

PROBLEMS OF DIFFERENTIATION OF SOCIO-ECONOMIC DEVELOPMENT IN THE GLOBAL ECONOMY

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Abstract: This paper considers the differentiation of the development level of some countries of the world using different models of socio-economic development. The study consisted of several stages and was based on data published on the official websites of the World Economic Forum, the World Bank, and the International Monetary Fund. In this regard, we studied the methods for assessing the quantitative and qualitative parameters of the development of countries in the world economy. We also studied the leading countries in terms of socio-economic development, strategies and their competitive advantages, and identified priority areas for the development of the economies of countries under consideration during the analyzed period. This paper presents an analysis of

economic parameters, a comparison of national economies, their development dynamics using quantitative indicators of economic growth. According to the study, China has prospects for a great leap forward in economic development, the United States is the leader in many respects, and Japan has slowed down in economic growth and risks continuing to suffer losses in a number of economic indicators. Chad, India, China and developed countries have strong differentiation in terms of per capita GDP growth rates according to PPPs. All this speaks of the processes of strengthening differentiation, taking place in the world economy, widening the gap in the level of life quality among countries.

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Introduction

There is no single and universal methodology for assessing the differentiation of socio-economic development of countries of the world. An important source of information for assessing the socio-economic development of countries of the world is the system of national accounts. The gross domestic product is a key indicator in this system.

The methodology developed by the specialists of the World Bank Department of Environment is based on the use of sustainable development indicator. According to World Bank experts, national wealth consists of natural capital, human capital, and produced capital. A distinctive feature of this method is the accounting of human capital and natural resources.

The next methodology is the methodology of the World Bank for Reconstruction and Development. In 2000, the International Association of Income and Wealth Researchers

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proposed a new indicator - “national wealth per capita”.

In the second half of the 1980s, it was formed a new concept of “human development index” within the framework of the UN. This index takes into account the conditions provided by the healthcare system and education for human development. Since 1990, the publication of HDI statistics for countries within the UN began.

The economic efficiency indicators best reflect the level of economic development of the country, directly or indirectly demonstrating the quality, level and state of use of all types of resources involved in production, fixed and working capital. Such indicators include: capital intensity, material intensity of GDP unit and a particular product type, labor productivity, etc.

Methods

The material for work was data from the World Bank and the International Monetary Fund. The methods for assessing the parameters of socio-economic development of countries have certain differences, and

therefore can complement each other to determine the differentiation level.

Table 1

Differentiation indicators of the population by income level in the countries of the world

A country	Quintile Income Ratio 2010–2015	Palm Index 2010–2015	Gini Index 2010–2015
USA	9,1	2	41,1
Germany	4,6	1,1	30,1
France	5,3	1,3	33,1
Italy	6,7	1,4	35,2
Great Britain	5,3	1,3	32,6
Netherlands	4,2	1	28
Luxembourg	5,9	1,4	34,8
Sweden	4,2	0,9	27,3
Finland	3,9	1	27,1
Japan	5,4	1,2	32,1
China	9,2	2,1	42,2
India	5,3	1,5	35,2
South Africa	27,9	7,1	63,4
Chad	10	2,2	43,3

From the data given in Table 1, we can draw conclusions about the state of distribution of goods between the population of different countries. It should be noted a fairly high level of uneven income distribution in the USA. The USA and Chad are approximately at the same level for five years. This

paradox can be explained by large population of the USA. The indicators of China are recorded at the same level. There is no strong stratification of society into rich and poor in Europe as a whole, especially in Sweden, Finland, and the Netherlands. There is an unexpectedly low level of uneven

distribution of goods in India. The highest level of all indices is in South Africa, where there is the highest percentage of white population in the African continent.

Currently, the development features of the former colonies and current developing countries is one of the most important topics of the modern world economy. The group of developing countries includes 103 countries in Africa, Latin America, Asia and Oceania, whose population is more than 4 billion people. The share of developing countries is approximately 37% in the world GDP. The production indicator of these countries doubled in the second half of the XX century, and their combined GDP increased by 6 times. In general, the collapse of the colonial system had a positive effect on the economies of the former colonies, as evidenced by the markedly accelerated rate of economic growth.

