

WELFARE OF THE UKRAINIAN POPULATION: ASSESSMENT OF THE LEVEL AND IMPACT OF KEY FACTORS

Svitlana Shumska¹, Anastasiia Gaidai², Viktoriia Blyzniuk³

Abstract. *The purpose* of this article is to identify the problems that limit the growth of welfare in Ukraine and to provide quantitative estimates of the impact of key factors that influence its level and development trend, taking into account the proposed three-level approach to determining the components of human welfare. *Methodology.* In order to assess the level and dynamics of changes in the well-being of the Ukrainian population, methods of statistical information analysis, results of sociological surveys and econometric modeling were used. *Results.* Based on the generalization of theoretical concepts of formation and methods of assessing welfare, the article presents the author's three-level approach to determining the components of human welfare, which includes: the basic or material level, the medium or psychological-emotional level, as well as the higher or spiritual level. Estimates of the pre-war level of welfare of Ukrainians are presented based on the analysis of the results of implementing the task of reducing poverty in Ukraine within the framework of achieving the Sustainable Development Goals (SDG1 – No poverty) as important landmarks on the road to European integration. The results of regression analysis and quantitative assessments of the impact of the key macroeconomic indicators (consumer price inflation, unemployment rate, foreign debt), as well as the indicator of crisis phenomena on the welfare of Ukrainians at different time intervals confirmed the importance of the selected factors explaining the trend of changes in the well-being of the population. The article reflects the negative impact of external factors on the welfare of Ukrainians, namely COVID-19 and Russia's military aggression. The results of sociological surveys are presented, confirming the negative effects of the pandemic and the terrible consequences of the military invasion of Ukraine; showing the losses that will have a long-term impact on various aspects of the lives of Ukrainians. The importance of humanitarian and charitable international assistance to Ukraine was emphasized. *Practical value.* An extended interpretation of the structure of the concept of well-being allows to consider in practice a wide range of factors that determine it, as well as its quantitative assessments, which are necessary for the justification of policy measures aimed at restoring the level of well-being of Ukrainians as a result of COVID-19 and military aggression, as well as increasing their welfare in the post-war period.

Key words: welfare components, sustainable development goals, regression model, welfare determinants, external factors, international aid.

JEL Classification: I31, I32, C22, D62, D63, F35

1. Introduction

The desire to increase the level of one's welfare reflects the existential essence of a human being, which is determined by nature and encourages a person to development, self-improvement, searching for new and better opportunities, as well as discovering not only oneself, but also the surrounding world and the

relationships in it. It is worth noting that in different periods of human evolution and with the development of economic thought, the concept of welfare has been significantly transformed, both in its definition and in the approaches and methods of its measurement, and this process continues to this day. From the total dominance of the material component to the

¹ State Organization "Institute of the Economy and Forecasting of the National Academy of Sciences of Ukraine", Ukraine (*corresponding author*)
E-mail: sv.shumska@gmail.com

ORCID: <https://orcid.org/0000-0002-3106-1928>

² National University of Kyiv-Mohyla Academy, Ukraine
E-mail: agaidai@ukma.edu.ua

ORCID: <https://orcid.org/0000-0002-9220-4072>

³ State Organization "Institute of the Economy and Forecasting of the National Academy of Sciences of Ukraine", Ukraine
E-mail: vikosa72@gmail.com

ORCID: <https://orcid.org/0000-0003-2265-4614>



This is an Open Access article, distributed under the terms of the Creative Commons Attribution CC BY 4.0

subjective assessment of an individual's satisfaction with life, there are many indicators of well-being today, including alternative ones developed by individual scientists and international institutions. However, there is still no single agreed approach to determining the level of welfare of the population, which would reflect the extent to which the full range of needs of a modern society or country are met. Since welfare is a complex category and apparently quite dynamic, which is evident from the development of this concept, the definition of its components and influencing factors was, is, and obviously will remain one of the most important areas of research (Pinchuk, 2021; Glubish, 2016).

For Ukraine, the issue of ensuring the welfare of its citizens today is extremely acute, as far as the background of accumulated problems in the economy (Heyets, Skrypnychenko & Shumska, 2020; Shumska & Pinchuk, 2014; Shumska & Nezhyvenko, 2013), together with global challenges related to the spread of COVID-19, and finally the tragic events of the war in 2022, have dramatically reduced not only the material level of people, conditions and opportunities for doing business, but also made an unprecedented attack on such basic pillars of welfare as a sense of security, safety, and emotional and psychological stability of people.

Before the military invasion of the Russian Federation, Ukraine was faced with the task of reducing the gap in the quality of life and socio-economic development with the EU countries on the way to European integration, but today the priority is to ensure the critically necessary conditions for the life of the population, although the main aspects of the social consequences of this aggression are also discussed (Heyets, Blyzniuk & Nykyforuk, 2022). After the war, Ukraine will have to face difficult challenges that will stand in the way of economic recovery, which will require an assessment of losses, available resources and the potential of internal capabilities. In this context, raising the level and quality of life will be a difficult and extremely urgent task for Ukraine, which should occupy a worthy place in the European family of the global world, also in terms of the level of welfare of Ukrainians.

Based on the three-level structure of welfare components, the article aims to identify the constraints on welfare growth in Ukraine and also to estimate the extent of influence of the main factors influencing its development trend. The mentioned goal is achieved through the following tasks: first of all, the theoretical concept of three levels of human welfare components is disclosed; the current basic level of welfare in Ukraine is evaluated through the analysis of the achievement of sustainable development goals presented in the third section; the impact of the main macroeconomic indicators

and crisis phenomena on the level of welfare in Ukraine is estimated with the regression model analysis in the fourth section; In the next section, the impact of such negative external factors as the COVID-19 pandemic and military expansion on the welfare of Ukrainians is analyzed; and the last section is devoted to the evaluation of international assistance to Ukraine with a focus on its counterbalance to the consequences of negative externalities and its relationship with the upper level of the welfare components described in the second section.

2. Theoretical aspects and methodological approaches

One of the positive achievements of modern economic thinking is giving human being the dominant role in economic relations, recognizing the important fact that man is not only a consumer on the one hand and a factor of production on the other, but also the unique source of innovative thinking and thus of technical progress. Moreover, humankind is the decisive factor of moral and ethical principles in the world, which determines the level of comfort and effectiveness of cooperation between the members of society, and consequently the level of public welfare. These recent changes prove that human beings do not exist for the development of the economy, but on the contrary – the economy should support the growth of people's welfare. Thus, the subject of welfare research has made its evolutionary path from the personal welfare of the exact individual (Pareto, 1964; Glubish, 2016; Sismondi, 1936; Buchanan, Musgrave, 2004; Menger, 1992) to the social (Smith, 1962; Pigou, 1985) and human welfare (Stiglitz, Sen & Fitoussi, 2009; Borshchenko, 2018; World Bank, 2018), which can now be reasonably considered as complementary, as they form the only unity.

