Comparative Estimates of Human Potential Taking into Consideration the Risks of Social Inequality

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Abstract. The paper considers key indicators to measure degree of achievement of the Sustainable Development Goals until 2030, introduced by United Nations in 2015. It presents the analysis of structure and trends of social disadvantage risks in countries based on the World Bank data available for 1994-2018.
Particular attention is paid to indicators of population's social well-being, their main disadvantages are highlighted. Based on the set of social disadvantage indicators, a comparative analysis of Russia and countries with comparative human development index (HDI) is carried out. It is shown the feasibility to take into account the population's well-being, assessed on the basis of main risks of vital activity, when evaluating the HDI for regions. The estimates of social disadvantage for regions for 2000-2018 were obtained. Their sustainable grouping by levels of these indicators was developed, according to which three groups were determined. The paper defines main differences of these groups by levels and structure of characteristics considered. An approach is proposed for calculating social well-being indicator as a characteristic of social aspect of population's vital activity and the feasibility is substantiated to use it when assessing HDI along with demographic, educational and economic components both for intercountry and regional comparisons.

Keywords: Human Development Index, human potential, social services, risks of social inequality, countries differentiation, multidimensional ranking.

1 Introduction

At present for a quantitative estimation for cross-country comparisons of quality of life is commonly used the Human Development Index (HDI), developed in the framework of the United Nations Development Programme (UNDP) [1]. Changes of the index in the countries are between 0.377-0.954 points (dimensionless). The highest index values belong to countries such as Norway (0.954), Switzerland (0.946), Australia (0.938), Denmark (0.930), the lowest – Chad (0.401), the Central African Republic (0.381), Niger (0.377). Russia on the value of the index (0.824) is among the countries with high levels of it, little yielding to many developed countries of the world (see Fig. 1).

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However, this index, which is calculated on the basis of three indicators – life expectancy, education and the its coverage, gross national income (GNI) per capita - in the opinion of many researchers, as Alkire, McGillivray, Rimashevskaya and others, has several disadvantages [2, 3, 4, 5, 6]. First of all, criticism is subjected to the choice of indicators characterizing the level of human development, in particular, the economic component of the index – gross national income in terms of purchasing power parity [7, 8, 9, 10]. This is due to the fact that the other two components of the index: life expectancy and the extent of the population education are directly related to the level of GNI. Thus, this figure is a defining indicator of the other two components of the index of human development [11, 12].

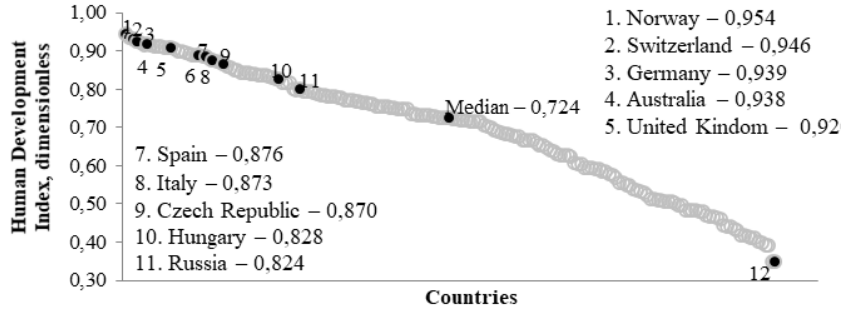

Fig. 1. Distribution of the countries according to the Human Development Index in 2018

This output is confirmed by the researches of interdependence of the HDI economic component and the indicators of longevity and education in the countries of the world community, shown in Figures 2 and 3. The increase in the gross national product per capita leads to a progressive increase in the expected number of years of schooling and life expectancy at birth.