Since independence, the developing countries have tightened control over their natural resources. Some countries have recreated heavy industry, banking system, infrastructure, workforce training system, and educational system. Other countries have only strengthened all public and state institutions. India, Brazil, Mexico, Egypt work for export and export products of electronics, engineering and other manufacturing industries to a sufficient extent. They can already compete with Japan, European countries and the USA for some groups of goods.

Results and discussion

Based on the per capita GDP and production competitiveness indicators, one can assess the level of economic development of countries and compare the effectiveness and efficiency of socio-economic development models [1].

Table 2

Per capita gross domestic product at purchasing power parity, USD

A country	1980	1990	2000	2010	2015	2016	2017	2018
USA	12553	23848	36318	48403	56770	57877	59895	62606
Germany	11308	20810	29957	40840	47678	48843	50804	52559
France	10728	19605	28470	37217	41687	42525	44168	45775

Italy	10744	20054	28714	34759	36121	37004	38358	39637
Great Britain	8853	17509	26682	36170	42145	43013	44365	45705
Netherlands	11735	21157	33611	45398	50400	51783	53933	56383
Luxembourg	15659	37012	65337	90640	101169	102325	103298	106705
Sweden	10550	19975	29410	42057	48681	49806	51180	52984
Finland	9457	18617	27512	38732	41235	42598	44492	46430
Japan	8948	19861	26956	35149	40458	41155	42819	44227
China	311	983	2930	9250	14372	15417	16682	18110
South Korea	2191	7549	16517	29731	36501	37810	39548	41351
India	559	1169	2026	4424	6264	6761	7287	7874
South Africa	4645	6424	7731	11813	13339	13326	13552	13675
Chad	434	784	956	2194	2650	2446	2349	2415

According to this indicator, we can conclude about effectiveness of the American socio-economic model. A country with such a large population (327.6 million people) demonstrates how to provide its citizens with a high standard of living. Developing countries should use the example of the USA to understand the areas of economy and government that need special attention. As it has been already said in the first chapter, the main components of the American socio-economic model are as follows: freedom of the individual, private property and private enterprise.

The remaining countries of Western Europe (Germany, France,

Netherlands, Sweden, Finland, and Great Britain) generally have a similar indicator level. Japan, South Korea can also demonstrate the effectiveness of the new economic policies.

It is worth paying attention to difference in growing rates of the GDP per capita at PPPs in Chad, India, China and developed countries. All this speaks of the processes of strengthening differentiation, taking place in the world economy, widening the gap in the level of life quality among countries.

The next criterion in the analysis by the international comparison method is competitiveness [2].

Competitiveness index

A country	2007	2010	2013	2014	2015	2016	2017	2018
USA	82.84	79.86	78.11	78.32	79.20	80.19	83.57	85.64
Germany	78.31	76.73	78.25	78.11	78.40	78.98	80.71	82.84
France	74.36	73.32	72.99	72.18	72.52	73.25	74.00	78.01
Italy	62.43	61.55	63.65	62.95	63.12	63.69	64.86	70.77
Great Britain	79.49	74.13	77.85	76.70	77.35	77.62	78.71	81.99
Netherlands	76.65	76.05	78.60	77.50	77.92	78.64	80.08	82.38
Luxembourg	70.84	70.91	72.75	72.67	73.81	74.28	74.71	76.63
Sweden	77.75	78.67	78.96	78.31	77.26	77.64	78.86	81.66
Finland	78.64	77.60	79.23	79.12	78.59	77.88	78.43	80.26
Japan	78.68	76.71	77.08	77.11	78.18	78.09	78.43	82.47
China	65.01	67.66	68.97	69.09	69.87	69.84	71.43	72.61
South Korea	72.41	71.49	73.14	71.59	70.83	71.24	72.43	78.84
India	63.88	61.47	61.73	61.14	60.11	61.58	65.57	62.02
South Africa	64.90	62.00	62.44	62.45	62.15	62.66	61.71	60.76
Chad	40.19	41.07	43.62	40.73	40.67	42.35	42.71	35.52

According to Table 3, we can conclude which socio-economic model is most effective. The USA have the most competitive economy in terms of numbers over 11 years. Its strategy of state non-interference in the economy, the optimal legislative framework for doing business, the freedom of action of economic agents and a strict approach to social support ensured high competitiveness and development of the market economy.