Modern welfare research should apply a multilevel approach to the study of this complex concept. It is important to consider that the meaning of human "welfare" goes far beyond its material prosperity, which is obviously its basic level. In addition to this rudimentary or material level of people's welfare, there is also a middle level, which includes emotional and professional components, and an upper or spiritual level. It is noteworthy that most of the categories of medium and high levels of welfare consist of individual or social indicators, which significantly reduces the possibilities of their economic study. Nevertheless, it is necessary to remember that all these categories have a remarkable influence on the feeling of "welfare" in today's reality.

Considering the research results of Pareto (1964), Sen, Stiglitz, and Fitoussi (2009), Mahbub ul Haq

(1995; Duraj, 2017), Ukrainian economists Chechel (2011), Glubish (2016), Guz (2012), and Pryjmak (2011) on the idea that the influencing factors of people's welfare go far beyond material aspects, the modern components of human welfare should be highlighted. These determinants of welfare could be into three levels: basic or material, middle, which includes emotional and professional aspects, and upper or spiritual. Most of the components are interrelated, as illustrated in Figure 1 below (1).

The basic level of human life consists of two main parts: material and immaterial, which is related to the feeling of security. The material element of welfare consists of the basic level of material comfort that is sufficient for human life, including housing, food, necessary clothing for the whole family, as well as educational and medical services. Quantitative indicators for the assessment of people's material security could be the following: the value of the consumer basket as a share of household income; the share of the population living below the poverty line and the level of social payments to such poor subgroups in relation to the officially set subsistence minimum; government debt for social payments; the share of the population with their own home; the affordability of housing for people with the average wage in the country, which could be assessed as the ratio of the average cost of housing rent to household income; the level of financial inclusion in the country. Today, examples of evaluation of the level of educational and medical services in

a country could be Human Capital Index, developed and calculated by the World Bank, and Human Development Index, used by the UN. Despite the fact that they use slightly different methodologies, both indexes indicate the possibility of a person to reach the age of adulthood and obtain a basic level of education. It is important to remember that the material component is not the main determinant of people's welfare. Assessing the level of material security means evaluating the extent to which basic physiological needs are met and whether the person or social group is not suffering from poverty. Because greater material welfare does not always translate into greater life satisfaction, this trend persists only until a certain level of "basic" living comfort is achieved, including housing, food, clothing, access to education and medical care.

Another important component of welfare, which constitutes its basic level, although it is seldom mentioned in connection with welfare, is the level of personal safety, i.e., to what extent a person feels safe in various spheres of life – on the street, at home, at work, in business and in education (Pinchuk, 2021). To assess this safety element, one could use a set of indicators that determine social, institutional, and environmental development, such as: the country's crime rate; the transparency of business operations; the likelihood of attacks on private businesses; the level of domestic violence; the fairness of the judicial system; the practice of complying with labor laws; the level of air, water, and soil pollution;

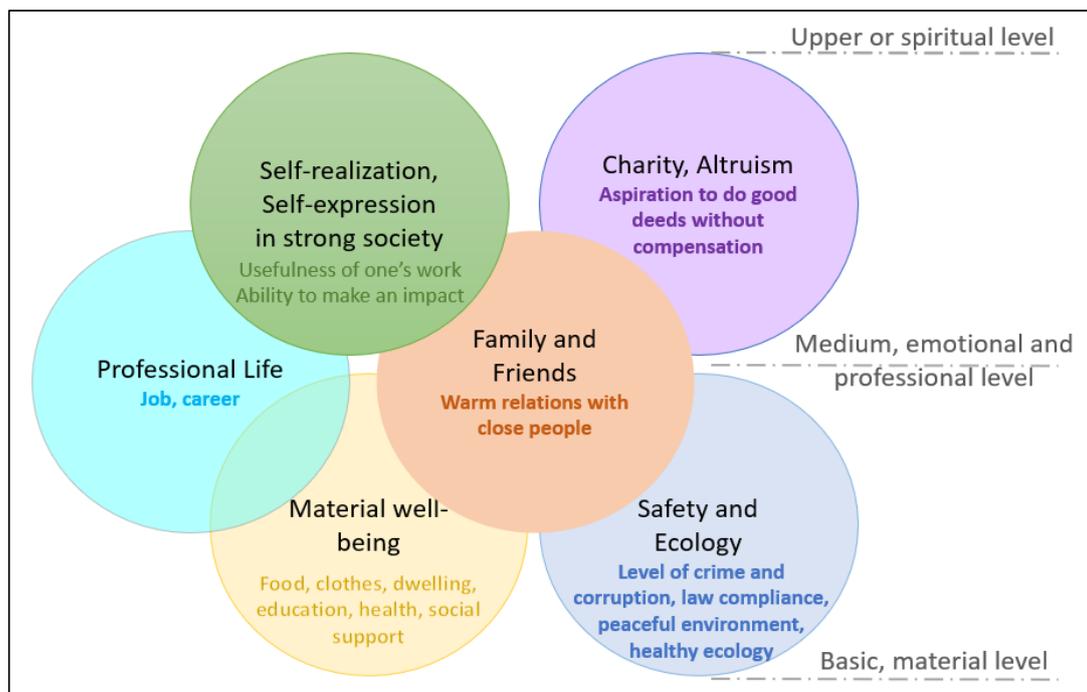


Figure 1. Welfare Components

Source: developed by the authors

the accessibility of drinking water; and the level of radiation. It is worth emphasizing that for most of the mentioned criteria it is difficult to apply quantitative approach, while most of the categories could be measured with the integrated indices. Moreover, when interpreting most of the mentioned indicators it is necessary to take into account the following methodological complexity: absence of facts for some violations could mean that they are so widespread in the society that they are considered as normal life, and that is why nobody reports about them nor seeks legal protection. Such situation could be observed with regard to domestic violence, as well as with regard to violations of labor law or attacks on business.

