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# Inclusive Development of the World Countries under Conditions of Globalisation: Models and Arguments

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Zinchuk, T., Kutsmus, N., Usiuk, T., Kovalchuk, O., & Zaburanna, L. (2021). Inclusive development of the world countries under conditions of globalisation: Models and arguments. *Scientific Horizons*, 24(6), 81-91. Abstract. This study investigates the features of economic growth in different countries of the world, which are described by differences not only in the achieved growth indicators, but also in the trajectory and nature of stimulating this process. The purpose of this study is to assess the impact of existential parameters of the functioning of countries (leading and growing economies) on the inclusivity of their development in the context of economic globalisation, as well as to justify the priority vectors of socio-political and economic changes aimed at realising the growth potential according to the concept of sustainability. The methodological framework of the research comprises methods of descriptive statistics, correlation analysis, and stepby-step regression. The index of development inclusiveness recommended by the World Economic Forum is used as the main indicator of the country's development. The information basis of this study included international databases representing data by country. The results of the study allowed identifying the main factors of economic development and the dependence of economic growth separately in the leading and developing countries of the world. It is proved that despite the direct or indirect impact of these factors on the economic development of the world's leading countries and countries with growing economies, there is no universal model that would ensure economic growth with a focus on sustainable development. However, it is possible to identify a group of factors that ensure the maximum effect of economic growth. Thus, for countries with growing economies, human development is a priority, while for the leading countries of the world, economic growth is mainly driven by factors such as the environmental footprint per person, the Human Development Index, the Globalisation Index and the cost of imported resources. Dynamic changes in the global space, trends towards further development of human capital in all countries, unpredictable consequences of the impact of COVID-19 pandemics determine the prospects for further research in this area

**Keywords**: globalisation, differentiation, inclusive development, economic growth



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## INTRODUCTION

Dynamic and inclusive growth of the global economy plays a key role in achieving the Sustainable Development Goals. However, the response to the risks associated with the 2019 pandemic and recession is typical for all countries of the world, regardless of their level of economic development. And, if in 2017-2018 the economic growth rate in most countries of the world increased and approached the maximum potential values, then in the following years it decreased at a record level in the developed countries of the world. In the post-pandemic period, the economies of these countries started to recover: there is a fairly high load of economic potential in most industries [1].

Choosing a development model in the modern world is a multifaceted process that covers such economic components as innovation, labour productivity, quality of life of the population, environmental and food security, competitiveness, Freedom Index, etc. To maintain their key role and place in the global economy, the developed countries must introduce substantial changes in economic life. For instance, such changes are subject to development strategies (tax growth/reduction, market globalisation), organisation of production processes (modernisation, introduction of high technologies), sociocultural values (targeted social support), which corresponds to the concept of Norbert Thom, known as "Change Management". The package of changes includes organisational, personnel, communication, information, physical, and environmental components. A characteristic postulate of this model is the crisis, which serves as an impetus for changes [2]. The American economist S. Kuznets associates the development of the economic model with the leading role of human capital. In conditions of its insufficiency or poor quality, the country loses its competitiveness and technological mode [3].

The pandemic has shown "blind spots" in the economies of developed countries. These were problems in social protection, structural inequality, environmental degradation, and the climate crisis. Widespread recognition of the ideas of a green economy in industrial countries encourages the development of indicators (natural intensity of GDP, resource intensity, dynamics of emissions, etc.). The green economy is gaining signs of a new model of prosperity and employment solutions. Since 2008, the OECD has been actively promoting the green economy principles in the context of anti-crisis policy, threats of recession, and stimulating investment generation [4]. In the EU Member States, "green measures" are aimed at creating alternative energy sources, developing public transport, building eco-structures, and improving recycling systems [5].

