# HUMAN DEVELOPMENT INDEX IN GEORGIA AND CHALLENGES OF SUSTAINABLE DEVELOPMENT

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**Abstract.** The Human Development Index is an indicator comprising three components – life expectancy, education and per capita income. In general, the human development index tends to grow worldwide. However, it does not always perfectly reflect reality. The aim of the research is to study the dynamics of the Human Development Index (HDI) in Georgia and a critical analysis of its components in relation to sustainable development challenges. HDI index in Georgia is growing dynamically. But a number of problems have emerged during the research, both with regard to the components of HDI and with the reality in Georgia. We have the country's favourable position in terms of ratings – in a group of high-growth countries, though the nominal indices of HDI components do not reflect actual content. Data on education and life expectancy in Georgia are good, but in reality, access to education is less problematic than the quality of education. The component variables do not measure the quality of the system. However, exactly HDI is the one of the determinatives of three main directions of sustainable development challenges: economic development, social inclusion and environmental sustainability. Although HDI is an important tool, it has drawbacks both in defining and calculating the components of variables and in the quality of the database. The index complexly determines human development, but uses very little data to calculate the significance of each component. It is advisable to improve the methodology of human development index calculation and to load it with more contextual analysis.

**Key words:** Human Development Index, Sustainable Development, Education.

**JEL code:** A13, I-25

#### Introduction

In the era of modern globalization, the most important factor in development of the country and improving the living standards is the development of human resources and the effective use of existing labour potential. The Human Development Index, together with other indices and empirical data, is included in the report of UNDP Human Development to assess progress in these directions. According to the current sustainable development goals, human development is particularly actual in the contemporary conditions, which is an important focus for the study and assessment of the ability of people to make worthy choices in terms of health, education and standard of living. The aim of the research is to study the dynamics of the Human Development Index (HDI) in Georgia and a critical analysis of its components in relation to sustainable development challenges. Therefore, we aimed to study the HDI in Georgia, comparing the nominal and real rates of its determinants. Depending on the purpose, the following objectives revealed: 1. to study the HDI statistics of the world and Georgia; 2. To compare and analyse nominal and real indicators of the identified components of human development. During the research process we used exploratory research (since 2012, no similar study has been conducted in Georgia in this way) and secondary research based on statistical resources;

The novelty of the research is that it critically analyses the components of human developments index and points to strengthening the qualitative content of the index. The object of the research is the components of Human Development Index/ quality and level of education system in Georgia.

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## Research findings and discussion

International indexes and ratings are one of the ways to measure the progress of a particular country in different directions - but it should be noted that they do not accurately reflect the situation in the country, even in the fields where they are assessment tools. The quality of the databases used during their calculation process, also reduces the accuracy of indexes and ratings. The ability to compare data between countries is a major problem due to imperfect methodology and databases for developing countries.

However, comparisons across countries and regions can still be made by ratings for the given period of time.

The Human Development Index is an indicator developed on the basis of the UN Human Development Theory, which comprises three components - life expectancy, education and per capita income.

"The main goal of development is to increase people's choice, not just their income." (Bendeliani N., 2012).

The Human Development Index (HDI) was designed to demonstrate that the ultimate criterion of the assessing a country's development is not only economic growth but also the people themselves and their capabilities. The HDI critically evaluates national policy decisions by comparing two countries that have the same GDP (per capita) but different human development rates.

The Human Development Index was developed in 1980 by the Pakistani economist Mahbub Ul Haq and Sir Richard Jolie. Since then, the UNDP has been using this index in its annual "Human Development Report". The Human Development Index is not a measure of the well-being or economic development of a country. It measures the rights and choices available to people necessary to develop their capabilities.

The Human Development Index sets out the criteria and shows the level of the different countries according to these criteria. All this is represented by a pointer from 0 to 1. According to the Development Index, countries are divided into 4 categories: highest - (0.8-1.0), high- (0.7-0.79), average - (0.55-.70), low - 0.55 and less.

From 1990 to 2011, the methodology of the Human Development Index changed significantly several times. The changes did not affect the three main constituents of the index. However, the rules for counting and the constituent variables were changing from time to time. These include long and healthy lives, education and a normal standard of living. HDI is the geometric means of the normalized values of these three parameters.

In general, the human development index tends to increase. Even in countries where the human development index is low, many people's living conditions have improved significantly. However, there is still inequality (e.g. gender) and discrimination, as evidenced by the statistics for 2018 on human development.

"Around the world, the average human development index for women (0.705) is 5.9 percent lower than for men (0.749). The gap between the sexes is the largest in the least developed countries, where the average human development index for women is 13.8 percent lower than for men." (Neidlein H., 2018)

If we look at the data of the last 30 years, significant progress is often noticeable. For example, the Human Development Index (HDI) in 2017 was 0.728, which is about 21.7 percent higher than in 1990 (0.598). As for the average life expectancy, it is 7 years longer than in -1990, and more than 130 countries have made the basic general education accessible.