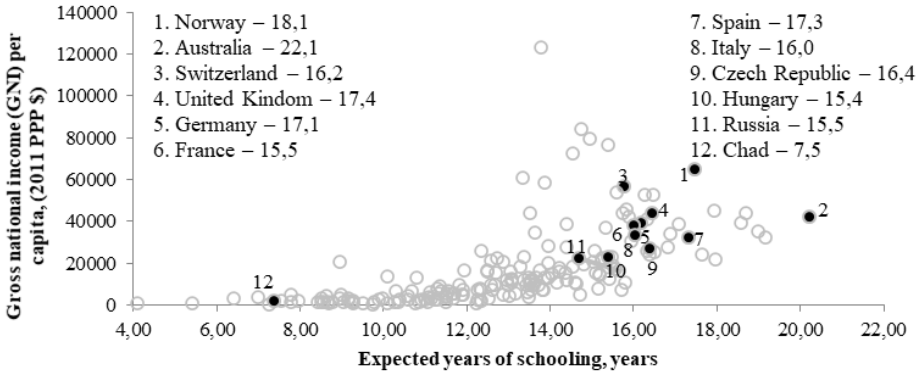

Fig. 2. Distribution of the world countries according to the level of GNI per capita and expected years of schooling in 2018

It should be noted that in countries with low income per capita, there are the lowest life expectancy and literacy. The reverse situation is typical for leading countries in terms of GNI [13, 14].

Russia, with a GNI per capita of $ 25.036 US in purchasing power parity in 2011, is among the countries with high levels of development. The position of Russia in terms of life expectancy and the number of years of schooling is also comparable with the position of the country on the level of per capita income [15].

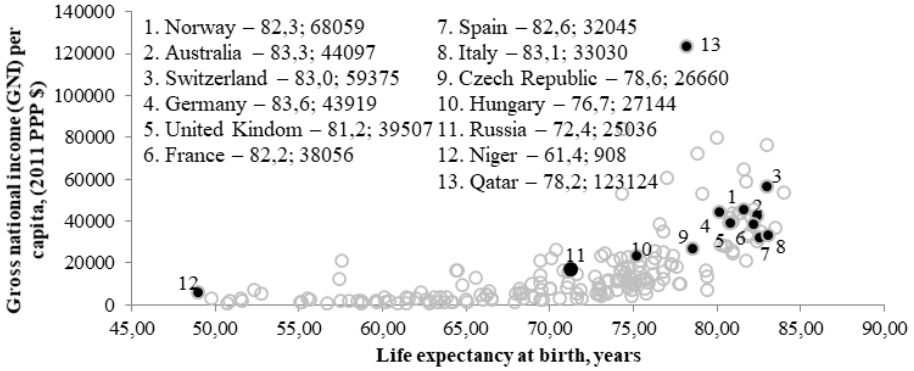

Fig. 3. Distribution of the world countries according to the level of GNI per capita and life expectancy at birth in 2018

Thus, we can conclude that, due to significant correlations between GNI and the characteristics of life expectancy and education when assessing of the Human Development Index the decisive role is played by the economic component, while the components of population longevity and literacy practically not taken into account in its assessment [16, 17].

In this regard, we consider it necessary to expand the number of characteristics to consider when evaluating the HDI. In particular, by adding to its structure a social component [18, 19, 20].

2 Statistical characteristics of the risks of social inequality in the groups of countries

The necessity of exploring the human potential structure, taking into account the impact that social performance, is based on the fact that its level is not only connected with longevity, literacy rate and gross national income, but also by many other factors and life risks, characterizing, in particular, the degree of protection of the population [21, 22, 23]. These risks include the main socially significant diseases: tuberculosis, alcoholism, drug addiction, HIV/AIDS and others, the death risk by main causes and premature mortality and others, homicides, suicides, all kinds of traffic accidents, and others, the demographic risks (infant and maternal. mortality, migration, etc.), as well as: crime, unemployment, sanitary living conditions, cost of living, housing conditions, etc.