The next level of human "welfare" is the middle one, which consists of the emotional and professional satisfaction of the individual. It is important to emphasize that realization at this level is highly dependent on success at the previous level. Obviously, it is difficult to imagine a happy and psychologically stable person who plans his professional development, suffers from poverty, struggles with a serious disease, or feels in danger at home or on the street. That is why the first two elements form the so-called "basic" level of individual welfare, which is a rudimentary condition for further formation of welfare in other spheres of life, middle and higher. Such a close relationship is illustrated in Figure 1 by the large intersection segments of the basic and middle circles.

Emotional element of welfare presupposes existence of warm relations with other people, mostly with the closest ones, and stable personal psychological health. In addition to sufficient level of material comfort of the family, affordable and accessible educational and medical services, which are also included in the material circle, among the factors influencing the emotional welfare of a person could be mentioned: healthy work-life balance, sufficient free time for leisure, level of job satisfaction and healthy family atmosphere. Meanwhile, the successful realization in the professional part of the welfare presupposes the possibility of professional growth, satisfying work atmosphere, comfortable working conditions and adequate remuneration reflecting the value of the spent efforts. It is noteworthy that most of the categories of the middle level seem to be beyond measurable indicators, since they depend mainly on the perception of individuals. Nevertheless, some integral indices could be used for estimation of this level of human welfare, for example, the index of happiness.

A higher level of the components of human welfare becomes relevant mostly when a person feels a sufficient level of satisfaction in the previous categories (Pinchuk, 2021). In other words, if a person

is certain that his or her family's basic material and educational needs are met, that work conditions and results are adequate, that everyone in the immediate environment feels generally safe and has mostly warm relationships with each other – then the person is more likely to feel the need for such aspects of his or her life as self-actualization and self-expression. Self-realization can be reflected in the feeling of usefulness of one's work, contribution to a common cause, the possibility of realizing one's plan, project or idea, as well as the feeling of influence of one's actions through the exercise of the right to vote, the possibility of participating in local self-government, or public protests that can have a real impact on state decisions or the direction of government programs. There is some overlap with aspects of the security circle (Figure 1), such as the level of state corruption, the realization of citizens' rights and freedoms, and the effectiveness of the judicial system. The possibility of free self-expression requires a high level of tolerance in society for marginal cultural, aesthetic, religious, and other human manifestations. It is fair to mention that aspects of self-expression and self-realization are to some extent available to a person at the medium and basic levels of welfare, for example, when choosing a profession (realization) or simply in the daily creation of one's external image (self-expression). However, in everyday expression, these two aspects have a more superficial nature, and at the highest level a depth focus is considered on those aspects that motivate a person to act, for example: participation in public actions, or expressing one's ideas or thoughts to society through creativity.

As a separate circle of the highest level of human welfare it is worth to emphasize "the desire to do good deeds without reward", or charity, which can appear in a person, generally, in case of effective realization at all other levels of his/her "good being" (Pinchuk, 2021). It is truly said that "altruism is the highest degree of selfishness", for it is difficult to find anything that can please a person more than helping another, provided that such help is a sincere desire of the person himself and not a manifestation of a sense of duty or guilt. In fact, satisfaction from good deeds is available in almost all areas of a person's life, but it is obvious that the likelihood of feeling such a desire is significantly reduced when the entire focus of attention is directed toward solving personal material, health, or emotional problems. Among the factors that can contribute to the manifestation of altruism in a society are the active social positions of citizens, the popularity of social and environmental projects, the level of intensity of charitable activities, as well as the high level of realization of human rights and freedoms in such a society.

It should be noted that the categories of the higher level of human welfare, such as the desire for self-

realization and good deeds, are not relevant to all people who have effectively satisfied their basic and middle levels. Often, after reaching a certain sufficient material and emotional level, an individual desires to further increase the material component. However, many socio-psychological studies show that the satisfaction of increasing material wealth has a short-term effect, which over time leads a person into a vicious circle of obsession with more and more wealth, which brings less and less pleasure, confirming the law of diminishing marginal utility. In contrast to this vicious circle, realization in the higher categories of welfare described above brings to any person an incomparable sense of self-importance, usefulness, necessity, importance of his or her existence, and need for other people – which together or individually provides many times more happiness than any material possessions, of course only if that person is not below the poverty line and has no other serious threats to his or her existence.

3. The welfare of Ukrainians measured by Sustainable Development Goals indicators

In the context of Ukraine's transition to sustainable economic growth, special attention is paid to the implementation of the goals and targets of the Sustainable Development Goals (SDGs) as important milestones on the way to European integration and improvement of the country's welfare. As evidenced by the analysis of the degree of incorporation of the SDGs presented in the "Voluntary National Review of Ukraine's Progress in Achieving the Sustainable Development Goals" (2022): a total of 17 goals and 86 national tasks of the SDGs are incorporated in 162 regulatory and legislative acts of the Government, 1394 tasks and 4296 measures directed to the implementation of the mentioned goals and objectives are established in these acts. However, despite a large number of state strategic documents and a large volume of tasks and implemented measures, Ukraine has managed to make progress on 15 of the 17 goals. Progress is not uniform across all goals. Some goals have already been achieved by 80% or more (SDG1,

SDG3, SDG4, SDG5), progress for four goals is in the range of 60-80% (SDG2, SDG6, SDG8 and SDG16), for some others progress is in the range of 20-60% (SDG7, SDG11, SDG12, and SDG17), and for the remaining goals (SDG9, SDG10, SDG13, SDG14, and SDG15), it is currently unlikely that the benchmarks will be met by 2020 (less than 20%).

From the point of view of increasing the level of welfare of the Ukrainian society and the country, the most pressing issue is to achieve the following goals: SDG 1 – No poverty; SDG 3 – Good health and welfare; SDG 8 – Decent work and economic growth; SDG 10 – Reduce inequalities; SDG 11 – Sustainable cities and communities; SDG 16 – Peace and justice – Strong institutions; SDG 17 – Partnerships for the Goals.

Table 1 presents three key indicators that reflect the results of monitoring the implementation of the task of reducing the level of poverty in Ukraine within the framework of achieving SDG1 (No poverty). As evidenced by the dynamics of two indicators, the target benchmarks were not achieved.

According to domestic experts, the reasons for the lack of progress in poverty reduction in Ukraine are the following (Voluntary National Review on SDG achievement, 2022): a) the limited financial capacity of the budget, which does not allow for a relevant increase in the level of social standards, in particular the subsistence minimum, which is the basis for determining the level of state social guarantees (this hinders the increase in income of citizens, first of all those who receive income at the lowest level); b) insufficient coverage of poor citizens with assistance, since not all citizens who are poor apply for state social assistance; c) limited financial resources of the pension system due to high demographic burden and shadow employment; d) insufficient social services at the place of residence of citizens (in communities) that would meet their needs; e) chronic underfunding of social infrastructure sectors (first of all health care), which forces the population to spend more money on necessary services.