Transformations in the life of society to preserve the environment and develop an environmentally oriented economy are attracting interest in developed countries in such a new model as the "blue economy". The philosophy of the new "blue economy" is to introduce innovative ways to manage and use available resources (coastal areas, ocean and sea energy, fishing and processing, navigation, marine tourism, aquaculture, marine biotechnology, wind energy facilities in water areas) to combat environmental problems and climate change [6]. Innovative and high-tech priorities allow replacing any resource with another that is necessary for production. Therefore, there is no waste in nature, since the by-product is the source of the new product. This enables highly developed countries to implement successful economic, social, and environmental business projects. Thus, highly developed countries modernise their economies towards green technologies and ensure the growth of environmental efficiency of the economy, which constitutes the essence of their modern industrial policy.

Despite numerous attempts to find a growth model of both political and scientific nature, the answer to the question of the impact of individual factors on this process, as well as its results, remains open for different countries of the world. The debate, multi-vector, and multifaceted nature of available theoretical concepts and practical models of economic development, the dynamism, and unpredictability of changes in the global environment permanently sharpen scientific interest in the process under study, as well as motivate new attempts to develop an effective methodology and conduct scientific developments. This paper is no exception, since the purpose of this study is to assess the impact of existential parameters of the functioning of countries (leading and growing economies) on the inclusivity of their development in the global economy environment, as well as to justify the priority vectors of socio-political and economic transformation aimed at realising the growth potential according to the concept of sustainability.

#### THEORETICAL OVERVIEW

Research of economic development conventionally occupies a leading place in the studies of leading researchers and economists and formed the basis for the development of a methodology for understanding evolutionary processes in the global economy system, enabling the design of develop basic theoretical models of growth. Modern economic science is saturated with many alternative theoretical approaches to substantiating models of economic development and growth. The most reasoned and widespread are as follows: the linear growth theory; the structural change theory; the dependence theory; the neoclassical theory; the new growth theory; the property rights theory.

Developed in the 1950s-1960s by the American scientist V. Rostow, *linear growth theory* is based on ensuring economic growth through savings and investments. Followers of this theory have established that each economic system must undergo separate stages of development (traditional society  $\rightarrow$  maturation of conditions

for a breakthrough  $\rightarrow$  breakthrough towards growth  $\rightarrow$  transition to technological maturity  $\rightarrow$  period of mass consumption) [7]. The main emphasis of Rostow's theory is to focus on a new type of economy in developed countries, which is based on a combination of factors of production, savings, and investment that can ensure high rates of economic growth. Despite the advantages of the basic hypothesis of this theory, it had several adverse aspects for Western capitalist countries, including political orientation (through the dominance of US foreign policy) to low-income countries during economic development and promotion of the model of US global influence on industrialisation and urbanisation in such countries [8].

The impact of the economic and energy crisis on the economy of developed countries in the 1970s became the basis for the development of the structural change theory, which allowed determining the quantitative criteria for the model of economic development of countries. Some researchers have focused their developments on the fact that the structural transformation of economic systems involves strengthening the role of industry in the structure of the national economy. This strengthening is achieved due to the gradual outflow of excess labour of the agricultural sector in the field of industrial production [9]. Therewith, the theory of structural transformations does not factor in such vital indicators as the technological development of the country and the functioning of the competitive labour market. Under such conditions, the surplus of labour can flow from one industry to another and cause full employment either in the industrial or in the agricultural sector [10], which partially contradicts the concept described by the authors.

The research of R. Prebish [11] served as the basis for the development of the *dependence theory*. The concept of this theory is that interdependence between the countries is the result of the dependence of colonies on metropolises and countries that are economic leaders. The proposed model of economic development of countries is also based on the consequences of non-equivalent exchange in mutual trade procedures. The non-equivalence of exchange lies in the fact that developed countries receive economic and technological rent, while multinational companies exploit the scale-up of production, natural and human resources of less developed countries.

Supporters of *neoclassical theory of economic development* [12], focusing on the deregulation of markets and minimising the influence of the state, argued the need to encourage entrepreneurship and reform labour markets. The postulates of this theory were actively promoted in the activities of international organisations such as the IMF and the World Bank [13]. The basic ideas of this theory turned out to be related to the problem of ensuring sustainable economic growth through a combination of incentive factors (labour, capital, technology). If T. Swan preferred an increase in the number of exogenous populations as a factor of economic growth [14], then R. Solow incorporated a technological variable into the theory [15], there by proving the importance of technology in progressive transformations of the world.

