

Competitive, Sustainable and Secure Development of the Regional Economy: "Response to Global Challenges" (CSSDRE 2018)

# Well-Being Monitoring for Sustainable Socio-Economic Development

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Abstract — The paper presents an innovative approach to measuring socio-economic development. The results of the OECD report "How is life?" and Russian Federal State Statistics Service are analyzed. Comparative analysis of the well-being of Russian households and a number of developed countries is carried out. The paper identifies the main problem areas and ways to reduce them for the purpose of sustainability of well-being. In conclusion, it is stated that there is a need of implementation of a new methodology for measuring welfare in the Russian statistical practice, taking into account the stability over time.

Keywords — Better Life Index (BLI), sustainability of wellbeing, innovative indicators, level and quality of life

#### I. INTRODUCTION

The consequences of the global economic crisis have significantly affected the well-being of the population in different countries. There is a widespread unemployment, mass layoffs, as a result of the loss of work and earnings, increased poverty and stress level, and the gap between poor and rich is rapidly increasing. However, the depth of these changes differs by country and region. The identification of causes and social consequences of the crisis, the joint search for ways out, the renewal and growth of the well-being of citizens issue challenges for governments at different levels.

One of the causes of the crisis is linked by scientists for the imperfection of the system of measuring socio-economic processes, which sets imprecise benchmarks in economic behavior and reduces the effectiveness of government measures.

The relevance of searching for new approaches to measuring of socio-economic development and well-being assessment is caused by the following reasons:

- Improvement of the system of indicators of the effectiveness of the economy and social progress.
- Identification of new factors that determine growth and development.
- Improving the quality of statistical analysis and international comparisons.
- Strengthening the evidence base aiming for development of policy of stimulation of economic growth and overcoming the crisis.
- Expanding comparative indicators in various areas to assess social problems.
- Development of recommendations for a policy of removal of disadvantages.

# II. MATERIALS AND METHODS (MODEL)

The scientific community is actively searching for new approaches to measuring economic efficiency and social progress. The Report of the Stiglitz Commission (J. Stiglitz, A. Sen, J.-P. Fitoussi) became a significant landmark in this direction [1]. The methodological basis for the formation of a new system for measuring the results of social and economic development puts forward three key propositions:

1) Adaptation of the system of measuring economic indicators for more accurate image of structural changes in modern economic systems.



- 2) Transition from the measurement of economic production to the measurement of well-being.
- 3) Pragmatic approach to measuring the sustainability of welfare over time.

Organization for Economic Cooperation and Development (OECD) has developed an innovative approach to measuring well-being, it is proposed to use the index of improving life, which includes a wide range of comparable indicators [2]. The conceptual basis of this approach is a new paradigm of welfare measurement:

- Current welfare should include both *economic* (level) and *non-economic* aspects (quality) of people's lives, which are equally important.
- The welfare assessment is carried out at the *aggregate* level general public and also considering the *differentiation* of various groups.
- Sustainability over time provides access to the possibilities of civilization not only for present, but for future generations.

In general, the interaction of methodological principles within the framework of the OECD paradigm is reflected in Fig. 1

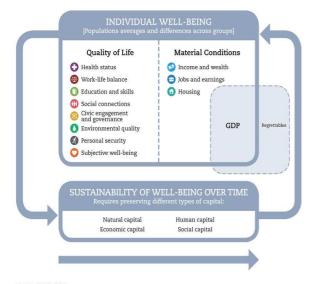


Fig. 1. OECD's Well-being Measuring Paradigm

The choice of indicators is conditioned by the significance of these factors for human well-being. The first group of three indicators reflects the material and financial resources that form the economic capital that determines the consumption of households and the level of their life. GDP is calculated after deducting negative effects (activities that do not contribute to the well-being of the population) considering the positive effects (non-market activities that increase consumption opportunities). The second group characterizes the quality of

life of the population, consists of 8 indicators, including a set of non-economic parameters that unite human, natural and social capital. forming their capabilities and people's life chances. Sustainability of socio-economic and natural systems, where people live and work, is critically important for well-being.