The fastest growth in the Human Development Index in the period 1990-2017 was fixed 45.3 percent in South East Asia, followed by the East Asian and Pacific Ocean regions with 41.8 percent and Africa in the south of Saharan with 34.9 percent.

In sum, countries with a low index of human development have improved the index by 46.6 percent since 1990. At the same time, the HDI growth rate of the countries with high-development economies was only 14%.

"These trends hope that inequality between regions will be reduced in human development." (Human Development Report..., 2019).

However, the achieved progress since 1990 has not been constant. Conflicting countries particularly lagged behind. In 2012, the Syrian Arab Republic ranked 128th according to the Human Development Index (HDI), placing it among the average human development group.

Furthermore, due to the ongoing conflict that has been going on for years, the country returned to its 155th position in 2017, was placed in a low human development group, mainly because of the low life expectancy.

There are huge disparities in health filed across countries with different levels of development. Despite the fact that one of the 10th goals of sustainable development is to overcome inequality, it has remainsed as a problem. In countries where the human development index is very high, life expectancy is on average 79.5 years, but in countries where the human development index is low, life expectancy is only 60.8 years.

Inequality between countries also exists in education field. Adolescents from countries with a high index of human development tend to attend school more than 6-7 years on average, compared to adolescents from the countries with a low index of human development.

As it is well known, in the modern conditions, society faces the challenges of sustainable development, which connects three directions: economic development, social inclusion and environmental sustainability. Sustainable Development Goals are a set of 17 goals and 169 indicators that all UN member countries agree on achieving the better and more sustainable future. They are about the contemporary global challenges we face: poverty, inequality, prosperity, peace and justice, as well as climate and environmental challenges.

The Human Development Index as an indicator is closely linked to most of the goals listed above and its upward dynamics have a positive impact on the achievement of the goals. But the feedback is also noticeable. While talking about the Sustainable Development and Human Development Index, the problems of developing and poorly developed countries are particularly important.

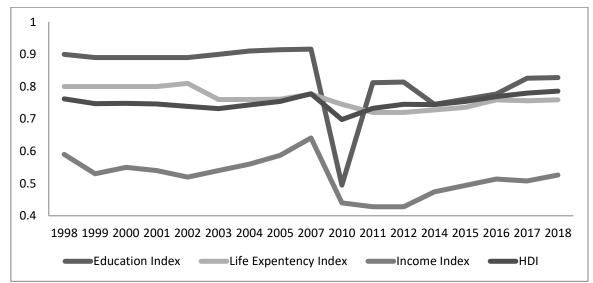
Georgia belongs to the category of developing countries and in order to assess the development of the country in various fields, it is important to keep recorded the results of the ongoing reforms and to analyse the prospects for future development. In the world, this practice is based not only on the growth rates of the economies of the countries but also on other important factors of development.

The Human Development Index in Georgia has been calculated since 1998, therefore the first statistics are also dated this year. HDI-0,762 is a high level of human development group(Human Development Report..., 1998).

HDI had been steadily increasing until 2010, particularly high in 2007. It should be noted that this year is marked by the highest macroeconomic performance in recent Georgian history, with the exception that all three components of HDI are upward, which may be considered as a positive consequence of the economic policies of the government which led the country after they started the

processes of the Rose Revolution. Education reform, economic growth of 12.6 % (which is the highest rate in the period from 2005 to 2019 years) haves also reflected on the growth of income.

In general, the income index according to the years is significantly behind the education and health components and reduces the index average score.



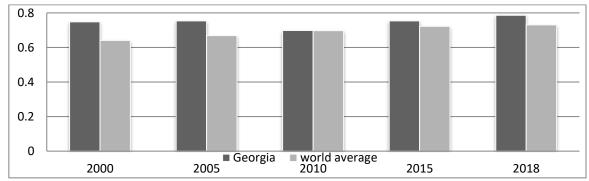
Source: Diagram built by author's, based on Human Development Reports 1998-2019

Fig. 1. Human Development Index dimensions

In 2010, due to changes in the human development index calculation methodology, the indicator decreased to 0.698, which led to the country's transition to the medium development group.

However, according to the 2011 Human Development Index data, Georgia is already classified as a country with a high level of human development, with a total score of 0.733 and a ranking of 75 out of 187 among countries in the world.

According to a report submitted by UNDP (2019), the average Human Development Index in the world is - 0,731, and in Georgia - 0,786, which is higher than the world average index.



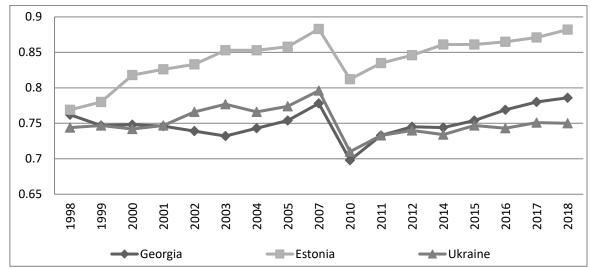
Source: Diagram built by author's, based on Human Development Reports 1998-2019

Fig. 2. Human Development Index in Georgia and world average

Comparison of the nominal and real content of the Human Development Index is particularly important for the former Soviet / Socialist countries.