Since the growth rates of real incomes of the population do not cover the decrease in state

Table 1
The fact and target benchmarks for the achievement of SDG1

Indicators	2015	2016	2017	2018	2019	2020	2021	Benchmarks		
								2020	2025	2030
Percentage of population whose average total per capita equivalent expenditure is below the actual (estimated) subsistence minimum, %.	58,3	58,6	47,3	43,2	41,3	47,2	39,1	30	20	15
Proportion of people whose daily consumption is less than USD 5.05 PPP, %.	2,4	2	1,9	1,8	0,3	0,2	0,4	0,5	0	0
Share of the poor population receiving government social assistance in the total number of poor, %.	63,0	70,3	73,6	72,0	57,4	55,5	-	65	75	85

Source: Voluntary National Review on SDG achievement, 2022

financing of the social sphere, the share of conditionally free funds (including for development) in households remains at a low level (Voluntary National Review on SDG achievement, 2022). This determines their low ability to withstand both internal and external challenges.

4. Models for estimating the impact of the main macroeconomic factors and the crisis component on the level of welfare of the Ukrainian population

In order to study the possibilities of increasing the living standards of the Ukrainian population through the application of macroeconomic policy tools, it is necessary to determine the nature and extent of the relationship between the level of welfare of Ukraine and its main macroeconomic indicators, as well as the crisis factor, at various stages of Ukraine's development.

For this purpose, single- and multifactor linear regression models were constructed with the following basic specification:

$$Y = \text{Const} + C1 * x1 + C2 * x2 + C3 * x3 + C4 * x4, (1)$$

where: Y is a dependent proxy variable representing the welfare of the Ukrainian population: GDP_PPP – GDP per capita in U.S. dollars at purchasing power parity; RNDN – changes in the real disposable income of the population (in % compared to the previous year). Independent factors x1, x2, x3, x4 explain the trend of welfare changes: x1 – consumer price inflation (as a percentage change in the consumer price index compared to the level of the previous year); x2 – unemployment rate (as a percentage change in the share of unemployed population in the economically active population, compared to the previous year); x3 – foreign debt (as a percentage of gross national income); x4 –

indicator of crisis phenomena (dummy variable that takes the value of 1 in the periods with negative change trend of real GDP compared to the previous year and the value of 0 in the case of positive rates of economic dynamics); C1, C2, C3, C4 are coefficients of independent variables. All models include the constants (Const), which reflect the cumulative effect of the influence of all other factors that affect the dependent variable, but are not included in the model. Table 2 shows the results of the regression analysis and quantitative estimates of the impact of the above-mentioned macroeconomic indicators and crisis phenomena on the welfare of the Ukrainian population at different time intervals.

The analysis of the statistical characteristics of these models empirically confirms the existence of a statistically significant influence of the selected factors on the level of welfare in Ukraine. The influence of the crisis variable, which reflects the decrease in GDP growth rates in models 1 and 2, built on the data of the periods 1995–2021 and 1995–2015, respectively, when the crises of 2008–2009 and 2014–2015 had an internal economic character, is evidenced by the negative coefficients of the x4 variable in models 1 and 2. The COVID-19 pandemic crisis for the period 2020–2021 was of a more complex nature, as it included a social and humanitarian background in addition to the economic one. A negative coefficient for the indicator of crisis phenomena in model 3 for the period 2012–2021 reflects a significant reduction in the real disposable income of the population in times of crisis for the period 2012–2021. This means that the income of the population shows a significant decrease due to the negative impact of both endogenous and exogenous crisis phenomena.

The adequacy and stability of the presented models, the significance of their indicators and the economic validity of the dependent variables

Table 2

Statistical characteristics of regression models assessing the influence of the main macroeconomic indicators and the crisis factor on the level of welfare in Ukraine

	Model 1	Model 2	Model 3
Dependent Variable (Y)	ln(GDP_PPP)	ln(GDP_PPP)	RNDN
Variable (x)	Coefficient*		
x1	-0.0011	-0.0010	
x2	-0.0872	-0.0899	
x3	0.0050	0.0052	
x4	-0.0879	-0.1002	-17.29048
Const	9.7236	9.7129	8.157143
R-squared	0.8371	0.9298	0.596795
Prob.(F-statistic)	0.0000	0.0000	0.008810
Sample	1995–2021	1995–2015	2012–2021

*All factors are statistically significant ($p < 0.08$).

Source: calculated by the authors using EViews.9 software on the basis of statistical information from the GlobalEconomy database (2022) and the database of the State Committee of Statistics of Ukraine (2022)

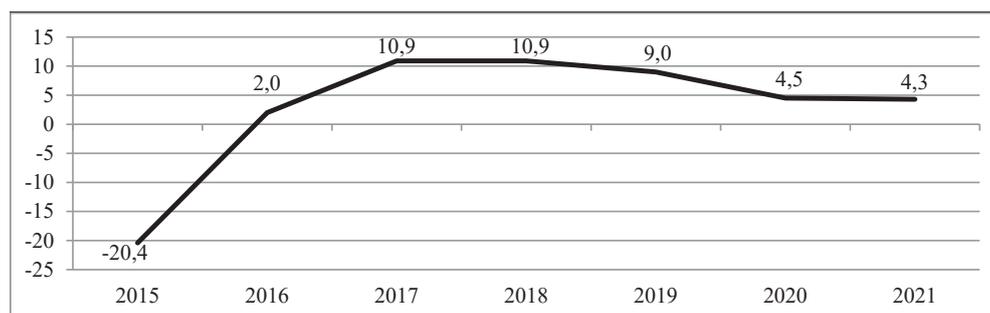


Figure 2. Changes in the real disposable income of the population of Ukraine (in % compared to the previous year)

Data: retrieved from the database of the State Statistics Service of Ukraine (accessed September 20, 2022)

show that the level of welfare in Ukraine is significantly influenced by the main macroeconomic factors: inflation, unemployment rate and the amount of foreign debt, as well as economic crises, which emphasizes the influential role of state regulation of macroeconomic processes of the country for the welfare of its population by defining and achieving strategically oriented goals, including overcoming cyclical or unpredictable economic crises.