The following indicators were examined to obtain comparative estimates of human development, taking into account the risks of social inequality for the 120 countries of the world community, divided into four groups presented in Table 1 according to their level of HDI [24, 25]:

– Point prevalence, alcohol use disorders, 15+ years (%).
– Point prevalence, drug use disorders, 15+ years (%).
– Age-standardized death rates, alcohol and drug use disorders, (per 100 000).
– Tuberculosis, new and relapse cases (per 100 000).
– Prevalence of HIV, total (% of population ages 15-49).
– Unemployment, total (% of total labor force) (modeled ILO estimate).
– Population using improved drinking-water sources (%).
– Population using improved sanitation facilities (%).
– Mortality rate, under-5 (per 1 000 live births).
– Maternal mortality ratio (World Bank modeled estimate, per 100 000 live births).
– Intentional homicides (per 100 000 people).
– Suicides (per 100 000 people per year).
– GINI index (World Bank estimate).
– Estimated road traffic death rate (per 100 000 population).
– International migrant stock (% of population).
– Human Development Index (dimensionless).

In the structure of social inequality in these groups of countries, presented in the Table 2, the largest share make up the risks unemployment (from 18.51% to 31.09%), migration rates (from 12.26% to 43.30%), the prevalence of alcoholism among male (from 17.58% to 26.71%) and female (from 18.31% to 27.51%).

Table 1. Distribution of countries in accordance with the value of the Human Development Index in 2018.

Group of countries	Countries
Countries with a very high level of human development (33 countries)	Australia, Argentina, Austria, Belgium, Great Britain, Hungary, Germany, Greece, Denmark, Israel, Ireland, Iceland, Spain, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Slovakia, Slovenia Finland, France, Croatia, Czech Republic, Chile, Switzerland, Sweden, Estonia;
Countries with a high level of human development (29 countries)	Armenia, Azerbaijan, Belarus, Bulgaria, Bosnia and Herzegovina, Venezuela, Georgia, Dominican Republic, Jordan, Iran, Kazakhstan, China, Colombia, Costa Rica, Mauritius, Macedonia, Malaysia, Mexico, Mongolia, Panama, Peru, Russia, Thailand , Tunisia, Ukraine, Uruguay, Sri Lanka, Ecuador, Jamaica;
Countries with a medium level of human development (29 countries)	Bangladesh, Bolivia, Botswana, Bhutan, Vietnam, Guyana, Ghana, Guatemala, Honduras, Egypt, Zambia, India, Indonesia, Cape Verde, Cambodia, Kyrgyzstan, Congo, Maldives, Moldova, Morocco, Namibia, Nicaragua, Paraguay, El Salvador, Suriname, Tajikistan, Uzbekistan, Philippines, South Africa;
Countries with a low level of human development (29 countries)	Afghanistan, Benin, Burkina Faso, Burundi, Congo, Dem. Republic of the Congo, Yemen, Cameroon, Kenya, Côte d'Ivoire, Lesotho, Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Pakistan, Papua New Guinea, Rwanda, Senegal, Sierra Leone, Uganda, Central African Republic, Chad, Ethiopia.

Source: Compiled by authors using UNDP data [1].

Also, groups of countries are characterized by high unit weights of prevalence drug use disorders among male (from 1.28% to 1.94% in the overall structure of social inequality risks) and female (from 0.44% to 0.64%), HIV prevalence among persons aged 15-49 (from 0.35% to 4.76%) and income inequality (from 0.12% to 0.34%).

The risks with a low share in the total risks of social inequality are deaths from alcohol (0.1%) and drug addiction (from 0.0% to 0.1%), maternal mortality (from 0.0% to 0.14%), intentional homicides (from 0.0% to 0.05%).