The departure from the ideology of development based on dependence on physical resources has become a qualitative feature of the new growth theory, which focuses on the desires and needs of individuals. Knowledge is recognised as a key factor in economic growth, as knowledgeable people buy, sell, and invest wisely and stimulate more substantial economic growth [16]. In addition, knowledge is considered as an intangible asset with the potential for exponential growth, and therefore the target of government efforts and programmes should be human development, the education system, research, and investment that will bring new knowledge [17; 18]. Idealising the role of knowledge, followers of the theory warn against excessive protection of intellectual property rights, and suggest that in the context of growing information asymmetry between developed and developing countries, certain restrictions on free trade may be justified [19]. Thus, the development of national policy based on the latest theory of economic growth is associated with such endogenous factors as human capital, knowledge flow, and information technology.

Another round in understanding the nature of economic growth is associated with the theory of property rights, which in the classical formulation pays attention to the historical and institutional contexts of the development and changes of property rights, and in the modern one focuses on modelling the property structure using advanced mathematical tools [20]. Recognition of the importance of guaranteeing property rights for the modern economy development prioritises documenting legal property rights that allow businesses to receive loans and function effectively [21]. In less developed countries, such guarantees are limited, which leads to the emergence of shadow economies and a decrease in official business activity [22]. Thus, from the standpoint of this theory, the lack of official property rights is the main cause of poverty and restrictions on economic development.

#### METHODOLOGY

The research methodology was developed according to the key idea – identification of influencing factors and differentiation of economic growth models for different groups of countries around the world. Information basis of this study included resources of international analytical organisations and databases, which accumulate world development statistics by world country (*Global footprint network* [23] – Ecological footprint per capita; United Nations Development Programme [24] – Gender Inequality Index and Human Development Index; World intellectual property organisation [25] – global innovation index; KOF Swiss Economic Institute [26] – index of globalisation; Resource trade earth [27] – resource export and import). The choice of existential parameters of the functioning of countries for analysis was

substantiated by the purpose of this study, namely the intention to establish the impact of social, environmental, and innovation factors, as well as involvement in international trade, globalisation of countries on their development level. The Inclusive Development Index (IDI) was used as an indicator of the development of the world's countries. IDI is the result of a systematic initiative of the World Economic Forum, which aims to inform and ensure sustainable and comprehensive economic progress by expanding public-private cooperation through leadership and opinion analysis, strategic dialogue and cooperation. It has a high heuristic potential for conducting research and considers three categories of indicators growth and development, inclusivity, generational continuity, and sustainability of development [28]. IDI covers 103 countries of the world, divided into two groups according to the index value (from 1 to 7) - advanced economies (29 countries – Norway, Iceland, Luxembourg, Switzerland, Denmark, etc.) and growing ones (74 countries – Lithuania, Hungary, Azerbaijan, Latvia, Poland, etc.) [29]. Due to the lack of data on the value of individual indicators, 9 countries were excluded from the study groups (Iceland, Nicaragua, Burundi, Nigeria, Madagascar, Sierra Leone, Mauritania, Chad, Lesotho) upon the analysis.

The methodological tolls of this study are based on methods of descriptive statistics, correlation analysis, and step-by-step regression. To process empirical data on the achieved level of inclusive development of the countries, as well as their inherent socio-economic, environmental, innovation, and globalisation parameters, their systematisation, visualisation, as well as quantitative description using the main statistical indicators, the authors of this paper employed the *descriptive sta*tistics method. To prove the existence and determine the nature of the correlation between the inclusive index and the countries' development parameters under study (advanced and growing economies), the method of correlation analysis was applied. The model of interdependence between performance and factor characteristics was constructed based on *step-by-step regression* – a method for selecting regression models, where the predictive variables are selected using an automatic procedure (in the form of a sequence of F-tests or t-tests).