5. External factors of influence

In addition to internal factors, various external factors have a significant impact on the welfare of Ukrainians. At the current stage of Ukraine's development, COVID-19 and Russia's military aggression have become serious external threats. It is worth emphasizing that in response to the very strong negative impact of these factors, another external factor acts – international humanitarian and financial aid, the positive role of which significantly reduces the scale of destructive consequences of external shocks – war and pandemic.

The realization of a global risk – the spread of the COVID-19 virus in Ukraine – led to a decrease in the real resource base for the formation of people's welfare. Thus, although the growth of gross household incomes in nominal terms showed an upward trend, their real incomes began to decline. After the growing trend of the real disposable income of the population in Ukraine and the stabilization of its changes in 2017–2018 at the level of 10.9% per year (Figure 2), the pace slowed down to

4.5–4.3% in 2020–2021 due to the negative impact of the COVID-19 pandemic (real national disposable income data obtained from the State Statistics Service of Ukraine in September 2022).

As a result of the government's implementation of a set of measures to contain the pandemic in the COVID years, nominal household income in 2021 amounted to UAH 4698.6 billion, expenditures – UAH 4876.0 billion, savings decreased by UAH 177.4 billion; disposable income per capita amounted to UAH 86016 (Household income and expenditure retrieved from State Statistics Service of Ukraine on 20th of September, 2022).

It is worth noting that the pandemic affected different strata of the population differently, increasing stratification according to indicators of average per capita expenditure and resources, which is reflected in the increase of differentiation of the population (households) in terms of material well-being (Table 2) in 2021 compared to the pre-pandemic period in 2018.

The various effects of the consequences of COVID-19 on the budgets of Ukrainian families are confirmed by various surveys. For example, according to the international research project "Eurasia Barometer" (2022), conducted by the "Social Monitoring Center", the existence of negative impact was confirmed based on the answers of different categories of respondents (by income, social status, employment, place of residence) with the difference that the content and scope of the needs they used to satisfy vary significantly (Balakireva, Dmytruk, 2021).

Table 3

Differentiation of household living standards in 2018–2021*

	2018	2019	2020	2021
Quintile ratio of differentiation of total population income, times	2,0	2,1	2,0	2,1
Quintile ratio of funds (by total income), times	3,3	3,5	3,5	3,5

* Excluding the temporarily occupied territories of the Autonomous Republic of Crimea and the city of Sevastopol; part of the temporarily occupied territories of the Donetsk and Luhansk regions.

Data: retrieved from the database of the State Statistics Service of Ukraine (accessed September 20, 2022)

The respondents' answers¹ to the question about the negative impact of the pandemic on their family budget were distributed as follows (Balakireva, Dmytruk, 2021): a) 40.5% in the affirmative, 8.7% of them noted the presence of a "very serious" negative impact, and 31.8% of respondents declared the presence of a "serious" negative impact; b) more than a third (35.6%) also noted the negative impact of the pandemic on their family budget, but assessed it as "not very serious"; c) only one in five (22.2%) denied the presence of a negative impact on their family budget. In particular, the negative ("very serious" or "serious") impact on budgets was felt most by employed respondents (42.6%) and those who rated their social status as the highest – 56.6%; respondents who rated their income as covering their needs well and allowing them to save a lot – 49.0% (Balakireva, Dmytruk, 2021).

The pandemic had a smaller impact on the budgets of rural families (Balakireva, Dmytruk, 2021). Among the respondents in rural areas, the percentage of people who noted a "very serious" or "serious" negative impact of the pandemic on the family budget was 36.3%; at the same time, in regional centers this indicator reaches 43.8%, in cities – 41.2%. Residents of Eastern Ukraine felt the negative impact on their budgets more acutely (44.5% chose the answer "very serious" or "serious" negative impact), in the south of the country the specific weight of such answers is the lowest among

other regions and accordingly amounts to 35.1% (Balakireva, Dmytruk, 2021).

An external factor such as Russia's military aggression has an extremely large negative impact on the sustainable development of Ukraine and the welfare of each Ukrainian. As a result of the war, different regions of Ukraine are facing a variety of challenges, such as: humanitarian problems, survival and losses among civilians are intensely felt in the zones of active hostilities. The Office of the United Nations High Commissioner for Human Rights (OHCHR) recorded 13212 cases of death or injury of civilians in Ukraine for the period from February 24 to August 14, 2022, including 5514 dead and 7698 wounded, and the dead also include children (147 girls, 170 boys, and 39 children whose sex could not be recognized) (August, 2022).

The loss of people, an important component of the national wealth of Ukraine, from the first days of the war was supplemented by the destruction of the social infrastructure, which was the basis for ensuring the welfare of the nation. As a result of the hostilities from February to September 2022, the Russian occupants damaged, destroyed or captured at least: 978 medical facilities, including 24 private medical facilities, 1270 schools, 786 kindergartens, 775 cultural facilities, 80 religious buildings, 149 tourist facilities and 153 sports facilities in the total estimated amount of 127.0 billion USD (see the report of the project "Russia will pay" of the KSE Institute,

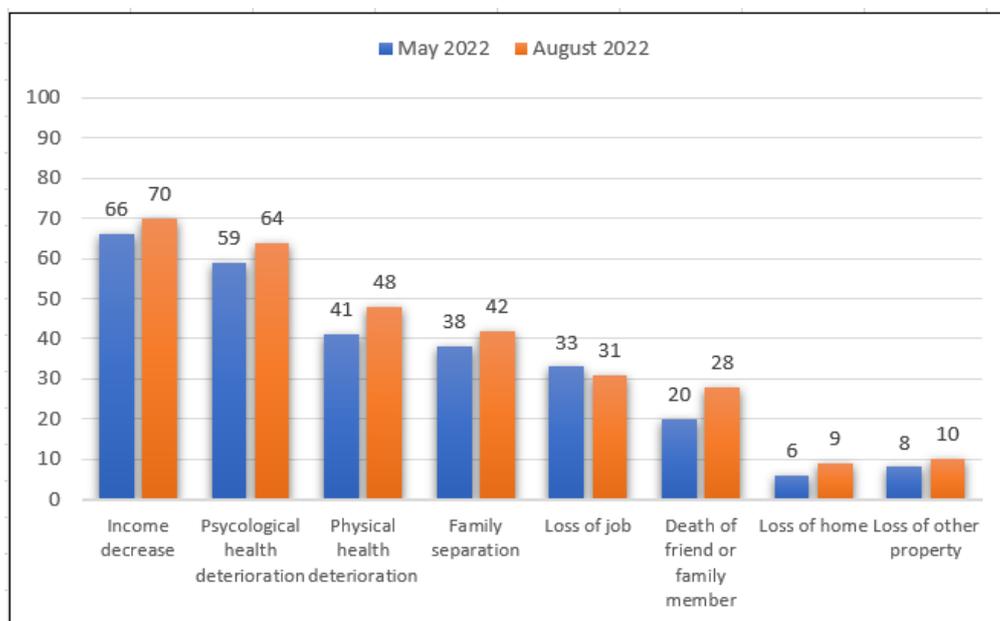


Figure 3. Results of the survey on the problems of Ukrainians since the beginning of the full-scale war

