INCLUSIVE DEVELOPMENT AS AN INSTRUMENT TO OVERCOME ECONOMIC INEQUALITY AND DISCRIMINATION

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ABSTRACT

The problem of economic inequality, manifesting itself in various forms such as uneven distribution of income or wealth, is one of the most important and contradictory problems facing modern scientists in the 21st century. The purpose of this study is to examine the correlation between the level of inclusive development and indicators of inequality in development across the world. VOSviewer was used to conduct bibliometric analysis in the Scopus base, enabling visualization of data on inclusive development. Correlation and regression analysis were employed to assess the relationship between the level of inclusive development and various inequality and discrimination indicators, with all statistical data sourced from the World Bank's collection. It was investigated that in developed countries, there is an inverse relationship between the IDI and Gini index, whereas a direct correlation between the IDI and QLI, HPI, and HDI is observed. Additionally, a direct correlation between the inclusivity of society and the gender neutrality of countries is seen, with the correlation being more pronounced in developed countries. To reduce economic inequality and promote inclusive development, measures should be taken to increase access to educational and training opportunities for disadvantaged groups, as well as to invest in infrastructure and public services in disadvantaged areas.

Keywords: inclusive development, inequality, education, discrimination, distribution, IDI, QLI, HPI, HDI, Gini, GGGI.

1. INTRODUCTION

Inequality is an economic problem because it creates a rift between the rich and the poor that is not in line with welfare economics. This can lead to a social gap and a lack of trust in the government, as well as a lack of opportunity for those not born into wealth. To create a more inclusive economy, the government needs to invest in programs that reduce inequality. It can also help to create a more level playing field by raising the minimum wage and providing more opportunities for education and training.

Inclusive development is focused on creating economic opportunities and improving the quality of life for all members of society, regardless of gender, race, ethnicity, religion, or other factors. It seeks to ensure that everyone has access to the resources and services they need to reach their full potential (Zhukovska, 2019; Zhukovska et al., 2021). This includes access to education, healthcare, employment, and other basic services. Inclusive development also seeks to reduce inequality and promote social justice.

The focus of inclusive development includes problems as:

- Poverty and economic inequality. Despite significant economic growth in many countries, poverty
remains a major problem, particularly in developing countries. The gap between the rich and the poor is growing in many countries, leading to social and economic disparities that can further exacerbate poverty and deprivation.

Gender inequality and discrimination. Women are often marginalized in the economic and political realms, leading to unequal access to resources and opportunities.

Lack of access to financial services. Many people in developing countries lack access to formal banking systems and other financial services, making it difficult for them to save money, access credit, and start businesses.

Poor infrastructure. Poor infrastructure can create barriers to economic growth, including unreliable electricity and water supplies, inadequate roads, and limited access to technology.

Weak institutions. Weak governance and corruption can contribute to economic exclusion and inequality, as resources and opportunities are diverted away from those who are most in need.

One of the most important and contradictory problems facing modern scientists in the 21st century is the problem of economic inequality. Economic inequality can manifest itself in various forms: uneven distribution of income or wealth between different groups of people, regions, or countries. The unequal distribution of income in the world is reflected in the fact that today 10% of the world’s richest population receive 52% of the world’s income, while 50% of the poorest population earn 8.5% (World Inequality Report, 2022). On average, the representative of the wealthiest population of the world earns 87,200 euros (122,100 US dollars) per year, while the representative of the poorest population of the world earns 2,800 euros (3,920 US dollars) per year (Fig. 1-2). Global inequality in the distribution of wealth is more pronounced than inequality in the distribution of income.

According to Fig. 1-2, the global bottom 50% captures 8.5% of total income measured at Purchasing Power Parity (PPP). The global bottom 50% owns 2% of wealth (PPP). The global top 10% of total household wealth and captures 52% of total income in 2021. Top wealth holders are not necessarily top income holders. Income is measured after the operation of pension and unemployment systems and before taxes and transfers.

The poorest half of the world’s population almost does not possess any wealth – only 2% of its total size. The top 10% of the wealthiest people in the world own 76% of all wealth. On average, in the poorest half of the population, there is one adult per 2,900 euros in PPP, or 4,100 US dollars, while the top 10% of the wealthiest population have an average of 550,900 euros (or 771,300 US dollars) (World Inequality Report, 2022).

