Olena Zharikova, Oksana Pashchenko, Larysa Mykhalchyshyna. Macroeconomic indicators of Ukraine's development. *Економічний дискурс*. 2026. Випуск 1. С. 139-153.
DOI: https://doi.org/10.36742/2410-0919-2026-1-14

UDC 338.1(477)
JEL Classification G 21

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MACROECONOMIC INDICATORS OF UKRAINE'S DEVELOPMENT

Abstract.

Introduction. *The article analyzes the current state of Ukraine's macroeconomic development, its resource and industrial potential, as well as the problems that have affected economic stability since the country gained independence. Key macroeconomic indicators are examined, including Gross Domestic Product (GDP) and its dynamics per capita, the Human Development Index (HDI), the level of economic freedom, and Ukraine's positions in international economic and social rankings. Particular attention is paid to the impact of political instability, governance deficiencies, and external factors on economic stagnation and the partial loss of economic and political independence.*

Methods. *The study employed both general scientific and specialized methods of economic analysis to investigate the macroeconomic indicators of Ukraine's development. In particular, statistical, comparative, and economic-mathematical methods were applied, enabling a comprehensive assessment of the state of the national economy, the dynamics of Gross Domestic Product (GDP), the Human Development Index (HDI), the level of economic freedom, population income, and other key indicators.*

The application of these methods allows for a comprehensive assessment of Ukraine's economic development, identification of the main causes of economic stagnation, evaluation of recovery prospects, and formulation of recommendations for effective economic policy and strategic national development planning.

Results. *The territorial, natural-resource, and infrastructural potential of Ukraine is analyzed, including energy, agricultural, and industrial resources, as well as its geographical location, which creates prerequisites for integration into global economic processes. The state of international economic relations and cooperation is assessed, particularly in the context of European integration and Ukraine's positions in rankings of economic freedom, GDP per capita, military capability, and the Human Development Index.*

The study also includes an analysis of prospects for economic recovery and strategies aimed at enhancing national competitiveness, effective utilization of existing resource potential, and increasing investment attractiveness. Special emphasis is placed on the need to improve governance mechanisms, enhance the effectiveness of economic policy, and develop human capital to ensure sustainable economic growth.

Discussion. *The analysis of international and national standards for the valuation of economic objects indicates a trend toward improving approaches for determining the value of complex assets and enterprises. Differences between international and national methodologies have been identified, including the use of various valuation instruments and the appropriateness of their application under the current conditions of Ukraine's economic development. It has been shown that due to the limited development of financial and market mechanisms in the country, the market and income approaches cannot always be applied in full, while the asset-based approach remains a key tool for assessing the economic potential of enterprises. Scholars suggest refining the concept of "enterprise" to better reflect the real economic potential of the object being assessed and to align with international practice.*

Keywords: *macroeconomic indicators, GDP, Human Development Index, economic freedom, economic growth, international rankings, economic potential.*

Introduction.

In the context of transformative processes, the transition to a market economy, and the strengthening of Ukraine's integration into the global economic space, the analysis of the country's macroeconomic indicators becomes particularly relevant. Macroeconomic indicators reflect the real state of the economy, its stability, the efficiency of public governance, and the country's capacity to ensure sustainable socio-economic development. In conditions of economic instability, military challenges, demographic changes, and globalization processes, an objective assessment of macroeconomic indicators is a prerequisite for forming a balanced economic policy.

Macroeconomic indicators such as gross domestic product (GDP), population income, employment levels, Human Development Index (HDI), inflation, and economic freedom provide a comprehensive evaluation of the national economy's performance. Their analysis should be based on accurate statistical data while accounting for the influence of internal and external factors, as unsubstantiated assumptions can distort the economic situation and lead to erroneous managerial decisions.

Economic categories and indicators are an integral part of market processes and require particularly careful analysis under conditions of economic instability. This does not preclude the use of market methods for macroeconomic analysis; on the contrary, it demands greater scientific justification, systematic assessment, and responsibility in the application of statistical and analytical tools. Classical economists, including William Petty and David Ricardo, emphasized the importance of quantitative measurement of economic processes and income as a basis for evaluating economic development and societal welfare.

In contemporary conditions, these approaches have evolved into a system of macroeconomic indicators that allow for the assessment of economic growth dynamics, living standards, and the efficiency of resource utilization. Therefore, the study of Ukraine's macroeconomic indicators is a significant scientific task aimed at identifying the causes of economic stagnation, determining recovery prospects, and forming strategic guidelines for sustainable national development.

Analysis of Recent Research and Publications.

The issues of Ukraine's macroeconomic development and the assessment of its key macroeconomic indicators are widely discussed in the works of both domestic and foreign scholars. Ukrainian economists, including V. Heiets, A. Halchynskyi, O. Amosha, E. Libanova, I. Lunina, O. Paskhaver, and M. Skarzynskyi, emphasize structural imbalances in the national economy, problems of economic growth, transformation processes, and socio-demographic consequences of prolonged crises. Particular attention is given to the analysis of GDP dynamics, household income, labor productivity, and the Human Development Index (HDI).