# **RESULTS AND DISCUSSION**

#### Conceptual framework of modelling

The development of the world's countries takes place in heterogeneous conditions and has different targeting, but the main target of evolutionary, and in some cases, revolutionary strategies, is socio-economic growth. Reinterpretation of the conventional, economically oriented development paradigm, where industrialisation and efficiency are the main drivers of growth, has led to the emergence of a new model of perception of development. It is based on the concept of inclusivity, that is, a form of development covering the entire spectrum of civil and political rights, idealising the dependence of society on considering the needs and opportunities of all categories of people [30], shifts the focus to human development and growth of their well-being and negating poverty and inequality [31].

The transmission of development values has led to the improvement of methodological approaches to its assessment. To replace the classic indicator of economic development (GDP per capita), an alternative option was developed – the Inclusive Development Index (IDI).

The methodology of this study is based not only on the grouping of countries of the world according to the value of the IDI, but also their gradation depending on the qualitative perception of progress made at the national and international levels, the strategies, and tools used to implement development goals, factors influencing the trajectory of the evolution of societies and economies. To identify the dependence of the IDI (Y) on the parameters of human development, the environmental burden on the environment, and the openness of economies in the global space, regression models were constructed for groups of leading and growing economies with the inclusion of the following variables:

 $-x_1$  is the Ecological footprint per 1 inhabitant, gha/per person;

 $-x_2$  is the Gender Inequality Index;

 $-x_3$  is the Human Development Index (HDI);

 $-x_{4}$  is the Innovation Index;

 $-x_{5}$  is the Globalisation Index;

 $-x_6$  is the cost of exported resources, billion US dollars;

 $-x_7$  is the cost of imported resources, billion US dollars.

The simulation results demonstrated the availability of substantially different correlations between the selected factors and the performance feature for each of the groups of countries under study, which indicates the need to distinguish further analytical steps.

# Modelling the development of leading countries by existential parameters

Results of modelling the dependence of the development level of leading countries on a combination of factors  $x_1$ - $x_7$  (Table 1) demonstrated the need to exclude gender inequality and innovation indices from further analysis, as well as the cost of exported resources, considering the statistically unac-ceptable value of their probability (*p*-value).

In leading countries on factors $x_1 - x_7$												
No.	Variables	Mean	Sd	Median	Trimmed	Mad	Min	Max	Range	Skew	Kurtosis	Se
1	Y	5.08	0.60	5.09	5.10	0.52	3.70	6.08	2.38	0.24	0.47	0.11
2	<i>x</i> <sub>1</sub>	5.88	2.27	5.15	5.53	1.19	4.00	15.82	11.82	2.94	10.17	0.4
3	<i>x</i> <sub>2</sub>	0.10	0.09	0.08	0.09	0.04	0.04	0.50	0.46	3.33	12.34	0.02
4	<i>x</i> <sub>3</sub>	0.91	0.03	0.92	0.91	0.03	0.85	0.95	0.10	0.57	0.44	0.00
5	<i>x</i> <sub>4</sub>	51.63	6.91	51.55	51.69	7.04	36.80	66.10	29.30	0.03	0.55	1.31
6	<i>x</i> <sub>5</sub>	84.99	4.01	84.68	85.11	4.23	76.82	91.19	14.37	0.22	0.95	0.76
7	<i>x</i> <sub>6</sub>	83.30	92.59	58.10	69.83	61.01	5.60	425.00	419.40	1.91	4.14	17.50
8	<i>x</i> <sub>7</sub>	97.95	110.59	41.35	82.03	48.93	6.60	465.00	458.40	1.53	2.08	20.90

**Table 1**. Descriptive statistics of the dependence of the inclusive development level in leading countries on factors  $x_1$ - $x_2$ 

Source: authors' own research.