For example, if compare the existing data of Ukraine and Estonia - countries were selected as the ex-Soviet Union republics, one with a successful developed economy - Estonia, and the other with a similar development to Georgia (Ukraine). In the comparison, can see that HDI is steadily increasing for Estonia, unless we consider the drop in methodology due to 2010. Since 2000, Estonia remains convincingly in the very high development group with a score of 0,818-0,882, which is not the case with Ukraine. Although it is in the high development group of 0.744-0.751, the dynamics

are quite unstable and the growth rate is low, but in many cases it is better than the corresponding figure in Georgia.



Source: Diagram built by author's, based on Human Development Reports 1998-2019

Fig. 3. Human Development Index in Georgia, Estonia and Ukraine

From the presented data, we can conclude that - the data do not reveal the high quality of education and health systems in Georgia - the variables that constitute these components do not measure the quality of the system.

Education is measured by accessibility (average duration of studying in the first, second and third stages and expected duration of studying) and health – by the average life expectancy. Consequently, these indicators are only basic measures of education and health. They do not generally reflect the quality of education or health systems in Georgia. Access to education in Georgia is less problematic than the quality of education.

In Georgia, the problem is not the access to education and level of literacy, but the contextual side that is deplorable.

According to the results of the international study (PIRLS - Progress in International Reading Literacy Study), the level of literacy of adolescents in Georgia is below average. According to the understanding of the content of reading in elementary classes, our country is in 37th place out of 45 countries. No better result in other age groups, where we share the last positions with African countries. According to studies, Georgia is in one of the last places in the world in terms of school education. This tendency applies to future teachers as well.

International Student Assessment Program PISA assesses students (15 years) competences in the natural sciences, reading and mathematics.

According to the results of the 2015 cycle, the average rate of student achievement in Georgia (out of 70 countries) is significantly below the OECD average. According to the natural sciences, (taking into account the result mismatch) it is in the range of 58-61 places, in reading - in the range of 59-64 places, in Math - in the range of 56-59 places (National Centre... 2016).

Math, literacy and natural sciences index is deteriorated – based on the official results of the PISA 2018 International Student Assessment Program.

In the 2018 cycle, it is in the 69th place out of 77 countries according the average of all three components. Math - 66th place, Natural Science - 73rd, reading - 70th place. According to PISA, Estonia is in the top five in 2018 (Scheiler A., 2018).

This is the result of the Estonian government's consistent education policy: Estonia expects a high standard from all children (from the pupils regardless from the village or town). Every resource is given to them for success. Lunch, books and transportation are free for all students. In order to attract qualified candidates, the teacher's salary is high. Teachers have complete independence / freedom. Estonia was one of the first countries to introduce digital technology in its curriculum. The goal of Estonia in 2020 is for all children to use digital technology in their learning processes.

As the above mentioned data shows, Estonia has a growing HDI, which is fully in line with the content side, Estonian adolescents increasing their level of knowledge as well. We cannot say the same about Georgia, the steadily growing HDI, unfortunately, does not lead to a higher level of education for Georgian adolescents.

Generally, indexes are conditional. The number of countries in the UN Human Reports was constantly changing, so the ratings for different years are not comparable. Accordingly, improving a country's rating does not mean a drastic improvement of the current situation in the country, but a change of position with respect to other countries, so it is even more difficult to determine the dynamics of human development according to ratings.

#### **Conclusions and recommendations**

- 1) When it comes to the Human Development Index, especially in developing countries, it is desirable to pay more attention to qualitative indicators, since quantitative, nominal indicators do not fully represent human development.
- 2) Although the Human Development Index is an important tool while assessing progress as an alternative to the growth indicators of a progress of the country, it has flaws in both the definition and calculation of constituent variables and the quality of the database. The index complexly determines human development, but uses very little data while calculating the significance of each component.
- 3) According to the overall scores of Human Development Index and analysis of ratings, the methodological flaws in the index directly affect the indicators in Georgia. The score of Georgia in the same year vary according to the different sources, that makes it impossible to compare the data by years. As a result, the Human Development Index changes, thus for example, in 2005, it can be defined as 0.707, 0.732 or 0.771.
- 4) At the same time, the reality behind HDI in Georgia stable nominal growth at a glance, we consider as a problem, namely:at first glance, it is possible to conclude that in this period (2000-2019) Georgia has gone through the entire development stage and has made an important progress in human life expectancy, education and a worthy life assurance. However, monitoring the dynamics of the Human Development Index data and considering the changes in index methodology demonstrates the progress, but not on such a scale.
- 5) As we noted, the human index comprises three components life expectancy, education and per capita income. Increasing each of them will have an impact on reducing inequality and poverty, increasing prosperity, reducing climate and environmental problems. If we consider the fact that the aims of sustainable development promote a long-term approach to solve the global challenges, it may not be typical for some countries but may be a problem for most countries and thus requires joint efforts.
- 6) In this direction, it will become even more apparent to improve the methodology of Human Development Index calculation and to load it with more contextual analysis.

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