Table 2. The structure of the risks of social inequality in countries of world community and Russia, %

Risks of social inequality	Countries with the HDI level				Russia
	Very High	High	Medium	Low	
Point prevalence, alcohol use disorders, male	17.58	23.81	26.71	21.41	32.24
Point prevalence, alcohol use disorders, female	18.31	24.28	27.51	21.78	37.54
Point prevalence, drug use disorders, male	1.28	1.87	1.74	1.94	0.75
Point prevalence, drug use disorders, female	0.44	0.45	0.59	0.64	0.28
Age-standardized death rates, alcohol disorders	0.01	0.01	0.01	0.01	0.01
Age-standardized death rates, drug use disorders	0.00	0.00	0.01	0.00	0.01
Tuberculosis, new and relapse cases	0.02	0.22	0.61	0.97	0.16
Prevalence of HIV	0.35	0.88	1.78	4.76	1.18
Unemployment	18.51	31.09	28.01	29.51	8.08
Mortality rate, under-5	0.01	0.06	0.25	0.88	0.01
Maternal mortality ratio	0.00	0.00	0.02	0.14	0.00
Intentional homicides	0.00	0.02	0.05	0.04	0.02
Suicides per 100 000 people per year	0.04	0.03	0.05	0.07	0.04
GINI index	0.12	0.23	0.26	0.34	0.09
Estimated road traffic death rate	0.02	0.10	0.13	0.25	0.04
International migrant stock	43.30	16.94	12.26	17.25	19.53
Total	100.00	100.00	100.00	100.00	100.00

Source: Compiled by authors using The WHO and The World Bank data [24, 25].

However, analyzing the variation of the studied parameters in these groups of countries, allows notice that the countries vary widely in terms of the basic risks of social inequality even within the groups to which they have been divided in accordance with the value of the HDI.

The values of prevalence of HIV in the countries are characterized by the greatest variation equal to 272.2% (including variation on this indicator totaled 214.1% among the countries with medium HDI, 166.4% – among the countries with very low HDI, 95.8% and 110.6% – among the countries with high and very high HDI levels). On

the rates of deaths from drug addiction variation is 232.3% (including the variation 69.3% among the countries with very high HDI, among the countries with a low HDI – 314.8%), on number of intentional homicides – 171.5% (including countries with high and medium levels of the HDI where the variation is 155.2% and 159.8% respectively).

It should also be noted that in countries with a higher HDI prevalence of alcohol and drug dependence is higher than in countries with a low HDI.

However, by the level of human development countries, the variation within groups is quite low. It is 4.2% for countries with a very high level of HDI, 3.4% and 6.7% – for countries with high and medium level of HDI, respectively, and 12.1% – for countries with low level of HDI, that indicates a relatively high homogeneity of groups of countries on this indicator. In general, the variation of the countries of the world community on the HDI is 23.5%, which indicates the insufficient distinguishability among them.

The fact that the human development index does not reflect the risks of social sphere, reveals not only their variability on the considered parameters, but also the results of the correlation analysis. In accordance with these results, HDI has a significant direct proportional relationship with such risks of social sphere, as the prevalence of alcohol use disorders among male and female. Such controversial results can be explained by the higher-income population of developed countries and increased number of stressful situations for their population.

The presence of a statistically significant direct correlation between the HDI and the level of migration confirms the results obtained previously, according to which in the countries of the world community there is a considerable migration from countries with a low level of development to the countries with high and very high levels of HDI.

Expansion of the population having access to clean drinking water and modern sanitation conditions may also contribute to the growth of the level of human development.

The decrease in the index of human development, based on the results of the correlation analysis, affect such risks as the incidence of tuberculosis, infant and maternal mortality, mortality in all kinds of traffic accidents.

We emphasize that the prevalence of HIV correlates only with the level of unemployment, and this correlation is directly proportional, and drug addiction mortality rate does not correlate with any of the examined parameters, including with the HDI, whereas previously it was obtained that these two indicators are the most differentiated among the countries of world community.

3 Comparative analysis of the risks of social inequality in the countries of the world community

These results are confirmed with the distributions countries of the world community by the level of prevalence of alcohol use disorders among males and females. Countries characterized by the highest values of this indicator are the leaders in terms of the value of the HDI.

In Russia, referred to developed countries according to the UN methodology, there are fixed one of the highest prevalence of alcohol use disorders among males compared to many countries of the world community is 30,8% of the total male population aged 15 years and older. Above this figure is only the level recorded in Hungary (a very high level of development), which is 36.9%.