According to World Bank data, the largest increase in global inequality and poverty since the Second World War is currently being observed (World Bank Indicators, 2022). Countries are on the brink of bankruptcy, and the poorest countries are now spending four times more on repaying debts to wealthy creditors than on health care. Three quarters of the world’s governments plan to cut spending in the public sector, including health care and education, by $7.8 trillion over the next five years (World Bank Indicators, 2022). Contemporary trends convincingly demonstrate that with the prevailing model of economic development, which is practiced by most countries in the world, economic and social inequality is increasing, absolute poverty is deepening, and there is no improvement in the well-being of a significant part of the population.

The thesis about the inadequacy of economic development to ensure full and effective growth of the economy was first heard in the UN report “Ensuring Sustainable Human Progress: Reducing Vulnerability and Building Resilience”, which emphasizes that in the modern world 2.2 billion people live below/or at the poverty line (Human Development Report, 2014). According to World Bank estimates (World Bank, 2015), 12% of the planet’s population lives in poverty; nearly 1 billion people live on less than 1.25 US dollars a day; more than one billion people in the world do not have access to clean water, 1.6 billion – to electricity and 5.4 – to the Internet; 2.5 billion people do not have accounts in financial institutions (Dluhopolskyi et al., 2023). T. Piketty warns that deepening inequality poses a threat not only to innovation, but also to market democracy, social trust, and the free-market system of capitalism (Piketty, 2014). His thesis can be supplemented by the danger of
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wars from the side of totalitarian states in the world.

Figure 1. Global income inequality, 2021.  
Figure 2. Global wealth inequality, 2021.

At the 2017 48th World Economic Forum in Davos (Switzerland), it was proposed to change the priorities of economic policy, which should be reoriented to more effectively counter insecurity and inequality accompanying technological changes and globalization. Sustainable inclusive progress, accompanied by an increase in the population's income and simultaneous enhancement of its economic opportunities, level of security and quality of life, should be recognized as the main goal of economic development, not GDP growth, as was previously thought. Analysis of the main macroeconomic indicators of a country can show a high level of economic development, but at the same time a significant part of the population will not be included in the process of creating GDP and, accordingly, in the distribution of social benefits, as a result of which wealth inequality of the population is observed and a number of related problems arise, the main of which is poverty.

2. LITERATURE REVIEW

For the purpose of bibliometric analysis, we used the scientometric databases Scopus and Web of Science. The bibliometric analysis tool used was VOSviewer. The analysis was conducted as follows: first, over 25,427 articles were found using the keyword “inclusive development” in the Scopus database during 1950-2023.

The boundaries of what we know are expanding, leading to an increased interest in inclusive development from year to year (Fig. 3). The interdisciplinary nature of this field is evident in Fig. 4. Fig. 5 displays the map of keywords for articles related to inclusive development and Fig. 6 demonstrates the top-15 countries, the authors from which are most interested in inclusive development research (USA, UK, Australia, India, Canada et.).
**Figure 3.** Annual number of articles for the keyword “inclusive development”.

Source: build by the authors based on Scopus database.

**Figure 4.** Connections between chosen articles from the “Social Sciences” field and other fields.

Source: build by the authors based on Scopus database.
Figure 5. Keyword map for the query “inclusive development” for the first 2000 most cited articles for 1950-2023.

Source: build by the authors based on Scopus database.

Figure 6. Countries whose authors write most about the problem of inclusive development.

Source: build by the authors based on Scopus database.
Fig 7 shows a list of authors who specialize in the topic of inclusive development (S. Asongu, S. Managi, J. Gupta, S. Carrington, M. Ainskow et.).

Figure 7. List of authors specializing in inclusive development issue.

Economic inequality has been in the spotlight of scholars around the world for a long time. Thus, in the mid-20th century, S. Kuznets predicted a U-like dependence between income inequality and economic growth (Kuznets, 1955; Panayotou, 2003). The scientist assumed that at an early stage of industrialization, with an increase in economic growth rates, economic inequality also increases, but later, at a mature stage, with the preservation of increased growth rates, economic inequality decreases (Koziuk et al., 2018; Dluhopolskyi et al., 2019). In scientific literature, this theory can be found under the name of the Kuznets curve. Based on this theory, it can be assumed that reducing the manifestations of economic inequality can be achieved by providing rapid and stable economic growth. The Kuznets curve has been severely criticized by scientists. And, as time has shown, not without reason. Contemporary world trends in socio-economic development testify to the fact that economic inequality not only persisted, but also significantly deepened in the conditions of high economic growth (Piketty, 2014).