Source: Nationwide Telephone Survey conducted by the Kyiv International Institute of Sociology, August 2-9, 2022

¹ The sample population of the monitoring survey is representative by basic socio-demographic indicators for the adult population of Ukraine. The method of collecting information is individual face-to-face interview at the respondent's place of residence. The survey was conducted from October 20 to October 27, 2021 in 24 regions of Ukraine and Kyiv. In total, 1,509 respondents were interviewed.

September 2022). The largest number of destroyed educational institutions was observed in Donetsk, Kharkiv, Luhansk and Kyiv regions.

In more secure areas, the destruction of economic links and infrastructure, massive internal displacement and refugee flows have led to large-scale job and income losses. The International Labour Organization (ILO) estimates that 30% of all jobs have been lost since the beginning of the war. As of August 2022, about 33% have lost their jobs, and 70% of Ukrainians say they have suffered financially due to Russia's full-scale war against Ukraine. This is evidenced by the data of a telephone survey conducted by the Kyiv International Institute of Sociology (the study was made possible with the financial support of the United States Agency for International Development (USAID), Sweden, and the Ministry of International Affairs of Canada) (Nationwide Telephone Survey, August, 2022). Previously, in May, the rate of those reporting a decrease in income was 66%. Some financial difficulties were reported by 40% of men and 35% of women, and serious difficulties by 34% of men and 26% of women. Of those surveyed, 95% said they could not live comfortably on their current income (Nationwide Telephone Survey, August, 2022).

Not only the financial losses of Ukrainians indicate a decrease in people's welfare. According to the above-mentioned data of the telephone survey, in May-August 2022 the share of people who had to face the loss of housing increased from 6% to 9%, and together with the loss of other property this percentage increased accordingly from 8% to 10%. In addition to economic problems, Ukrainians also suffer from other problems caused by the war, including: deterioration of mental health (64%), deterioration of physical health (48%), loss of friends or relatives (28%), as shown in Figure 3.

Nevertheless, there are some encouraging facts that show the character of Ukrainians and the importance of the components of the upper level of welfare (see Figure 1). Among these factors, the following should be emphasized: *firstly*, since the beginning of

the full-scale invasion of Russia, more than 81% of Ukrainians surveyed donated money to the Armed Forces, 60% donated money for humanitarian needs, 54% of Ukrainians provided shelter or helped internally displaced persons, 37% volunteered (Nationwide Telephone Survey, August, 2022); *secondly*, during the first four months after the launch of the state crowdfunding platform United24, donors from all over the world made charitable contributions and thus collected over 180 million USD of accumulated financial help for Ukraine. Residents of 110 countries have joined United24 during the operation of the platform. The largest number of donations came from the USA, Germany, France, Great Britain and Canada (Pavlysh, September 2022).

6. International humanitarian and financial assistance

Taking into account experts' estimates of 30-45% reduction of Ukrainian GDP in 2022, the intensification of pressure on the social system observed during the large-scale aggression in Ukraine as an inevitable consequence of simultaneous decrease in revenues and increase in budget expenditures. International partners support Ukraine in solving this problem by providing significant amounts of financial assistance during the war, including direct financing of Ukraine's budget expenditures (except for those for military purposes). According to the operational data of the Ministry of Finance of Ukraine as of July 27, 2022, half of the budget expenditures, i.e., 12.7 billion USD, were financed by external resources: IFO (IMF, World Bank, EIB) – 11.7%, foreign countries (bilateral agreements, grants and guarantees) – 38.6%.

International support from various countries and world institutions allowed Ukraine to stand up and partially meet its financial, military and humanitarian needs. The data in Table 4 show the assessment of the assistance received by experts of the National Bank of Ukraine (NBU database, 2022) based on the

Table 4

Official assistance committed to Ukraine from end January to end November 2022 in billions of euros

	Financial	Military	Humanitarian	Total
EU institutions*	30,32	1,57	3,10	34,99
USA	15,05	9,90	22,86	47,82
IFIs**	9,77	0,00	0,00	9,77
EU stsats	4,39	3,85	8,61	16,84
UK	2,55	0,40	4,13	7,08
Other countries***	3,06	1,03	2,27	6,37

Note: * European Commission, EU Council and European Peace Facility funds, including the announced 18-billion-euro package. ** IMF, World Bank, EBRD, UN. Assistance under multi-donor programs is counted as individual country assistance. *** Australia, Canada, New Zealand, Norway, South Korea, Taipei, Turkey, Switzerland and Japan.

Source: data from the NBU and the Kiel Institute for the World Economy

research of the Kiel Institute for the World Economy (Antezza et al., 2022). From the point of view of ensuring an adequate level of welfare, among the quantitative assessments of international assistance, the amount of financial and humanitarian support received by Ukraine deserves attention. In this case, humanitarian aid refers to assistance to the civilian population (mainly food, medicine, and other relief items), and financial support includes grants, loans, and loan guarantees, mostly provided to the Government of Ukraine.

In addition to state monetary payments to the population, Ukraine has agreed with international organizations such as UNICEF, UNHCR, the World Food Program, the International Committee of the Red Cross, and the International Organization for Migration to provide additional direct assistance to the most affected categories of Ukrainians. Support from the funds of these programs, totaling 9.6 billion hryvnias, will receive more than 2 million people from the most vulnerable categories, affected by the war, through monthly payments in the amount of 2200-2500 hryvnias for a period of 1-3 months (Demchuk, 2022). Such groups include large families, families raising children with disabilities, low-income seniors and others. Each of the mentioned categories of people is agreed to be taken over by one of the international organizations, which provides them with a monetary payment (Demchuk, 2022).