**Note**: variables – variables; mean – average value; sd – mean square deviation; median – median; trimmed – weighted average value; mad – mean absolute deviation; min – minimum value; max – maximum value; range – range of variations; skew – skewness coefficient; kurtosis – excess coefficient; se – standard error

The next stage of the study involved the construction of a matrix of correlation fields of dependences of factor and effective features (Fig. 1). Graphical interpretation of the results of correlation analysis demonstrates the presence of a statistically significant correlation between the IDI and the environmental footprint of countries (the correlation coefficient is 0.434), human development indices (0.743), innovation (0.550), and globalisation (0.450).



**Figure 1**. Correlation matrix of developmental inclusivity index dependencies leading countries from the factors under study  $(x_1 - x_2)$ 

Source: authors' own research

Applying regression analysis capabilities (Fig. 2) proves that despite the discovered correlations between factor and performance characteristics, the economic and mathematical model of the impact on the level of inclusivity of development of the studied group of countries includes only such factors as  $x_1$  (Ecological footprint per 1 inhabitant, gha/per person),  $x_3$  (Human Development Index),  $x_5$  (Globalisation Index), and  $x_7$  (cost of imported resources, billion US dollars).

1m(formula = Y ~ X3 + X7 + X1 + X5, data = data)													
Residuals:													
Min	1Q	Median	3Q	Max									
-0.66618	-0.16368	-0.01739	0.21267	0.68448									
Coefficients	Coefficients:												
Estimate Std. Error t value Pr(> t )													
(Intercept)	-1.207e+01	2.170e+00	-5.564	1.16e-05	***								
X3	1.500e+01	2.451e+00	6.121	3.04e-06	***								
X3	-1.509e-03	5.455e-04	-2.766	0.0110	*								
X1	7.957e-02	2.665e-02	2.986	0.0066	**								
X5	3.725e-02	1.564e-02	2.381	0.0259	*								
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1													
Residual standard error: 0.308 on 23 degrees of freedom Multiple R-squared: 0.7789, Adjusted R-squared: 0.7404 E-statistics: 20.25 on 4 and 23 DE p-value: 2.895e-07													

**Figure 2**. Results of regression analysis of the influence of factors  $x_1$ - $x_2$  on the inclusivity level of development of the leading countries in the *R*-Statistics software environment

The regression model has the following form (1) and reflects the positive impact of the growth of the environmental footprint, Human Development and Globalisation Indices on increasing the level of inclusivity of development in the leading countries, as well as the adverse impact of increasing the cost of imported resources.

$$Y = -1.207 + 7.957x_1 + 1.500x_2 + 3.725x_5 - 1.509x_7 \quad (1)$$

Thus, proceeding from the simulation results, the following intermediate conclusions can be drawn:

1. Despite the prioritisation of sustainable development ideas at the international level, integration of efforts to overcome the environmental consequences of globalisation processes, promotion of social responsibility of business and civil society, the presented model proves that economic growth of even highly developed countries is based on resources and growth of Ecological footprint. Furthermore, the countries included in the group of leading ones, according to the methodology of the World Economic Forum, are leaders in the scale of resource use, namely the absolute championship in this rating is assigned to Luxembourg, whose Ecological footprint is estimated at a record 15.82 gha/person; the second and third positions are occupied by the United States and Canada with 8.1 and 7.7 gha/person, respectively. Consequently, the policy of reducing the environmental footprint as an element of the implementation of the Sustainable Development Goals is debatable, given the permanent desire for economic growth.

2. The simulation results prove the adverse impact of increasing the cost of imported resources, which reduces the prospects of strategies to compensate for the need for them due to imports and thus reduce the load on the endogenous natural resource potential of countries. Moreover, the trade balance of resources trade involving the studied group of countries indicates their total import dependence, except Norway, which exports 6 times more resource goods than it imports, New Zealand – 3.1 times, Canada – 2.5 times.

3. The Gender Equality Factor has not acquired statistical significance for consideration in the constructed model, since for the group of countries studied, its value ranges from 0.182 (USA) to 0.037 (Switzerland), which is evidence of the special progress they have made in the field of equality of rights and non-discrimination based on gender (for comparison - the index value for Ukraine is 0.284, which determines the 60<sup>th</sup> position of the country in the world ranking). Furthermore, they are leaders in the field of human development, belong to the group of countries where its level is extremely high (forming the top-30) [32].