Sustainability of well-being depends on the person's current activities, which directly affects the resources of various types of capital (natural, economic, social and human). This approach is applicable both at the macro-level to characterize the stability of the aggregate capital of a country and at the meso-level of a region.

#### III. RESULTS AND DISCUSSION

Once in three years, the OECD publishes a report "How is life?". It reflects the dynamics of well-being in different countries [3; 4; 5]. The well-being measuring tool is the "Better Life Index" (BLI), which is based on 11 indicators. All indicators are ranked according to the 10-point system: the higher the total score, the higher the level of well-being, the more successful the country and the more effective one or another policy. 34 OECD countries, as well as Russia, Brazil, Latvia and South Africa., are involved in well-being monitoring. The assessment methodology does not suggest a rating of countries, but it reflects what some countries do better than others. All countries are grouped according to the "traffic light" principle, green zone - countries (tor-20%) with high well-being indicators, yellow - 60% with middle performers, red - 20% with bottom performers.

In terms of household wealth, Russia is among the average group of countries on the 20<sup>th</sup> line out of 38 in the set of indicators. The Scandinavian countries, the USA and Canada have the highest indicators, the middle ones are the majority of European countries (Germany, France, Italy, Spain, etc.), rather low - the countries of Latin America, Southern Europe and Turkey. The international well-being analysis indicates the success of one or another country in various areas of life and is important for understanding *what* policy and *which* tools are the most effective in achieving development goals, involves the exchange of knowledge and best practices to address current problems.

The index is not only an international standard for assessing well-being, but it sets benchmarks for internal use, it is critically important for identifying problem areas and developing corrective policy in certain areas. Visualization of the index of a better life for Russia is as follows (Figure 2).



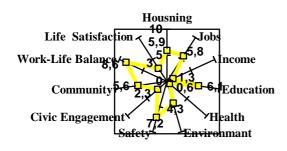


Fig. 2 - Better Life Index (BLI): Russia

# TABLE. 1 BLI: INDICATORS OF EDUCATION STATUS BY COUNTRY

Indicators	Russia	United	Canada	Germa	Norway
		States		ny	-
Population	91	89	88	86	81
(15-64					
years)					
complete					
secondary					
education,					
in %					
Duration of	16,6	17,1	17,0	17,9	17,9
studying (in					
the period					
5-39 years)					
The quality	469	496	527	510	500
of					
education					
according					
to the PISA					
methodolog					
y, in points	4.7	0			1.7
Gender gap	15	0	6	6	15
in					
knowledge					
of girls and					
boys, points	0.5	110	75	105	77
The	85	112	75	125	77
economic					
gap in					
knowledge,					
in points					

Note. How's Life? 2013. Measuring well-being. - OECD Publishing, 2013; How's Life in the Russian Federation? - OECD, 2016; How's Life? 2017. Measuring well-being. - OECD Publishing, 2017.

The comparative analysis of data through Russia shows the maximum rate of the balance of work and leisure - 8.6, personal safety - 7.2, and the level of education and qualification of the population - 6.1. However, the last

indicator, traditionally high for Russia, is inferior to the developed countries in terms of the quality of education, which is explained on the basis of the international assessment of educational achievements of students (PISA). At average student in Russia is gaining 469 points in reading quality, knowledge in mathematics and natural sciences, that is almost 30 points below the average for OECD countries - 497 points (see table 1). This is a serious signal for the education system, which can adversely affect the quality of human capital in future.

According to the "better life index" the most problematic for Russia is the extremely low income and health indicators of the population, which is closely correlated with a low assessment of subjective life satisfaction.

Despite the growth in real incomes over the past ten years, Russia has not been able to achieve the European level of income. Adjusted net household profit after taxes is \$ 15 286 per year, which is below the OECD average indicator of \$ 23 047, and almost 2.5 times less than the average American family (see Table 2).