The importance and directions of financial support from the first month of the invasion and hostilities are proved by the results of the sociological survey "Financial support during the war", which was conducted from March 18 to 24 in cooperation with UNICEF. The results of this survey², in which 5370 U-Reporters aged 14-34 participated, were used to develop a financial assistance program for young people and families from Ukraine who suffered from the Russia attack (Demchuk, 2022). As of March 24, almost half of the respondents (41.8%) were forced to leave their permanent residence in Ukraine, of which 24.9% temporarily changed their current place of residence within Ukraine, and 16.9% – temporarily settled in another country; 48.2% of respondents remained in their permanent place of residence in Ukraine; others – 10% (Demchuk, 2022). According to the analysis of the results after one month of war almost 40% of Ukrainians needed material help, mainly in the form of food, more than 27% confirmed difficulties

with accommodation, 19% suffered from the lack of medicines, 18% mentioned the need for clothes, more than 13% needed hygiene products, and problems with other necessities declared 10.7% of respondents. 82.4% of young people preferred to receive financial assistance in the form of humanitarian aid, and the rest 17.6% chose the form of goods and services. Finally, taking into account the above-mentioned results of the survey, 75.1% of respondents received help in the form of cash and non-cash options (cards), and 24.9% in the form of goods and services (Demchuk, 2022). The absolute majority of respondents (96.1%) indicated that the assistance met their needs (fully – 51.5%; partially – 44.7%). Respondents used the financial assistance to meet the following needs: food – 50.8%; charity – 26.9%; housing – 22.9%; hygiene products – 19.3%; clothing – 11.3%; relocation – 10%; medicines – 9.3%; community services – 6.6%; did not spend – 14% (Demchuk, 2022).

According to the European Commission, as of August 11, 2022, the delivery of 66224 tons of aid in the form of goods from 30 countries to Ukraine has already been coordinated through the EU Civil Protection Mechanism (European Pravda, August 8, 2022). Among the latest offers of material aid to Ukraine from EU members through the above-mentioned mechanism are hospital beds and hygiene kits from Austria, an ambulance and medical equipment from Norway, shelter equipment from Finland, personal protective equipment from Germany, medicines from the Czech Republic and Slovakia, power generators from Italy and power supply equipment from France (European Pravda, August 8, 2022).

The EU and its Member States also continue to support Ukraine and its health system. In particular, 501.12 thousand doses of Pfizer/BioNTech ultra-frozen vaccine (adapted to the Omicron strain) have already been delivered from Sweden as part of the European vaccine distribution system, according to the EU Mission in Ukraine. In addition, Poland plans to transfer about 1 million doses of the coronavirus vaccine, as well as 100 thousand doses of the vaccine against measles, mumps and rubella (European Pravda, August 8, 2022).

The given examples show that despite the significant negative consequences of such external factors as the COVID-19 pandemic and the large-scale military aggression of the Russian Federation, the effects of humanitarian and financial

² The U-Report project is an interactive tool for conducting weekly topical surveys among teenagers and young people via Facebook Messenger, Telegram, Viber. The results of the surveys are used in the activities of government institutions, public associations and international organizations. U-Report is conducted in 89 countries of the world and has more than 16 million participants. In Ukraine, the number of U-Reporters exceeds 103,200 and is constantly growing. During the 5 years of the project's existence, the U-Report team launched more than 175 surveys on topical issues for young people and conducted more than 400 presentations and trainings across Ukraine. This survey was conducted from March 18-24, 2022 in cooperation with UNICEF. 5,370 U-Reporters aged 14-34 participated.

aid from individuals, governments of various countries and international financial organizations gave Ukrainians an opportunity to persevere, maintain the essential conditions of life, adapt to new difficult circumstances, develop plans for post-war reconstruction of Ukraine and further improvement of welfare.

7. Conclusions

The systematic approach to assessing the welfare of an individual, a population and a country is based on a multidimensional definition, which is the essence of this concept, as it reflects the state and values of modern society, which are dynamically changing. In this context, the material component of welfare, which rightly constitutes its basic level and remains historically extremely important, today must be supplemented by immaterial, spiritual components, which outline the medium and higher levels of human welfare, the implementation and

evaluation of which in practice still largely depend on successes at the basic level.

Modern assessments of the level of welfare of the population of Ukraine are significantly influenced by internal macroeconomic factors, in particular inflation, unemployment, debt; level of social development, as well as external, global factors, crisis phenomena. Understanding their interrelationships highlights the important role of state regulation of macroeconomic processes and implementation of the social quality management approach in the country, which directly affects the growth of the population's welfare by defining and implementing tasks to overcome cyclical or unpredictable economic shocks, as well as achieving strategic goals on the way to sustainable inclusive development.

Further scientific research will focus on the study of world experience and evaluation of the impact of macroeconomic policy instruments and the concept of social quality, which ensure the improvement of the country's welfare.

References:

- Antezza, A., Bushnell, K., Frank, A., Frank, P., Franz, L., Kharitonov, I., Rebinskaya, E., & Trebesch, C. (2022). The Ukraine Support Tracker: Which countries help Ukraine and how? *Kiel Working Paper*, vol. 2218, pp. 1–65. Available at: https://www.ifw-kiel.de/fileadmin/Dateiverwaltung/IfW-Publications/-ifw/Kiel_Working_Paper/2022/KWP_2218_Which_countries_help_Ukraine_and_how_/KWP_2218_Version5.pdf
- Balakireva, O. M., & Dmytruk, D. A. (2021). Impact of the COVID-19 pandemic on the quality of life of Ukrainians. *Ukrainian socium*, vol. 3(78), pp. 132–151. DOI: <https://doi.org/10.15407/socium2021.03.132>
- Borshchenko, T. I. (2018). The role of Amarty Sen in the development of the theory of social welfare. *Scientific notes of the Tavra National University named after Vernadskyi V.I. Series: Economics and management*, vol. 68(4), pp. 1–5. Available at: https://www.econ.vernadskyjournals.in.ua/journals/2018/29_68_4/29_68_4.pdf#page=7
- Buchanan, J. M., & Musgrave, R. A. (2004). *Public finances and public choice. Two opposite visions of the state (transl. from Eng.)*. Kyiv: Kyiv-Mohyla Academy.
- Changes in the real national disposable income of the population. State Statistics Service of Ukraine. Available at: <https://www.ukrstat.gov.ua/>
- Chechel, O. M. (2011). Basic criteria for the welfare of the population. *Investments: practice and experience*, vol. 1, pp. 82–85. Available at: http://nbuv.gov.ua/UJRN/ipd_2011_1_23
- Demchuk, V. S. (2022). Digest of U-Report Survey: 1st quarter of 2022 (national cinema, digital professions, youth at war: security and volunteering, financial assistance). *Ukrainian socium*, vol. 1 (80), pp. 123–134. DOI: <https://doi.org/10.15407/socium2022.01.123>
- Differentiation of the living standard of Ukrainian population in 2018–2021. State Statistics Service of Ukraine. Available at: https://www.ukrstat.gov.ua/operativ/operativ2020/gdvdg/duf/arh_duf_u.htm
- Duraj, P. A. (2017). Human development index in estimation of countries' welfare. *National economic University of Ternopil*. Available at: <http://dspace.wunu.edu.ua/bitstream/316497/21580/1/%D0%BA.%D1%80.%20%D0%94%D1%83%D1%80%D0%B0%D0%B9%20%D0%9F.%20%D0%90.pdf>
- Eurasia Barometer: project of Institute of Comparative Survey Research. Available at: <http://office.eurasiabarometer.org/>
- Funding of the state budget of Ukraine since the beginning of the full-scale war. Ministry of Finance of Ukraine. Available at: https://www.mof.gov.ua/uk/news/ukraines_state_budget_financing_since_the_beginning_of_the_full-scale_war-3435
- Global Economy Database (2022). GDP and economic growth. Available at: https://www.theglobaleconomy.com/indicators_list.php
- Glubish, L. Ya. (2016). Evolution of scientific views on the meaning of welfare theory and its specific at present stage of social and economic relations. *Scientific journal of National Uzhgorod University*, vol. 6(1), pp. 58–62.
- Guz, M. M. (2012). Analysis of indicators of economic and social welfare. *Problems and prospects of development of the banking system of Ukraine*, vol. 36, pp. 66–75.
- Heyets, V. M., Skrypnychenko, M. I., & Shumska, S. S. (2020). Macroeconomic imbalances in Ukraine: MIP SCOREBOARD monitoring and model estimates of their impact on growth and stability. *Financial and Credit*