#### Modelling the development of developing countries by existential parameters

In contrast to the patterns established for leading countries, the results of statistical analysis of the dependence of the level of inclusivity of development of growing countries on the multitude of factors  $x_1 - x_7$ , the

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authors of this study proved the existence of a paired correlation between them and the effective feature

(Table 2), except for indicators of international trade in resources.

<b>Table 2.</b> Descriptive statistics of the aependence of the inclusive development level in developing countrieson factors $x_1 - x_7$												
No.	Variables	Mean	Sd	Median	Trimmed	Mad	Min	Max	Range	Skew	Kurtosis	Se
1	Y	3.84	0.56	3.98	3.86	0.55	2.47	4.86	2.39	-0.36	-0.78	0.07
2	<i>x</i> <sub>1</sub>	2.48	1.40	2.10	2.30	1.19	0.70	7.60	6.90	1.34	1.97	0.17
3	<i>x</i> <sub>2</sub>	0.38	0.13	0.38	0.38	0.14	0.12	0.68	0.56	-0.15	-0.80	0.02
4	<i>x</i> <sub>3</sub>	0.71	0.11	0.74	0.72	0.09	0.43	0.87	0.44	-0.71	-0.52	0.01
5	<i>X</i> <sub>4</sub>	29.54	7.22	28.80	29.15	8.15	18.70	53.30	34.60	0.56	0.08	0.90
6	<i>x</i> <sub>5</sub>	65.43	10.15	66.28	65.50	10.04	45.44	84.98	39.54	-0.10	-0.90	1.26
7	<i>x</i> <sub>6</sub>	32.32	60.55	7.50	18.83	8.90	0.17	382.00	381.83	3.61	15.82	7.51
8	<i>x</i> <sub>7</sub>	33.48	104.96	6.90	14.27	7.71	0.22	801.00	800.78	6.23	41.55	13.02

**Source**: authors' own research.

**Note**: variables – variables; mean – average value; sd – mean square deviation; median – median; trimmed – weighted average value; mad – mean absolute deviation; min – minimum value; max – maximum value; range – range of variations; skew – skewness coefficient; kurtosis – excess coefficient; se – standard error

Using correlation analysis (Fig. 3), it was established that the highest level of close correlation is observed between the value of the IDI and the Human Development Index (0.817), the Globalisation Index (0.645), the Innovation Index (0.578) and the environmental footprint per 1 inhabitant (0.551). Notably, an inverse correlation with a high level of significance was found between the

indices of inclusive development and gender inequality (-0.673). This conclusion contradicts conventional ideas regarding the impact of gender discrimination on social and economic development, since Gender Equality Index constitutes an indicator not only of the maturity and quality of human capital, but also an integral attribute of targeting in economic growth strategies and policymaking.

	Y	X1	X2	Х3	X4	X5	X6	X7	
0.6 - 0.4 - 0.2 - 0.0 -	$\nearrow$	Corr: 0.551***	Corr: -0.673***	Corr: 0.817***	Corr: 0.578***	Corr: 0.645***	Corr: 0.145	Corr: 0.054	×
6 4 2		$\bigwedge$	Corr: -0.667***	Corr: 0.682***	Corr: 0.613***	Corr: 0.602***	Corr: 0.324**	Corr: 0.095	X1
0.7 0.6 0.5 0.4 0.3 0.2 0.2		***	$\bigwedge$	Corr: -0.812***	Corr: -0.769***	Corr: -0.752***	Corr: -0.190	Corr: -0.191	Х2
0.8 - 0.7 - 0.6 - 0.5 -	and the second second			$\nearrow$	Corr: 0.665***	Corr: 0.795***	Corr: 0.236.	Corr: 0.059	X3
50 - 40 - 30 - 20 -	and a second				$\sim$	Corr: 0.749***	Corr: 0.400***	Corr: 0.514***	Х4
80 - 70 - 60 - 50 -						$\wedge$	Corr: 0.143	Corr: 0.053	X5
400 - 300 - 200 - 100 - 0 - •								Corr: 0.485***	X6
800 - 600 - 400 - 200 -		•				•			X7
0	5 30 35 40 45	2 4 6 0	1020304050607	05 06 07 08	20 30 40 50	50 60 70 80	0 100 200 300 40	00 200 400 600 8	00