The main provisions of the concept of inclusive development were developed in 2008 by the members of the Commission on Growth and Development under the leadership of Nobel Prize laureate M. Spence and published in the work “The Growth Report. Strategies for Sustainable Growth and Inclusive Development” (The Growth Report, 2008). In 2009, the concept of inclusive growth was further developed in the scientific article (Ianchovichina, Lundstrom, 2009), in which the authors studied the conceptual foundations of inclusive growth and identified constraints that may impede sustainable and inclusive growth, using the economy of Zambia as an example.

Among contemporary authors researching the issues of inclusive economic development, it is worth mentioning such as:

1. S. Asongu, N. Odhiambo and Y. Malah Kuete (Asongu, Odhiambo, 2020; Malah Kuete, Asongu, 2021; Asongu et al., 2017), who examines empirically whether the state of infrastructure
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1. Development stimulates structural changes;

2. T. Howard and Y. Hedrick-Wong (Howard, Hedrick-Wong, 2019), who dedicated their research to inclusive growth, its principles and models, as well as ways to solve financial and social integration problems and increase social equality in society;

3. R. Mehta, J. Gupta and N. Pouw (Mehta, 2019; Pouw, Gupta, 2017), who researches the concept of inclusive development from the perspective of its practical implementation;

4. D. Ludwig, B. Boogaard, P. Macnaghten and C. Leeuwis (Ludwig, Boogaard, Macnaghten, Leeuwis, 2021), who study the role of knowledge in inclusive development and innovation;

5. A.H. Ahmad, D.T. Llewellyn and V. Murinde (Ahmad, Llewellyn, Murinde, 2021), who are researching the impediments of inclusive development, the implications for macroeconomics and stability, and aspects of regulation;

6. C.J. Johnstone, Y. Sugiawan and S. Managi (Johnstone, 2022; Sugiawan, Managi, 2019), who acknowledges the importance of the concept of inclusive development and highlights its negative aspects, such as shifting the focus of development from efficiency to justice.

Authors researching economic inequality should not be overlooked. Among them are:

1. J.C. Gornick and M. Jantti (Gornick, Jantti, 2013), along with a team of authors, are studying the issues of income inequality and the functioning of the middle class in developed countries;

2. T. Piketty (Piketty, 2014; Piketty, 2015), who studies the fundamental questions underlying one of the most pressing problems of modern economics and politics – economic inequality;

3. M.P. Drennan (Drennan, 2015), who views economic inequality as the primary cause of economic crises;

4. J. Torre Dwyer (Torre Dwyer, 2020), who developed pathways to eliminate inequality and poverty based on fundamental moral principles and egalitarian measures;

5. E. Buitelaar, A. Weterings and R. Ponds (Buitelaar, Weterings, Ponds, 2021), who are researching the social consequences of economic inequality and segregation.

Despite the multitude of scientific research in these areas, most of them are fragmentary, that is, they only illuminate individual aspects of inequality or inclusive development. To date, there are no comprehensive scientific studies in the world literature on the concept of inclusive economic development as a tool for overcoming economic inequality and discrimination.

3. AIM OF THE RESEARCH

The goals of this study are to analyze the connection of the level of inclusive development with a number of indicators that demonstrate the inequality of development of the countries of the world, as well as the formation of main areas of overcoming economic inequality through inclusive development.

4. METHODS

The VOSviewer tool was used to carry out bibliometric analysis in the Scopus base. It allows us to visualize the data obtained on the topic of inclusive development. Correlation and regression analysis was used to evaluate the interconnection of the level of
inclusive development with several inequality and discrimination indicators. All statistical data were generated from the collection of the World Bank 2018-2022.

5. RESULTS

The concept of inclusive development is based on seven main pillars and fifteen sub-pillars, which include a multitude of factors that influence the breadth of population social participation in the process and benefits of economic growth (Fig. 8). Countries that have achieved success in building a strong middle class and reducing poverty and social marginalization have created effective economic institutions and political incentives in each of these areas.

Figure 8. Inclusive Growth and Development: Key Performance Indicators.

The Inclusive Development Index (IDI) is used to measure the level of inclusive development, developed by four economists: R. Semans, M. Hanus, G. Corrigan and M. Berk and presented at the World Economic Forum in Davos (Switzerland). The authors developed this index as an alternative to gross domestic product (GDP) – the main economic indicator by which a country’s status in the world is determined. According to the developers, even though GDP correlates well with the level of employment, it is not able to reflect the expansion of the digital and globalized economy. In conditions where there is a great variety of goods and services, when a significant number of companies operate beyond borders, it is difficult to correctly determine the size of added value. The growth of the sharing economy also increases the number of types of economic activity that are not subject to accounting (The Inclusive Growth and Development Report, 2017). It is also important to consider how the GDP is distributed among the population of the country, whether there is a middle class, how freedom of speech is developing, what level of education, what education system, life expectancy, what health care system, the dynamics of the country’s development, etc. It should be noted that the authors of the IDI do not devalue the GDP but use it as one of the indicators that determine the country’s IDI.