The West European socio-economic model also shows excellent results. The highest result is seen in the German submodel. This model is significantly different from the American one, but nevertheless it is not much behind in the efficiency of economic activity. The main differences are as follows: huge social support of citizens and even migrants, which translates into a large item of government spending, state regulation of

the economy, and public responsibility of citizens for each other. The UK model, which has common features with both the American model and the German one, is only slightly behind the rating leaders.

The economies of Japan and South Korea are about as competitive as the countries of Western Europe. By their example, they show how we can achieve high results in a short time. Their new economic policy, changing the financing vector in the scientific and technical sphere, reducing the public sector in the economy raised their products and services to the world level, so they turned into Asian dragons.

Chad takes the last place not only in our sample of countries, but in the global ranking. Absolutely uncompetitive production or even its absence confirms all the typical features of the African model. The lack of internal incentives for development, the illiterate use of external assistance from the international organizations

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supporting third world countries are some of the many reasons why the Chadian economy has no prospects for progress.

The next method by which the veracity of socio-economic models and their effectiveness will be verified is an indicator of national wealth per capita. For analysis, we will need data on gross national income of PPP and population of countries. When analyzing the data from Table 3 and Table 4 through the criterion of the indicator of national wealth per capita, it is noticeable that the rate of capital growth is lower than population growth. The authors of these indicators interpret this as a lack of enhanced sustainable development in these countries. It is worth recalling that the attitude towards this method has become skeptical after the study results, in which the most developed countries did not get into the top ten. In this case, let us use the method of international economic comparison of the selected indicator [3].

Table 4

Gross national income per capita at purchasing power parity, \$

A country	1990	2000	2010	2015	2016	2017	Average annual growth, %
USA	23730	36930	48900	58300	58960	61120	22,41
Germany	19740	27120	39960	49010	50910	53660	23,33
France	17700	26700	36730	41720	42840	45120	22,00
Italy	18320	26920	34940	36640	39140	41150	18,71
Great Britain	16760	26230	48900	41090	41900	44090	26,83
Netherlands	18720	32100	45170	50340	50580	54650	26,43
Luxembourg	28820	49180	61750	69470	71350	76300	23,67
Sweden	19890	29280	42780	49060	49620	52130	22,84
Finland	17830	26590	39260	42530	44360	46880	23,02
Japan	19740	27220	35890	41990	42630	43540	18,08
China	990	2900	9290	14440	15500	16800	96,89
India	1220	2130	4230	6060	6510	6950	46,13
South Africa	6040	7380	11400	12890	12900	13120	18,30
Chad	710	780	1820	2140	1990	1920	30,05

According to the data from Table 5, the countries are divided into 2 types of average annual population growth: high and low growth. The highest population growth rates are in

India, South Africa, Luxembourg and the USA. Germany and Japan have the lowest rate, which will affect the share of the able-bodied population and the rate of economic growth [3].

Table 5

Population, mln.

A country	1990	2000	2010	2015	2016	2018	Average annual growth, %
USA	250	282	309,7	320,930	323,225	325,32	5,52
Germany	78,949	81,457	80,28	81,687	82,349	82,657	0,93

France	56,577	58,858	62,765	64,301	64,469	64,618	2,72
Italy	56,694	56,924	59,707	60,796	60,666	60,589	1,36
Great Britain	57,077	58,886	62,760	65,11	65,648	66	2,98
Netherlands	14,952	15,926	16,615	16,937	17	17,140	2,79
Luxembourg	0,382	0,434	0,502	0,563	0,576	0,591	9,27
Sweden	8,591	8,883	9,416	9,851	9,995	10,120	3,35
Finland	4,974	5,171	5,351	5,472	5,487	5,503	2,05
Japan	123,4	126,8	127,5	126,978	126,960	126,74	0,54
China	1143,3	1267,43	1340,9	1374,62	1382,71	1390	4,06
India	847,5	1029,5	1200,6	1282,918	1299,796	1316,8	9,52
South Africa	36,79	44,9	50,850	54,75	55,62	56,522	9,24
Chad	5,648	7,478	10,223	11,566	11,855	12,185	5,52

The next method that we will use was developed by the UN. The human development index takes into

account the conditions provided by the health and education system for human development [4].