**Figure 3**. Correlation matrix of developmental inclusivity index dependencies developing countries from the factors under study  $(x_1 - x_p)$ 

Source: authors' own research

Regression analysis of a set of selected factors influencing the inclusive development of growing countries of the world (Fig. 4) narrowed it down to only one – the Human Development Index ( $x_x$ ). Thus, the regression

model of the problem under study in the plane of established factors  $(x_1 - x_7)$  takes the following linear form (2):

$$Y = 0.9519 + 4.0708x_2 \tag{2}$$

**Figure 4**. Results of regression analysis of the influence of factors  $x_1 - x_7$  on the inclusivity level of development of the developing countries in the R-Statistics software environment

Thus, the constructed model argues the necessity of priority concentration of efforts and internal political initiatives in the developing countries on measures to stimulate human development. It is the evolutionary leap in the quality of human capital that creates prerequisites for the implementation of innovations in economic systems, taking advantage of the openness of the economy and globalisation processes, namely international trade in general, since its raw material component at this point does not affect overall growth.

The proven dependence of the development of countries with growing economies on their human capital points at the understanding of the main priority of their development models - stimulating the growth of human development, without which the effects of internationalisation of business, growth of labour productivity and investment, economy technologisation remain insufficient to achieve the sustainability goals. Similar ideas are argued in numerous modern studies implemented with evidence from countries of this group. In particular, K. Wang and R. Jiang, upon determining the correlation between carbon emissions and the level of development of the BRICS countries, discovered that Russia and the Republic of South Africa (the Human Development Index for which is 0.824 and 0.725, respectively) managed to break this dependence, achieving a sustainable effect of weakening the energy intensity of economic growth. Instead, for India (HDI=0.547), the extensive correlation between economic growth and energy consumption persists [33]. Consequently, the BRICS countries are described by a stable dependence of the nature of economic development on the achieved level of human development.

The importance of the achieved level of human development in the model of international business expansion, expressed through entrepreneurial skills and the ability to develop social capital, is also proved in studies of small and medium-sized social enterprises in China during their internationalisation [34]. F. Vorkadel and E. Arakil express their solidarity on the role of human development in the growth model of international business. Based on quantitative and qualitative indicators of TNC activity, they identify elements of corporate social responsibility aimed at institutional and social, humancentred changes in countries with growing economies, namely the development of institutional and subsidiary entrepreneurship, support for initiatives of stakeholder groups [35].

The interdependence between migration processes, investment in education and economic growth of labour donor countries, modelled in the study of Z. Benhamu and L. Kassin using the example of the Caribbean, proved the duality of the importance of human development for emerging countries. On the one hand, the educational component of human capital development constitutes a priority for investment by migrant workers, and on the other hand, it is a factor in stimulating further economic growth of countries. In other words, migration creates a substitution effect between savings and human capital [36]. However, according to the results of a study by A. Sarvar et al., human capital becomes of real importance for the country's growth in the presence of an established financial system that functionally provides opportunities for access to education, an increase in the number of schools and highly qualified teachers in different regions [37]. An alternative view of the problem of infrastructure support for human development is observed in a study conducted using evidence from Columbia universities [38]. Its results point at the necessity of supporting the intellectual capital of universities, which is being transformed into opportunities for the development of the country's human capital through education, research, and innovation. Therewith, it is necessary to agree with the authors of the study on the importance of state support for increasing the critical mass of higher education institutions for the development of progressive research and development centres, the involvement of students and teachers in international mobility programmes.

