education and recent changes. Gross Domestic Product (GDP) is the monetary value of goods and services produced in a country irrespective of how much is retained in the
country. Gross National Income (GNI) expresses the income accrued to residents of a country, including international flows such as remittances and aid, and excluding income generated in the country but repatriated abroad. Thus, GNI is a more accurate measure of a country’s economic welfare, since large differences could exist between the income of a country’s residents, measured by GNI or GDP. With geometric mean of the three dimensions, poor performance in any dimension is now directly reflected in the HDI, and there is no longer perfect substitutability across dimensions. This method captures how well rounded a country’s performance is across the three dimensions.

As mentioned earlier, the HDI should indicate the level of achieved human development in a country and thus help policymakers in shaping policies that would enable country’s socio-economic progress. An open question, however, remains whether the HDI really captures human development.

**HDI as a Measure of Human Development**

In this section, the overall assessment of the HDI is provided in order to determine whether the HDI fully captures the level of human development. After that, the components of HDI are examined in order to check whether the chosen measures of health, education and income really indicate people’s capabilities in relation to those dimensions.

**Overall Assessment of the HDI as a measure of human development**

This section provides an overview of the positive sides of this measure and the various criticisms of the HDI as a measure of the human development level.

There are numerous advantages of the HDI as a measure of socio-economic progress. First of all, it is an objective measure of human well-being, and therefore more powerful than subjective expression of one’s preferences and the utility that a person ascribes to a certain alternative (Sen 1999). The characteristics of the HDI should be considered in comparison to the GDP/GNP, since they are rival measures of socio-economic progress. Since it is compound measure, the HDI gives richer information regarding human devel-
opment than the GDP/GNP. Moreover, the HDI has changed the way development is expressed and analysed. Consequently, policymakers’ attention is moved from the economic growth to broader dimensions of human well-being (Jahan 2002).

The simplicity of the HDI makes it a very powerful instrument of public communication, sparking comparison and healthy competition between countries, as well as comparison of a country’s performance over a certain period (Jahan 2002). This has resulted in reconsideration of the public policies provided to enhance human development. For example Jamaica went eight places down on the HDI global rank, from the year 2006 to 2007. Although Jamaica’s HDI rose by 0.29% annually from 0.750 to 0.766 between 2000 and 2007, the policymakers in this country may consider the reasons why the countries from the medium human development improved their rankings, while Jamaica dropped.

It is also argued that achievement in three basic capabilities opens opportunities for other areas (Jahan 2002). It is likely that a healthy and well-instructed individual will achieve the functionings that are valuable for her. The income dimension of the HDI is often considered to reflect the possibilities for people to reach the valuable functionings, such as for example leisure activities.

Finally, disaggregation of the HDI and its dimensions enable us to examine the development within population subgroups such as geographical region, ethnicity, occupation, etc. (Anand and Sen 1994). Therefore, the disaggregated HDI can draw attention to the areas of inequalities. This is of the particular informational value for policymakers to focus on the disadvantage within the society. For example, the southern parts of Brazil are significantly more developed in comparison to the northeast of the country. The values of the HDI in the 1990 were 0.799 and 0.474, respectively (Fukuda-Parr, Raworth and Kumar 2003). This is the indicator for the policymakers to focus more on the provision of the capabilities for the inhabitants of the northeast Brazil.

However, there are also numerous shortcomings of the HDI. The main problem with the HDI as a measure of human development is that the concept of human development is much broader than the HDI manages to capture (Fukuda-Parr 2003). While HDI is a crude number, the reality of socio-economic progress is much
more complex (Raworth and Stewart 2002). More concretely, one may value a myriad of functionings, while the components of the HDI take into the consideration only health, education and income. For example, beside good health, being educated and having enough resources for a decent living, one may also value unpolluted environment and freedom to express the political attitudes. However, if this person lived in a polluted area and in a society where people cannot freely express their political views, she would face unfreedom. At the same time, her country may record high level of HDI. In other words, although the level of HDI may place the country in a group with a very high human development, we still can doubt whether this qualification is accurate since it may ignore the important functionings. Nevertheless, the list of capabilities that people may want to have is endless. This makes creation of an enlarged index of human development very difficult. For example, one may consider unpolluted environment to be of a huge significance, while for this person the community well-being might not be as important. Consequently, there occurs a problem which particular dimensions of well-being the HDI should include, and also how to weight their importance. Although through democratic decision making the consensus on the list of valuable functionings within the nation states or smaller communities may be created, this would lead to an emergence of a number of different mutually incomparable human development indices.

Moreover, since it is lacking the dimensions of political freedoms and environmental concerns, the HDI does not express the main components of the human development paradigm listed by ul Haq. However, concepts like respect for human rights and political freedoms are very difficult to measure or be expressed in a single number as a dimension of the HDI (HDR 2009), which complicate the creation of an enriched human development index furthermore.