The Inclusive Development Index is an extended measure of a country’s social and economic development. In addition to GDP, this index measures 11 additional parameters. IDI is composed of 12 indicators, divided into 3 major groups:

1. growth and development (GDP per capita in US dollars, labor productivity, healthy life expectancy, employment);
2. inclusion (income inequality, poverty level, wealth inequality, median daily income (PPP per capita);

3. fairness between generations and sustainability (clean savings, CO₂ emissions per unit of GDP, public debt, ratio of working-age population to non-working-age population).

Group indices are first calculated, and the final index is calculated as an arithmetic mean. This indicator not only shows the level of production in the country, but also the prospects and quality of life of the people. IDI clearly illustrates how deceptive success can look when measured only by productive capacity. At the 2017 World Economic Forum, IDI was presented to 103 countries in the world, data for which were available and accessible in the units of measurement necessary for the study. All countries were divided into two groups: advanced economies (30 countries) and emerging economies (77 countries). The second group included not only resource-exporting and low-potential economies, but also other countries that do not reach the level of high-income countries. This division was introduced in connection with the existence of a significant difference between the understanding of poverty and inequality in these two types of countries. Thus, some countries with developed economies have lower positions in IDI than countries with developing economies. Thus, the authors of the index attributed Latvia, Hungary, Azerbaijan, and Lithuania to countries with a developing economy, although they significantly exceed the recognized world leaders in economic development – the USA and Japan – in this indicator (Zhukovska, 2019). Such a gap between countries can be explained by the specificity of the methodology for calculating the HDI, according to which a complex environmental situation (for example, China) or a large external debt (for example, Japan) negatively affects the countries’ positions in the rating despite a high and stable GDP growth. Moreover, according to economists, 27% of the countries included in the rating have reduced their HDI values over the past five years despite an increase in GDP size (The Inclusive Development Index, 2018).

Table 1 shows the leading countries in terms of GDP and IDI. The leaders of the inclusivity ranking are almost the same as GDP, but there are exceptions. For example, among developed countries, both in terms of GDP per capita and IDI, Norway, Luxembourg, and Switzerland are the leaders. However, Iceland, which is only 10th in terms of GDP, has emerged as the second most inclusive. There are also unexpected leaders among developing countries. Poland (64th in GDP) came in fifth. The top spots in both cases were left to European countries: Lithuania, Hungary, and Latvia. At the same time, Japan only came in 33rd out of developed countries.
There are many indicators and methods for measuring economic inequality, such as the Gini index, Lorenz Curve, Theil index, Atkinson index, Kuznets Curve, etc. The most widely used among them is the Gini index (also known as the Index of Inequality), which was developed by Italian economist C. Gini at the beginning of the 20th century (Ceriani, Verme, 2012; Kolluru, Semenenko, 2021). Gini Index illustrates the gap between the poor and the wealthy strata of the population: the higher the Gini index, the greater the income inequality among the population, and conversely, the closer to zero the Gini index, the lower the income inequality and, therefore, the lower the economic inequality.

We used the values of IDI 2018 and Gini index for different years to establish a correlation. The results obtained are presented in Fig. 9-10. In developed countries, the relationship between the IDI and the Gini index is inverse but not linear. That is, high levels of inclusiveness correspond to low levels of inequality. However, in developing countries, such a relationship is not obvious, which may be explained by the lack of well-formed institutions of inclusive development and the wide range of values of the inequality index in countries belonging to this group.
We consider the comparison of the IDI with the Quality-of-Life Index (QLI) to be an interesting topic for research too. The World Population Review, an independent organization, has determined QLI by country (Quality of Life Index, 2023). According to the data from Fig. 11-12, there is a direct correlation between IDI and QLI, meaning that a higher level of economic inclusion correlates with a higher level of life satisfaction around the world. However, it should be noted that this correlation is more significant in developed than in developing countries. Again, this can be explained by the established institutional environment and the value orientations of people living in highly developed countries.

**Figure 9.** The relationship between IDI and Gini Index in developed countries.  
**Figure 10.** The relationship between IDI and Gini Index in developing countries.