The lowest prevalence rates of alcohol dependence among males are fixed in Iran (a high level of development), Egypt (the medium level of development) and Pakistan (the low level of development) – 0.4%, 0.4% and 0.5% respectively. In the countries of the world community, the figure is on average 8.0% of the total number of male populations. Countries with comparable values to this value include Guyana, Paraguay, Dominican Republic, Suriname, Bolivia, Nicaragua (medium HDI), Venezuela, Panama, Ecuador (high HDI).

The proportion of female suffering from alcohol dependence in Russia was 6.7%. Russia with this indicator takes the 3rd place out of 120 countries. The highest values of incidence of alcoholism among female were observed in Hungary (very high HDI) – 6.8% and the UK (very high HDI) – 6.7%, the minimum – in Pakistan (0.1%) and Mauritania (0.01%) (low HDI), and Iran (high HDI) (0.1%). The national average level of female alcoholism prevalence is 1.8% of the total number of women. Comparable to the average level recorded in Iceland (very high HDI), Jamaica (high HDI), Kyrgyzstan, Uzbekistan (medium HDI).

By the incidence of drug use disorders among male and female Russia takes the 39 and 38 place respectively. The proportion of male with the disease is 0.72%, and female – 0.23% of the total number of male and female respectively. The highest incidence of drug use disorders among male (3.32% and 3.14%) is registered in Iran and Colombia (high HDI), among female (1.04%) – in Colombia (high HDI). The lowest values of these characteristics among males (0.02%) are fixed in Sierra Leone (low HDI) and Indonesia (medium HDI), females (0.01%) – as in Sierra Leone and the Republic of Moldova (medium HDI). The average value of this characteristic among male amount 0.49%, female – 0.15%.

According to the World Bank, in Russia alcoholism and drug addiction are the most common causes of death of the population (11.9% and 0.9% of the total number of deaths, respectively) [26, 27, 28]. In 2008, in Russia, the mortality among patients with alcohol dependence adjusted for the age structure of population was 3.5 cases per 100 000 people, whereas the average for the countries of the world community, the figure was 1.00 cases per 100 000 people. (the choice of time period is determined by the presence information). The highest values of this index were registered in El Salvador and Guatemala (22.08 and 14.7 cases per 100 000 people, respectively), the lowest – in Georgia, Bosnia and Herzegovina, Italy (0.2 cases per 100 000 people, respectively), and Jamaica (0.1 case per 100 000 people).

In addition, in Russia was recorded the highest mortality rate among persons suffering from drug addiction (4.5 cases per 100 000 people), which is 6.4 times higher than the international average. The highest death rate from drug addiction took place in Afghanistan (33.1 cases per 100 000 people), the lowest – in Cyprus and the Netherlands (0.1 cases per 100 000 people).

It should be noted that the HDI and the mortality rates of alcohol and drug abuse do not correlate. Thus, we can conclude that the reduction of human disease by reason

of alcoholism and drug addiction does not affect the ranking of countries according to HDI, proposed by the UN.

The situation is similar for other social risks. Russia is characterized by high rates of tuberculosis and HIV. By the number of newly registered cases of tuberculosis or relapse Russia occupies 43 place out of 120 with an figure equal to 71.35 cases per 100 000 people in 2014, which greatly exceeds the average level in the countries of the world community (43.0 cases per 100 000 people.). The only exception is South Africa, where among every 100 000 people it amounts to 567.3 new cases of tuberculosis. The lowest incidence of tuberculosis was recorded in Iceland, very high HDI, (2.4 cases per 100 000 people).

By the value of HIV prevalence among the population of ages 15 to 49 Russia with a value equal to 1%, exceeds the average level among the countries (0.4%). Countries with HIV prevalence, comparable to the level of Russia, include Guyana, Honduras, Niger, Panama and Ukraine. The highest values of indicators are fixed in Swaziland, medium HDI, and Lesotho, low HDI, (27.4% and 22.9%), the lowest are fixed in Sri Lanka, high HDI, Croatia, Czech Republic, Sweden, very high HDI (0.1%).

