
THE COVID-19 PANDEMIC AND THE QUESTIONING OF THE PRINCIPLE OF THE HUMAN DEVELOPMENT INDEX

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ABSTRACT: *The covid19 epidemic has definitely affected nearly all economic and social activities across the world, in addition to its destructive and fatal impacts. As a result, estimates for global economic growth have been lowered downward. Furthermore, the pandemic scenario has pushed scientific study in new areas in order to discover answers to the new problems that have arisen as a result of the epidemic. We have questioned the idea of calculating the human development index (HDI) in this context, while providing new assessment criteria judged useful and compatible with pandemic conditions to evaluate sub-dimensional development indicators pertaining to health, education, and income. As a result, we have shown that the environmental dimension is necessary for measuring the progression of the HDI, allowing us to offer a novel HDI calculation formula.*

KEYWORDS: covid-19, pandemic, principle, human development, Index

INTRODUCTION

Covid19 had a significant impact on the health, economic, and social systems of all developed and developing countries. Closure of land, air, and sea borders has undoubtedly forced each nation to mobilise its own resources and adopt or borrow suitable methods in order to stem the spread of the pandemic and identify its negative economic and social consequences.

As a result, it was discovered that the majority of affluent nations suffered more than poor ones in dealing with the pandemic risk. Strong economic means and military might were not enough to solve the problem; they were both essential but insufficient. Following this dangerous pandemic situation, The world has lost its bearings, and a number of economic values and ideas have been questioned. In this sense, and through this article, we hope to shed light on the effectiveness of the HDI principle as a tool for assessing a country's development.

Presentation of the HDI:

The HDI is a dimensionless composite indicator created by Indian economist Amartya Sen and Pakistani economist Mahbubul Haq and released by UNDP in 1990. It is determined based on three key indicators:

The first indication is health/longevity, which is based primarily on life expectancy at birth and takes into consideration the fulfilment of basic material requirements such as availability to nutritious food, safe drinking water, enough housing, excellent sanitation, and medical treatment.

The second criterion is knowledge or educational attainment. The average duration of schooling for people over the age of 18 and the projected length of schooling for school-age children are used to calculate it. It represents the fulfilment of intangible requirements such as the capacity to participate in workplace or societal decision-making.

Third indicator: The standard of living as assessed by the logarithm of gross domestic product per capita in purchasing power parity, which includes aspects of quality of life such as mobility and cultural access.

According to the UNDP, the UN Department of Economic and Social Affairs provides statistics on life expectancy at birth, while the United Nations Statistical Institute advances data on years of schooling. The World Bank and the International Monetary Fund provided the UNESCO and GNI per capita figures. HDI was usually published with a delay, based on statistics gathered.

From 2011, the calculation of the HDI is based on a geometric mean whose formula is as follows:

$$IDH = \sqrt[3]{I_{longevity} \times I_{Education} \times I_{Income}}$$

With:

$I_{longevity}$: longevity index

$I_{Education}$: Education level index

I_{Income} : income level index

Limits of the HDI:

The HDI, like any other composite indicator, has faults, the most significant of which is that it presupposes that its constituents are comparable. This score is calculated without taking into consideration the substantial link between different elements of quality of life and the distribution of individual situations in each nation. As a result, the formulae for computing the HDI's elementary indices have received a lot of attention. Indeed, the UNDP's use of log in the income index computation attempts to lower the weight of the index as time goes on. Furthermore, the HDI has a basic problem in that it fails to account for public liberties in its calculations, despite the fact that, according to AmartyaSen, progress is a process of expanding freedoms

The questioning of the principle of HDI: First, the worldwide catastrophe produced by Covid19 has clearly demonstrated that human health is a critical problem, and that each government should prioritise it at the top of its agenda. This calls into question the method used to generate the "health" index at the HDI level. As a result, relying solely on life expectancy at birth to measure health progress is both required and insufficient. During the global spread of the virus, it was noticed that the majority of industrialised nations' health systems (China, Italy, Spain, France, Germany, etc.) had become practically incapable of sustaining the large number of infected.