![IDI vs. Gini](image)

Source: build by the authors based on (The Inclusive Development Index, 2018; Gini Index, 2022).

**Figure 11.** The relationship between IDI and QLI in developed countries.  
**Figure 12.** The relationship between IDI and QLI in developing countries.

![IDI vs. QLI](image)

Source: build by the authors based on (The Inclusive Development Index, 2018; Quality of Life Index, 2023).

Similarly, to QLI, the level of inclusive development is directly correlated with the Happy Planet Index (HPI), which reflects the well-being of people and the state of the environment in different countries around the world. This index was proposed by the New Economics Foundation in July 2006. The main task of HPI is to reflect the “real” well-being of nations. To compare the level of living in different countries, the value of GDP per capita or Human Development Index (HDI)
is used, but these indices do not always reflect the real situation. Comparison of GDP values is considered inappropriate, since the goal of most people is not to be rich, but to be happy and healthy. As can be seen from Fig. 13-14, there is a significant direct correlation between IDI and HPI both in developed ($R^2 = 0.5965$) and in developing countries ($R^2 = 0.4089$).

The most widely used indicator to assess the conditions for the formation and development of human capital is the Human Development Index (HDI), which reflects the average level of a country’s achievements in the three most important elements of human potential development: 1) long and healthy life, measured by the expected life expectancy at birth; 2) knowledge, measured by the literacy rate of the adult population and the total number of those who have entered educational institutions; 3) decent level of living, measured by the GDP per capita. According to Fig. 15-16, there is a significant direct correlation between IDI and HDI in both developed ($R^2 = 0.5247$) and developing countries ($R^2 = 0.6379$).

**Figure 13.** The relationship between IDI and HPI in developed countries.  
**Figure 14.** The relationship between IDI and HPI in developing countries.

**Figure 15.** The relationship between IDI and HDI in developed countries.  
**Figure 16.** The relationship between IDI and HDI in developing countries.

Source: build by the authors based on (The Inclusive Development Index, 2018; Happy Planet Index, 2021).
The problem of discrimination based on various characteristics is still relevant for many countries around the world, especially those that are developing. Discrimination is a broad concept that refers to the unjust or prejudicial treatment of different categories of people, especially on the grounds of race, age, or sex. Discrimination can take many forms, including direct and indirect. To simplify the calculation procedure, we choose The Global Gender Gap Index (GGGI) as the indicator for discrimination, which was proposed at the World Economic Forum in 2006. GGGI is a measure of gender equality that looks at the relative gaps between women and men in four key areas: economic participation and opportunity, educational attainment, health and survival, and political empowerment. GGGI is used to measure the progress of countries in closing the gender gap and to identify areas where further action is needed. Discrimination is a major factor in the gender gap, as it can limit access to education, employment, and other opportunities for women and girls (Global Gender Gap Report, 2021). Top-5 most gender-equal countries include Iceland, Finland, Norway, New Zealand, and Sweden. The data in Fig. 17-18 demonstrate a direct correlation between the inclusivity of a society and the gender neutrality of countries around the world. This connection is more pronounced in developed than in developing countries.

**Figure 17.** The relationship between IDI and GGGI in developed countries.

**Figure 18.** The relationship between IDI and GGGI in developing countries.

Source: build by the authors based on (The Inclusive Development Index, 2018; Global Gender Gap Report, 2021).
6. DISCUSSIONS AND CONCLUSIONS

The strategic goal of inclusive development should be the creation of investment-attractive, gender-oriented, comfortable, ecologically clean living conditions with developed infrastructure, effectively working small and medium-sized businesses, effective governance, and an active community of people, where every citizen can realize their opportunities and satisfy their needs regardless of age, gender, physical and financial capabilities, nationality and religion.

There is an inverse relationship between the IDI and Gini index in developed countries, but not in developing countries. There is a direct correlation between IDI and QLI, HPI, and HDI in both developed and developing countries, with the correlation being more significant in developed countries. There is also a direct correlation between the inclusivity of a society and the gender neutrality of countries around the world, with the correlation being more pronounced in developed countries.

In order to facilitate inclusive development and reduce economic inequality, the following measures should be taken: 1) increase access to educational and training opportunities for disadvantaged groups to promote economic inclusion; 2) invest in infrastructure and public services in disadvantaged areas; 3) investments in human capital with new jobs creation; 4) organization of an effective system of social protection, prevention of their discrimination, ensuring social integration of all members of society.
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