By the availability of clean drinking water for the population, Russia is at a high level. Thus, 96.4% in 2018 of the population have access to clean drinking water, and the availability of sanitation facilities in Russia is 72.2%, that is comparable with those of Cape Verde, the Philippines, El Salvador. Fully provided clean water and sanitation facilities are the population of Australia, Austria, Israel. In Papua New Guinea and Chad, access to clean drinking water have only 40.0% and 50.8% of the population, and in Madagascar and Niger, access to modern sanitation is 12.0% and 10.9% of the population respectively.

We consider it appropriate when assessing the human development level to take into consideration the characteristics of infant and maternal mortality, which increasingly dependent on the public health status of the country [29, 30, 31, 32, 33, 34]. In Russia, high HDI, these levels are much higher than similar characteristics of developed countries (5 cases of infant mortality per 1000 live births and the maternal mortality rate is 25 cases per 100 000 live births). In terms of infant mortality rate Russia is comparable with such countries as Sri Lanka, Latvia, Uruguay, Maldives, Chile. The lowest indicators of this characteristic were observed in Luxembourg and Iceland (0.9 per 1000 live births).

The maternal mortality rate in Russia is comparable with those in Costa Rica, Iran, Armenia, Azerbaijan, Ukraine, Moldova. The lowest values of maternal deaths are recorded in Iceland and Finland (3 cases per 100 000 live births). The worst situation for the infant and maternal mortality is significantly higher than the average for the countries concerned, is typical for Sierra Leone (34.9 infant deaths per 1000 live births and 1360 maternal deaths per 100 000 live births) and Pakistan (45.5 infant deaths and 178.0 maternal deaths in comparable terms).

One of the indicators of social well-being of the country is a low level of mortality from external causes (unnatural death). Theses causes include homicide, suicide, road traffic deaths and some other reasons. Increased percentage of deaths for these reasons in the general structure of mortality inevitably reduces the social security and safety of citizens, which leads to a reduction of human potential. For Russia, this problem is particularly relevant, since these risk levels of social distress we are ahead of most countries of the world community. According to the World Bank in 2018 9.2

intentional homicides per 100 000 persons were registered in Russia, which is comparable with those in Suriname, Chad, Guinea, Peru, Kazakhstan. The largest number of homicides were committed in Honduras (91.0 cases per 100 000 people), the lowest were committed in Iceland (0.3 cases per 100 000 people).

By the level of suicides in 2018 Russia was among the ten worst countries, with a value of 19.5 cases per 100 000 people. While countries such as Guyana (44.2 cases per 100 000 people), Sri Lanka (28.8) and Lithuania (28.2 cases) showed the worst rating on this indicator. On the average per 120 countries of the world community the value is 8.8 cases per 100 000 people. The lowest number of suicides was noted in Jamaica (1.2 deaths for this reason per 100 000 people).

The level of deaths from road traffics in Russia (18.06 cases per 100 000 people) is slightly higher than the average level of 18.9 cases for all the analyzed countries. The spread of this indicator was recorded from 37.2 deaths per 100 000 people in Venezuela to 2.5 deaths per 100 000 people in Sweden as of 2018.

Also on the quality of life and level of the human development have a negative impact such socio-economic characteristics as unemployment, migration and degree of differentiation of incomes of the population, which are reducing the motivation of people to self-realization.

The unemployment rate in Russia in 2018 was 5.1%, which is comparable to such countries as Austria (5.0%), Germany (5.0%), Iceland (5.0%) and Switzerland (4.5%). The worst unemployment rate are fixed in Mauritania (31.0%) and Bosnia and Herzegovina (27.9%).