TABLE. 2 BLI: INDICATOR OF INCOME BY COUNTRY, IN USD (\$) PER YEAR

COUNTRI, IN USD (\$) FER TEAR						
Indicators	Russia	United	Canada	Germany	Norway	
		States				
After tax	15286	38001	28194	28799	31459	
Family						
income						
Income of	37269	82666	55178	53978	53912	
20% of the						
riches						
Income of			10526	12544	14621	
20% of the	4153	10434	10320	12344	14021	
poor						
Social	8,97	7,92	5,24	4,30	3,68	
inequality						
(times)						
Financial	15142	115918	63852	44938	6905	
well-being						

Note. How's Life? 2013. Measuring well-being. - OECD Publishing, 2013; How's Life in the Russian Federation? - OECD, 2016; How's Life? 2017. Measuring well-being. - OECD Publishing, 2017.

The situation is aggravated by a deep level of social inequality, the income gap of 20% of the poor and the income of 20% of rich families is 9 times, according to monitoring, Russia is in the penultimate level among the OECD countries. The problem of inequality is one of the most negative for Russia, and during the crisis the situation only worsened as practically showed (See table 3).

In this regard, there is a need in urgent measures and a scientifically grounded policy of reducing inequality in income and consumption of Russian households using various tools: raising the Minimum wage to the Living wage, tax exemption of income lower than Living wage, maintaining the principle of free-of-charge basic socially important weal, progressive taxation of property.



TABLE. 3. INDICATORS OF INCOME FOR SOME REGIONS OF THE RUSSIAN FEDERATION, IN RUBLES.

2016						
Indicators	Russia	Moscow	Saratov	Volgogr	Republic	
			Region	ad	of	
				Region	Ingusheti	
					a	
	20744	50202	10.406	20720	1,5000	
Average	30744	59203	19 406	20739	15000	
income per						
capita for the						
subjects of						
the Russian						
Federation						
Income of	47,1	47,7	43,3	41,6	42,5	
20% of the						
rich						
Income of						
20% of the	5,3	5,2	6,4	7,0	6,7	
poor (in %)						
Social						
inequality	15,6	16,6	11,2	9,6	10,5	
Gini						
coefficient						
(times)						
Living wage	9691	15092	8168	8794	8881	
Minimum	7500	7500	7500	7500	7500	
wage						

Note. Compiled and calculated on the basis of "Russian Regions: Socio-economic indicators. 2017: Stat. vol./ Rosstat. - M., 2017. http://www.gks.ru/wps/wcm/connect/rosstat main/rosstat/ru/statistics/population/level/#

An important addition to the income characteristic is the financial well-being of the household, that is, the total amount of all financial assets (savings, currency, securities, deposits) excluding debts. In Russia, the average net household financial wealth is \$ 15 142, lower than the OECD average of \$ 40 516. The ratio of income and financial wealth reflects the level of capitalization of household incomes. Low capitalization does not allow Russian households to receive additional income from financial assets, which puts them in direct dependence on the current level of income. However, while determining the economic well-being of a household, it is recommended to consider not only financial assets, but fixed assets (for example, land property, summerhouse, car shed). Including this data, economic welfare can change significantly, especially in Russia, where the ratio of owned housing is high. This data is particularly important in the framework of social security of citizens, targeted support for families, social and tax benefits.

An important indicator of the better life index is the health status of the population, which is primarily determined by the lifetime. The average for Russia has slightly improved over the recent period and is 71 years, but this is significantly lower than in the OECD countries - 80 years (Table 4). In this indicator, Russia occupies the last line in the list.