Proceeding from the results obtained in this study and the results obtained by other researchers of the development features of countries with emerging economies, it can be concluded that it is necessary to ensure a complementary supplement to the human-centred growth model with measures that solidify the conditions for the multiplication of human capital, namely:

 transformations of the institutional environment aimed at realising the entrepreneurial potential;

 activation of initiatives within the framework of corporate social responsibility of international companies (development of the social environment for doing business and directly the staff of business structures);

 development of competencies in the field of financial literacy and management of financial resources;

 adaptation of teaching standards and methods to the requirements of world practice, development of the academic environment and technologies of educational and scientific networking.

## CONCLUSIONS

The problem of development has a consistently high relevance and multidimensional nature of attempts to study, which combine evolutionary theoretical concepts and modern practical patterns identified during empirical developments. A special feature of this study is the intention to model the correlation between the level of inclusivity of development of the world's countries and the parameters of human development achieved by them, innovation and globalisation of national economies, involvement in international trade in resources and the environmental burden on the natural environment. The results of this study proved that despite the direct or indirect impact of the analysed factors on the economic development of the world's leading countries and countries with growing economies, there is no universal model that would reflect the real content of the economic growth process. Development is a multidimensional process that involves extensive structural changes in the economic, social, environmental, and political areas; therefore, it is difficult to create a single model that would contain the standards and values of world civilisation, the features of global economic and political systems.

The use of statistical analysis and modelling methods allowed differentiating the dependence of their level of development on the investigated parameters for the groups of countries under study. Despite the priorities of sustainable development and their implementation in global strategies, the economic growth model of the world's leading countries is always based on the use of natural resources, including imported ones. This suggests that their leading role in shaping the Ecological footprint of humanity on the planet will continue to be preserved. At the same time, the growth model of the world's leading countries is based on the positive nature of the interdependence between inclusive development and globalisation, the characteristics of human capital. The model created for countries with growing economies proved a different format of dependence. In particular, it was discovered that for a group of such countries, human development remains the main factor of development. Therefore, the quality of human capital should become a priority for shaping the ideology of economic growth, national reforms, and policies.

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# Інклюзивність розвитку країн світу в умовах глобалізації економіки: моделі та аргументи

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Анотація. Стаття присвячена дослідженню особливостей економічного зростання в різних за рівнем розвитку країнах світу, для яких характерними є відмінності не лише в досягнутих показниках росту, а й траєкторії та характеру стимулювання цього процесу. Метою дослідження є оцінка впливу екзистенційних параметрів функціонування країн (провідних і зі зростаючою економікою) на інклюзивність їх розвитку в умовах глобалізації економіки, а також обґрунтування пріоритетних напрямів суспільно-політичних та економічних змін, направлених на реалізацію потенціалу росту відповідно до концепції сталості. Методичну основу дослідження становлять методи описової статистики, кореляційного аналізу та покрокової регресії. Як основний показник розвитку країн світу використано індекс інклюзивності розвитку, що рекомендований Світовим економічним форумом. Інформаційною базою дослідження є міжнародні бази даних, що представляють дані в розрізі країн світу. Результати дослідження дали змогу визначити основні чинники розвитку економік та виявити залежність економічного зростання окремо провідних і розвиваючих країн світу. Доведено, що незважаючи на прямий чи опосередкований вплив даних факторів на економічний розвиток провідних країн світу та країн із зростаючою економікою, універсальної моделі, яка б забезпечувала економічне зростання з орієнтацією на сталий розвиток, не існує. Проте можливим є визначення групи факторів, що забезпечують максимальний ефект економічного зростання. Так, для країн із зростаючою економікою пріоритетом є людський розвиток, а для провідних країн світу економічне зростання переважно забезпечується дією таких чинників, як екологічний слід на одну особу, індекс людського розвитку, індекс глобалізації та вартість імпортованих ресурсів. Динамічність змін у глобальному просторі, тенденції до подальшого розвитку людського капіталу в усіх країнах світу, непрогнозованість наслідків впливу пандемії COVID-19 визначають перспективність подальших досліджень у започаткованому напрямі

Ключові слова: глобалізація, диференціація, інклюзивний розвиток, економічне зростання

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