Table 6

Human Development Index

A country	1990	2000	2010	2015	2016	2018
USA	0,860	0,885	0,914	0,920	0,922	0,924
Germany	0,801	0,868	0,921	0,933	0,934	0,936
France	0,779	0,849	0,882	0,898	0,899	0,901
Italy	0,769	0,830	0,870	0,876	0,878	0,880
Great Britain	0,775	0,867	0,905	0,918	0,920	0,922
Netherlands	0,829	0,876	0,910	0,926	0,928	0,931
Luxembourg	0,782	0,855	0,889	0,899	0,904	0,904
Sweden	0,816	0,897	0,905	0,929	0,932	0,933

Finland	0,784	0,858	0,903	0,915	0,918	0,920
Japan	0,816	0,855	0,885	0,905	0,907	0,909
China	0,502	0,594	0,706	0,743	0,748	0,752
South Korea	0,728	0,817	0,884	0,898	0,900	0,903
India	0,427	0,493	0,581	0,627	0,636	0,640
South Africa	0,618	0,630	0,649	0,692	0,696	0,699
Chad	-	0,299	0,371	0,407	0,405	0,404

According to the data from Table 5, the country with the highest human potential is Germany, followed by Sweden with a slight lag. In general, this indicator is very high throughout Western Europe, which indicates the effectiveness of investing in human capital, healthcare, educational environment and social security. The HDI is not much different and rarely drops below 0.9 in all developed countries.

Asian countries also demonstrate their awareness of the importance of human resource development [5]. However, in terms of numbers, China is noticeably behind its neighbors. This may be due to the high population and internal differentiation of the level of socio-economic development and the stratification of society into rich and poor.

South Africa and India have average HDIs, but little progress is noticeable over the years. These countries have the prospect of further development. In India, the former colony of Great Britain, a large proportion of the population speaks English, which laid the foundation for highly qualified personnel and a fairly good level of education [6]. This causes a conclusion about the prospects for the development of international cooperation. However, it is hampered by high internal differentiation of the social security of the population.

Chad, as expected, ranks last. A country that is unlikely to be able to provide its domestic consumption without external support does not focus on the development of human capital.

Summary

A comparative analysis of the state of the problem of differentiation of the socio-economic level of the countries of the world reflects how the number of countries, suffering from low development rates and high poverty, has changed over 8 years [7]. Table 7 shows the changes in indicators characterizing the poverty level in the world: the

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number of poor countries with a large share of the population living on less than \$5.5; the number of countries with low HDI, the number of countries with low GDP per capita, the number of countries with low prosperity index and the number of countries with a gross national income per capita below the average.

Table 7

The dynamics of indicators of the degree of differentiation of the socio-economic level

Indicators	2010	2018
The number of poor countries with a large share of the population living on less than \$ 5.5	74	24
HDI = <0.5	35	25
GDP per capita below \$ 2,000	29	21
GDP per capita below world average	99	83
Prosperity Index <55	51	41
Gross national income per capita of less than \$ 5,000	61	48

Table 7 presents the dynamics of indicators characterizing differentiation of the level of socio-economic development of the countries

of the world. On their basis, one can see how the situation in the world has changed with the distribution of wealth among countries and the standard of

living [8, 9]. In 2018, the number of poor countries with a large share of the population living on less than \$5.5 has decreased by 50 countries since 2010. The countries with HDI below 0.5 decreased by 10. This indicates an increase in life expectancy, an increase in the education level of the population and GDP per capita at PPPs. The latter conclusion is also confirmed by the international statistics, which confirms the reduction of countries with low GDP per capita: among countries with less than \$2,000 per person - by 8 countries, among countries with a figure below the global average - by 16 countries. The number of countries with a low prosperity index has decreased by 10 in 8 years, which means increasing social welfare in poor countries [10]. The number of countries with low GNI per capita decreased by 13 from 2010 to 2018.

Conclusions

In general, according to the analysis, the situation is being improved, the number of poor countries is declining, the human capital is developing, and the education level of the population is growing in the world.

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An increase in the education of the population is one of the fundamental measures for economic growth and development [11]. According to the UN studies, the world's population is becoming more educated every year. By 2000, the number of people without basic education dropped to 25%; in 1960 this figure was 36% [12]. The Organization of Economic Cooperation and Development revealed that more than 90% of educational institutions are funded by the state at its own expense in the developed countries in its studies on educational trends. Private funding sources sponsor higher education. We also revealed a direct relationship between the education level in the country and GDP. In the future, the growth of GDP and economic development indicators indicates an increase in life expectancy and the quality of public health.

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