TABLE 4 BLI: HEALTH INDICATOR BY COUNTRY

Indicators	Russia	United	Cana	Germ	Norw
		States	da	any	ay
Average life span (years)	71	79	81	81	82
• Men • Women	65 76	76 81	78,5 83	78 83	79 84
Health care expenditure level to GDP, in%	5,1	17,6	11,4	11,6	9,4
Healthcare expenditure per person, USD	998	8233	4445	4338	5388
Subjective health assessment (good), in%	37	90	87	64	73

Note. Compiled and calculated by: How's Life? 2013. Measuring well-being. - OECD Publishing, 2013; How's Life in the Russian Federation? - OECD, 2016; How's Life? 2017. Measuring well-being. - OECD Publishing, 2017.

It is obvious that the high life span depends on many factors, among them the level and quality of life, ecology, education, but it is also specified by health care expenditure. The total expenditure in Russia is 5.1% of GDP, much lower than in Norway - 9.4%, or in the USA- 17.1%. According to the monitoring data, per capita costs are even lower and amount to only \$ 998, that is 3.3 times lower than the average for OECD countries (\$ 3,268).

Two thirds of Russians consider their health unsatisfactory - 73%. The reasons are diverse: starting from economic: the commercialization of health care, the lack of highly qualified professionals and affordable medicines, to the non-economic: a bad lifestyle, a high level of stress, especially during the crisis. Such negative subjective assessment of health allows to predict the future needs of the population for medical services. A lot of people believe that the health status is directly affected by the quality of the environment: air pollution, the quality of the used water. The indicator of the ecological status in Russia is 4.3, comparatively lower than in many European countries, which inevitably raises the issue of environmental protection, environmental policy update and the strategy of "green growth".

Low incomes, poor ecology and unsatisfactory health of the Russia's inhabitants explain a low index of subjective well-being or happiness, which is determined by the level of satisfaction with life as a whole [6]. Despite the subjective nature of this assessment, this indicator is considered a useful addition to objective data for comparing the quality of life of the population in different countries [7;8].



#### IV. CONCLUSION

Generally it should be noted that human life is multifaceted and complex, it is influenced by a variety of economic and non-economic factors. Identification of these factors, the possibility to strengthen the influence of positive and neutralize negative effects, will make life better. In this sense, the OECD's new approach is an attempt to develop an alternative tool for measuring socio-economic development. The better life index is an innovative tool that aims to measure the sustainability of development and well-being in the future.

Analysis of monitoring results based on the better life index allows us to draw some conclusions about the welfare of Russians [9]. Firstly, the consequence of the crisis was a tendency of decreasing social welfare, as proved by changes in individual elements of aggregate capital. Short-term well-being changes are connected with a reduction of the economic capital of households: a slowdown in economic growth, as a consequence of a slowdown in GDP per capita, loss of work and earnings of part of the population, objectively declining living standards. Long-term changes in well-being are due to the fact that the permanent reform of the sphere of education and healthcare does not bring tangible positive results, on the contrary, there is a deterioration of the quality of human capital.

Secondly, economic growth is necessary to maintain the sustainability of well-being over time. The new quality of growth is determined by the aggregate capital of the nation: natural, economic, human and social, which are interrelated. The instability or decline of a separate resource component of the aggregate capital of society leads to a slowdown in economic growth and to a decline of the national welfare of future generations. At the meso-level, the instability of capital reduces the well-being of the population of the region.

Thirdly, the methodological principle of the transition from the measurement of production to the measurement of well-being should become the basis for the development of the country's innovative development strategy. GDP (GRP) (gross domestic product and/or gross regional product) is an important and significant economic indicator, which in a greater degree shows the level of production development, should be supplemented by a social indicator, similar to the GNW (GRW) - (gross national and/or regional well-being) which shows the level and quality of life of the population of the country and the region. For a basis it is possible to take better life index which sets more exact directions in social, labor, housing and other kinds of the person-oriented policy.

In conclusion it can be noted that it is necessary to actively initiate a discussion and stimulate scientific research on measuring socio-economic development. There is a need of implementation of innovative methods for measuring the level and quality of life of the population in the Russian statistical practice, and a profound analysis of the dynamics of well-being on method's basis, taking into account the stability over time.

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