By the number of migrants which is 8.6% of the total population Russia occupies 31 place and is among the countries with the highest values of this indicator along with Portugal, Denmark, Belgium, Norway, Malaysia and Slovenia. The most unfavorable by the level of migration are Jordan and Israel, where the fixed values are 49.2% and 38.6%. The lowest level of migration was recorded in Indonesia and China (0.05% of total population).

The GINI index for Russia in 2018 amounted to 40.9 points. The variation of this indicator among the countries of the world community is more than 24.4% from 63.0 points in South Africa to 16.6 in Azerbaijan.

The foregoing results of the comparative analysis of the position of Russia with regard to the countries of the world community on the risks of social sphere, which have a significant influence on the development of human potential, were compiled using the method of multidimensional ranking. Each factor of social inequality in countries in accordance with the qualitative nature of its impact on the HDI has been promoted to the rank – in descending order, if the increase of value of the factor reduces the quality of life of the population, and increasing, if the increase of value of the factor increases the quality of life (e.g. population using improved drinking-water sources, population using improved sanitation facilities). As a result, the overall grade was calculated for all the countries under review, which allowed us to determine their place in an orderly row of the degree of social inequality. Countries with high risk of social inequality have been assigned lower values of aggregate, and the country with the lowest levels of risk – the greatest (see Fig. 4).

Russia by the aggregate risk of social inequality at 722 points holds one of the worst positions among the countries under review, which is contrary to its position on the HDI, valued according to the UN methodology (high level). Less prosperous in

the social sphere in comparison with our country is only the Cote d'Ivoire (670 points, the country with low HDI).

Fig. 4. Distribution of the countries of the world community by the total rank the risks of social tensions in 2018, dimensionless

The average level of aggregated index of social inequality for the countries in question amounted to 1123.5 points, which is typical for countries such as Portugal (1129.0), Croatia (1125.0) (countries with very high HDI) and Burkina Faso (1122.0, the country with low HDI).

We received considerable spread of countries at risk of social inequality (higher than 1000%). The four most socially favorable countries, with a significant margin, include countries with very high HDI countries - Czech Republic (1600.0), the Netherlands (1534.5), Cyprus (1531.0), Italy (1505.0), Iceland (1505.0), in the most unfavorable – Russia and Cote d'Ivoire (722.0 and 670.0 points respectively).

4 The modified HDI taking into account the Social Well-being Index

According to the results of research it can be concluded that a common methodology for the UN ranking of countries on the HDI do not adequately reflect the quality of living of the population, does not take into account the social sphere, which leads to contradictory conclusions about the true situation in the country [35, 36]. For a more comprehensive and adequate assessment of the quality of life of the population of the countries is necessary to expand the list of indicators considered in the HDI and take into consideration the basic characteristics of the safety and social protection of the population, expressed in social inequality risk levels.

For this purpose it is proposed to calculate the social well-being index, which reflects the position of the countries of world community on major risks of social sphere listed, and the higher value of the index is, the more prosperous is a country.

For aggregation of analyzed risks of social inequality to index previously standardized their original values to bring them to a common scale, equivalent to the interval (0, 1), based on one of the following expressions:

$$V_i^j = \frac{X_i^j - 0,95 \cdot X_{\min}^j}{1,05 \cdot X_{\max}^j - 0,95 \cdot X_{\min}^j}, \quad (1)$$

$$V_i^j = 1 - \frac{X_i^j - 0,95 \cdot X_{\min}^j}{1,05 \cdot X_{\max}^j - 0,95 \cdot X_{\min}^j}. \quad (2)$$

where X_i^j is the actual value of the j-th risk of social inequality in the i-th country, $X_{\min}^j$ and $X_{\max}^j$ is the minimum and maximum observed thresholds j-th risk of social inequality in the countries of the world community.

Expression (1) is used to standardize the indicators, increasing the value of which indicates an increase in social well-being. To standardize the indicators, which increase in value reduces the assessment of social well-being, expression (2) is used.