It is necessary to redefine the longevity index by including additional parameters and criteria such as a country's health system's ability to provide high-quality care to all patients with

serious and urgent cases, as well as dealing with unforeseen serious and dangerous situations in the event of disasters and epidemics. The number of doctors per thousand inhabitants, the number of hospitals per thousand inhabitants, the number of intensive care beds per thousand inhabitants, the number of people unable to access care, and the percentage of people covered by health and social insurance can all be used to estimate the health system's capacity.

Second indication: In connection to the first indicator, "health," in order to have a healthy, effective, and efficient health system, a country's education system must be able to generate all that the first system requires, particularly human, technological, and scientific resources. In this regard, the HDI's second indication, the knowledge or degree of education on which it is based, is important. Based on which its calculation of the average length of schooling for adults over 25 years old and the expected length of schooling for school-aged children is ineffective in providing a clear picture of the health of a country's educational system. Indeed, the crisis brought on by Covid-19 has highlighted the significance of investing in scientific and technical research and development.

Because of their knowledge of the seriousness of the situation and their conduct in relation to the World Health Organization's orders pertaining to the fight against this epidemic, people's level of consciousness and degree of culture played a significant part in the virus's siege. In this environment, it is obvious that the quality of education and instruction is critical. This factor can be calculated using the percentage of the budget allotted to education, the percentage of the budget allotted to scientific research, the number of scientific publications and/or production, the number of patents and innovation, the percentage of graduates integrating into the labour market, and the number of political representatives with a higher level of education who participate in the legislative process, political, economic and social decision-making at local, regional or national level and the rate of out-of-school and literacy

Because the first has shown its inefficiency in materialising income inequalities within and between countries, the third indicator of the HDI, "standard of living," which is measured by the logarithm of gross income per capita in purchasing power parity, can be replaced by the relative poverty rate. The relative poverty rate, on the other hand, provides a clear picture of the quality of life of the population.

The fourth metric is: Respect for the environment and the battle against the impacts of climate change appear to be important and required in order to improve a country's human development index. The degree to which the country contributes to lowering greenhouse gas emissions may be used to calculate this measure. Thus we propose a new method of calculating HDI:

$$IDH = \sqrt[4]{I_{longevity} \times I_{Education} \times I_{Income} \times I_{Environment}}$$

With:

$I_{longevity}$: longevity index

$I_{Education}$: education level index

I_{Income} : Income level index.

$I_{Environment}$: Environment index and the fight against the effects of CC

CONCLUSION:

In light of the growth of the Covid-19 pandemic, we have questioned the efficiency of the UNDP "HDI" index premise in this article. As a result, we've developed a new approach to calculating the human development index that incorporates additional criteria relevant to its components, such as health, education, and income.

Furthermore, we have included a fourth indicator that relates to the environmental component, which we believe is critical in gauging development. By presenting this new formula for calculating the human development index, we want to spark a scholarly debate about the validity of the previous technique of calculating HDI in the light of the global struggle against pandemics' severe consequences.

Climate change has become an important aspect to consider before considering growth. As a result, we intend to put this novel method to the test using empirical data and collaboration with national and/or international development agencies.

REFERENCES

1. Amartya Kumar Sen, 2000. « Development as Freedom ». Alfred A. Knopf, Inc. P: 384 ISBN 10:0375406190 ISBN 13: 9780375406195.
2. Dwight H. Perkins, Steven Radelet and David L. Lindauer (2006), « Economic of Development ». Sixth Edition by W.W. Norton & Company, Inc. Michael P. Todaro and Stephen C. Smith. 2012. «Economic Development » ELEVENTH EDITION, PEARSON, ISBN 978- 0-13-801388-2.
3. UNDP, 2019. « Human Development Report 2019: Beyond income, beyond averages, beyond today: Inequalities in Human Development in the 21st Century »