While access to equal opportunities is one of the human development paradigm’s pillars, the HDI cannot reflect inequalities of human development that may exist in the society (Jahan 2002). On the one hand, we can take the United States as an example. This is a country that, according to the level of the HDI of 0.956\(^3\), has

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\(^3\) All the values of the HDIs presented in this section are given in accordance to the HDR from 2009 and they represent the levels of the HDIs in the year of 2007 for respective country.
a high human development, but it also has relatively high income inequalities. According to the Gini index of 40.8⁴, the United States is among the sixty most inequitable countries from the HDR list. On the other hand, Ukraine has a medium level of human development, with the HDI of 0.796. However, this country records the Gini coefficient of 28.2, and it is among ten countries with the most equitable income distribution. This leads us to the conclusion that, in comparison to the Americans, the greatest number of Ukrainians is capable of achieving the similar level of functionings related to income as their fellow countrymen. At the same time, when estimating the level of people’s well-being is based on the HDI, we might conclude that the Americans are better off.

Next, due to different definitions, sample techniques, social and political environments, etc, the international comparisons should be done with caution (Raworth and Stewart 2002). Therefore, saying that the level of human development in Iceland is more than twice higher than in Niger, might not be precise.

To conclude, the arguments presented within this section clearly lead to the conclusion that there are numerous advantages of the HDI as a measure of socio-economic progress. However, it is also shown that the HDI is not a comprehensive measure of human development. Since it does not include all of the possible functionings one has reason to value, it does not fully represent people’s freedoms. Nevertheless, as it is outlined above, inclusion of other dimensions into one compound measure raises numerous difficulties.

The HDI dimensions

The aim of this section is to examine whether chosen dimensions of health, education and standard of living really indicate people’s real freedoms in relation to health, education and a decent standard of living. To address these issues, I first examine what the capabilities to be healthy, educated and to enjoy a decent standard of living entail.

⁴ The Gini index lies between 0 and 100. A value of 0 represents absolute equality and 100 absolute inequality. The data are given according to “World Development Indicators” World Bank, 2009.
According to the World Health Organisation “health is state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (Arina and Naveed 2009: 229). The human development approach recognises that different people might have different values in terms of health, often comparing them against other dimensions of life (Ibid). Therefore, they need different resources to achieve functionings they value. The life expectancy “can be thought to be both valuable in itself and also helpful for pursuing other objectives” (Anand and Sen 1994: 141). Nonetheless, a person has a life expectancy as a member of a group. The life expectancy can be calculated for a population classified according to class, gender, and other categories, but however the data for different groups are not always available or reliable (Ibid). Also, a capability to live a long life although essential does not tell us much about “complete physical, mental and social well-being of people” (Ibid).

The human development approach stresses three roles of education: instrumental\(^5\), empowering\(^6\) and redistributive\(^7\) (Unterhalter 2009). It also emphasises the conversion factors of the educational inputs to valuable outputs (Ibid). Therefore, the evaluation of education should regard both inputs such as expenditure and level of teacher qualifications, or enrolment rates, and outputs such as students’ grades, whether they pass certain exams, as well as the literacy rate (Ibid). In addition, capability approach requires focus not only on actual achievements, but also on opportunities that each person has in achieving what she values in education (Ibid). The education dimension is measured by combining the expected years of schooling for a school-age child in a country today with the mean years of prior schooling for adults aged 25 and older. By including average years of schooling and expected years of schooling, one can better capture the level of education and recent changes. These indicators are relevant indicators of the capabilities in relation to education since they cover both input and output side. However,

\(^5\) For example, well-educated individuals can foster public dialog about social arrangements (Unterhalter 2009).

\(^6\) Education of the marginalised groups can enable them to organise politically and gain access to centres power (Ibid).

\(^7\) Education has redistributive effects between, for example, social groups and households (Ibid).
their power to express people’s real freedoms is limited, since examination whether people are reaching what they value requires much more data.

Income seen from the human development perspective is a means for achieving other valuable ends (Anand and Sen 1994). What is a decent standard of living (or what are the desirable ends) is individually determined – it depends not only on people’s values and the level of income, but also on the conversion factors. Therefore, GNI per capita has limited powers in providing that information.

To conclude, the indicators of health, education and living-standard have limits in reflecting people’s capabilities to live long, healthy life, to achieve valuable functionings in relation to education, and also to reach a decent standard of living. However, a more in-depth analysis would require much more data, which are not always available and reliable in every country.

Concluding Remarks

This paper has shown that human development is about enlarging people’s freedoms to live lives they have reason to value. In order to assess the level of human development and introduce policies that lead to its improvement, decision-makers have to rely on an accurate indicator. As a response to this need, the human development index (HDI) was introduced. HDI is a summary measure that indicates a country’s average achievements in health, education and GDP per capita. The aim of this paper has been to examine whether the HDI reflects the main tenets of human development.

The presented debate clearly leads to the conclusion that human development is a much broader concept than the HDI manages to capture, and therefore the HDI is not its comprehensive measure. While the HDI focuses on three dimensions, people may value numerous others. Moreover, even the chosen indicators of the existing HDI dimensions cannot completely express people’s capabilities in regard to health, education and living standard. However, the enlargement of the HDI to encompass more capabilities has its numerous difficulties. Despite its shortcomings, the HDI still has numerous advantages over the alternative indicators of the socio-economic progress, such as GNP for example.
To conclude, since human development is much broader concept than any individual indicator could capture, country’s level of development should be assessed by the combination of different indicators.

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INDEKS HUMANOG RAZVOJA KAO POKAZATELJ HUMANOG RAZVOJA

Apstrakt


Ključne reči: humani razvoj, indeks humanog razvoja.