The index V_i^S evaluating the state of social life in the i-th country, it is proposed to determine in accordance with the following expression:

$$V_i^S = \sqrt[k]{\prod_{j=1}^{k} V_i^j}, \quad (3)$$

where V_i^j is j-th sub-component of social well-being in the i-th country, which is the reverse indicator to j-th risk of social inequality, k is the number of sub-components. At the same time when assessing the sub-components of the index there were previously excluded those social inequality risks, for which have strong correlations with other sub-components. So, from an consideration were excluded the characteristics of prevalence of alcoholism and drug addiction among female which correlate with the similar values fixed for the male population with the coefficients higher than 0.9.

Human Development Index, which takes into account social well-being, it is proposed to estimate as the geometric mean of the Human Development Index and the index of social well-being according to the following expression:

$$HDI_i^S = \sqrt{V_i^S \cdot HDI_i}, \quad (4)$$

where HDI_i is the Human Development Index in the i-th country, V_i^S is the social well-being index in the i-th country.

5 Decision and conclusion

The results presented in Figure 5 show a significant change in the positions of the countries in terms of human development, taking into account social well-being. So, in the 36 countries of the 120 examined the level of human development decreased by

an average of 3.6% owing to the inclusion in the structure of HDI the indicator social well-being. At the same time, it should be noted that 26 of the 36 countries are countries with a very high level of development, 7 countries with high level of development. Close to average level of decline countries are such countries as Switzerland, Luxembourg, Spain (3.9%), Greece (3.8%), Austria (3.7%). The greatest decline in the human development is recorded in the Russia (8.1%), the UK (9.0%), Venezuela (9.2%) and South Africa (13.6%).

Countries such as Italy, the Netherlands, Kazakhstan, Swaziland, Finland, Iceland, Portugal, Latvia, Ecuador (see Fig. 5) did not change their position relative to the level of human development when included into the structure of HDI the social well-being index. Deviation of the HDI values based on social well-being with regard to the values represented in the UN report, in these countries does not exceed 1.0%.

In the other 82 countries considered, including 25 countries with middle and 28 countries with low human development, evaluations of the level of human development, taking into account increased by on average of 10.6% when taking into account in its structure social well-being indicator. In particular, such countries include Nicaragua, Moldova (9.9%), Cape Verde (10.2%) and Egypt (11.0%).

Such countries as Mali (30.4%), Burkina Faso (31.3%) and Burundi (34.8) are characterized with the biggest change of HDI, taking into account social well-being index.

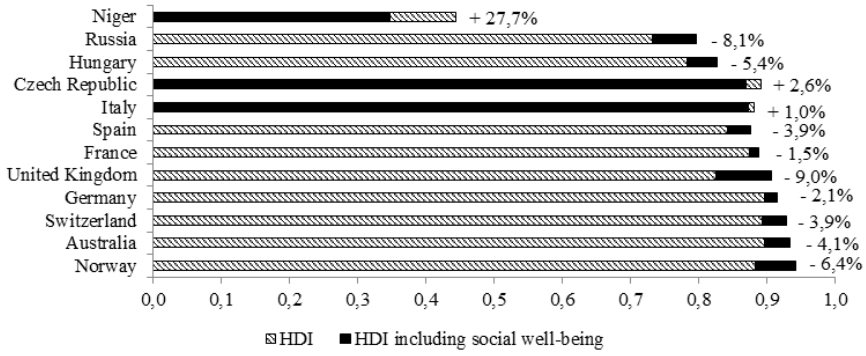

Fig. 5. Comparative analysis of some countries of world community on the HDI, including the social well-being index, and HDI, excluding social sphere (dimensionless) in 2018

The results of this study allow to conclude about the necessity to modify the HDI by taking into account in the structure of social well-being indicator, due to the considerable differentiation of indicators that characterize this sphere of life in the countries of the world community, and the exposure to the risks of social inequality on the level of human development. This would allow providing a comparative analysis of the countries of the world community on the basis of a wider range of indicators that influence the formation processes of accumulation and realization of human potential, combined into in the economic, educational, demographic and social units.

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