- Activity Problems of Theory and Practice*, vol. 2(33), pp. 296–305. DOI: <https://doi.org/10.18371/fcaptp.v2i33.206956>
- Heyets, V., Blyzniuk, V., & Nykyforuk, O. (2022). The Recovery of Ukraine: Social Quality in the Postwar Societal Space. *International Journal of Social Quality*, vol. 12 (1). Available at: https://www.berghahnjournals.com/view/journals/ijsq/ijsq-overview.xml?tab_body=forthcoming
- KSE (2022). Project report of Kyiv School of Economics "Russia will pay/damaged.in.ua". Available at: <https://kse.ua/ua/russia-will-pay/We>
- Menger K., Bem-Baverk, E., & Vizer, F. (1992). *Austrian school of political economy (transl. from Eng.)*. Moscow: Ekonomika.
- National Bank of Ukraine (2022). *Financial Stability Report, December 2022*. Available at: URL: <https://bank.gov.ua/en/stability/report>
- Opportunities and obstacles on the path of democratic transition of Ukraine. *Nationwide Telephone Survey, conducted in August 2-9, 2022 by National Democratic Institute*. Available at: <https://www.ndi.org/sites/default/files/Opportunities%20and%20Challenges%20Facing%20Ukraine%E2%80%99s%20Democratic%20Transition%20August%20%28Ukrainian%29.pdf>
- Pareto, V. (1964). *Cours d'Économie Politique*. Nouvelle édition par G.-H. Bousquet et G. Busino, Librairie Droz, Geneva.
- Pavlysh, O. More than \$180 million has already been raised through the UNITED24 platform. *Economic Pravda*, September 5, 2022. Available at: <https://www.epravda.com.ua/news/2022/09/5/691118/>
- Pigou, A. (1985). *Economic theory of welfare (transl. from Eng.)*. Moscow: Progress.
- Pinchuk, A.K. (2021). Evolution of "Welfare" concept and modern approaches to determination of its components. *Economic Analysis*, vol. 31(2), pp. 44–54. DOI: <https://doi.org/10.35774/econa2021.02.044>
- Priymak, V. I. (2011). Fuzzy assessment of the level of economic well-being of households. *Economics: the realities of time*, pp. 149–158.
- Shumska, S. S., & Nezhyvenko, O. V. (2013). Shadow economy in Ukraine: methodology and evaluation. *Actual Problems of Economics*, vol. 10 (148), pp. 74–83. Available at: <http://eco-science.net/downloads/>
- Shumska, S. S., & Pinchuk, A. K. (2014). Criteria of optimum currency area: from classical to modern approach. *Actual Problems of Economics*, vol. 10, pp. 45–55. Available at: <https://eco-science.net/downloads/>
- Sismond, J. (1936). *New principles of political economy, or of wealth in its relations with the population (transl. from Fr.)*. Moscow: state socio-economic publisher.
- Smith, A. (1962). *An inquiry into the nature and causes of the wealth of Nations (transl. from Eng., edited by V. Afanasiev)*. Moscow: Publisher of social and economic literature.
- State Statistics Service of Ukraine Database (2022). Household income and expenditure in 2021. Available at: <https://www.ukrstat.gov.ua/>
- Stiglitz, J. E., Sen, A., & Fitoussi, J. P. (2009). *Report by the Commission on the Measurement of Economic Performance and Social Progress, September 14, 2009*. CMEPSP.
- The EU reported on record over 60,000 tons of vital aid to Ukraine. *European Pravda*, August 8, 2022. Available at: <https://www.eurointegration.com.ua/news/2022/08/11/7144838/>
- Ukraine received more than 501,000 Pfizer/BioNTech covid vaccines from Sweden. *European Pravda*, September 29, 2022. Available at: <https://www.eurointegration.com.ua/news/2022/09/29/7147723/>
- Ukraine: civilian casualty update. (2022, August). United Nations Human Rights Monitoring Mission in Ukraine. Available at: <https://ukraine.un.org/sites/default/files/2022-08/Ukraine%20-%20civilian%20casualty%20update%20as%20of%2014%20August%202022%20ENG.pdf>
- Ul Haq, Mahbub (1995). *Reflections on Human Development*. New York: Oxford University Press.
- Voluntary national review of progress towards achievement of the Sustainable Development Goals in Ukraine. Available at: https://sustainabledevelopment.un.org/content/documents/2629SVNR_2020_Ukraine_Report.pdf
- World Bank (2018). *The Human Capital Project*. World Bank, Washington, DC. Available at: <https://openknowledge.worldbank.org/handle/10986/30498> Received on: 09th of March, 2023

Received on: 09th of March, 2023

Accepted on: 23th of April, 2023

Published on: 23th of May, 2023