The studies of M. Taran, O. Havrylenko, O. Shevchenko, N. Reznikova, and I. Kravchuk focus on economic freedom, the institutional environment, state regulation, and Ukraine's investment attractiveness. Scholars highlight that low levels of economic freedom, inefficient managerial decisions, and political instability significantly hinder economic growth and worsen Ukraine's position in global rankings.

Among international researchers, notable contributions to the study of macroeconomic processes and transitional economies have been made by J. Sachs, J. Stiglitz, D. North, and A. Sen, who analyzed the relationship between economic growth, institutional quality, social development, and population welfare. Their works are widely used in assessing macroeconomic indicators, particularly GDP, HDI, and economic freedom.

Special attention is also given to studies by international organizations and analytical centers, including the United Nations Development Programme (UNDP), the World Bank, the International Monetary Fund, the Fraser Institute, and the Heritage Foundation, which regularly monitor macroeconomic indicators, socio-economic development, and institutional capacity in Ukraine. In these studies, the Human Development Index is considered an integral indicator of population well-being and national economic efficiency.

Despite the significant volume of research, the challenges of a comprehensive analysis of Ukraine's macroeconomic indicators under conditions of military conflict, demographic crisis, and European integration processes require further in-depth study, which underscores the relevance of this research.

Purpose.

The aim of the study is to assess the current state of Ukraine's economy through an analysis of macroeconomic indicators, to identify problems in economic development, and to formulate prospects for increasing the efficiency of utilizing the country's existing potential. The study focuses on a comprehensive analysis of Ukraine's macroeconomic indicators, an assessment of the causes of economic stagnation, and the determination of prospects for economic stabilization and growth. The scientific significance of the work lies in forming a holistic understanding of the country's economic condition, while its practical significance is in providing recommendations for government bodies, analytical centers, and international experts to enhance the effectiveness of economic policy and strategic planning.

Research Methodology.

The methodological foundation of the study consists of a combination of general scientific and specialized economic methods, which ensure a comprehensive and objective analysis of Ukraine's macroeconomic indicators in conditions of a transforming economy and multifactorial instability.

The study employs statistical analysis, which enabled a quantitative assessment of the dynamics of key macroeconomic indicators, including GDP, GDP per capita, HDI, inflation, unemployment, and public debt of Ukraine for the period 2012-2023. The application of this method made it possible to identify the main trends in economic growth, periods of stagnation, and crisis shifts, as well as to assess the depth and duration of economic recessions.

The comparative method was employed to juxtapose Ukraine's positions with those of other countries worldwide according to international indicators such as economic freedom, GDP per capita, Human Development Index (HDI), competitiveness indices, and defense potential. This approach allowed for determining Ukraine's relative position in the global economy, assessing the extent of its lag behind developed countries, and identifying key directions for potential economic convergence with European Union countries.

The historical-economic analysis was applied to study the evolution of Ukraine's economic system since the country gained independence, to assess initial development conditions, production structure, the level of industrialization, and the utilization of natural resource potential. This method made it possible to reveal systemic policy errors, institutional distortions, and factors that led to the formation of chronic imbalances and governance crises.

The systemic analysis was used for a comprehensive evaluation of the interrelations between macroeconomic, social, demographic, and geopolitical factors affecting Ukraine's development. **The application of this method allowed** the economy to be considered as an integrated system, where changes in a single element (e.g., demographics, migration, or security) directly influence overall macroeconomic outcomes.

In addition, the study employed generalization, induction, and deduction methods, which enabled the formulation of scientifically grounded conclusions and the identification of prospects for the stabilization and recovery of Ukraine's economic growth in the medium and long term.

Results.

Ukraine is one of the largest European countries, possessing significant territorial, natural-geographical, human, industrial, transport, and agricultural potential. Before gaining independence, Ukraine ranked fifth in Europe in terms of GDP. The country had all the necessary conditions for successful development: diverse natural and raw materials, nearly all elements of the periodic table in its subsoil, fertile chernozem soils, vast forested areas, and a favorable geographical location for international transportation. Ukraine had a full spectrum of industries, ranging from mining to high-tech sectors such as shipbuilding, aerospace, and instrumentation, as well as large-scale military-industrial production. The country also maintained extensive trade, economic, and scientific connections with most countries of the world. With independence, Ukraine had every opportunity to meet international economic standards, which could have allowed it to join the European Union as a full member on equal terms without the need to apply [10].

However, the unpreparedness of the authorities for a market economy led to a deep governance crisis, resulting in an economic collapse [10]. Ukraine not only failed to capitalize on opportunities for independent development but also experienced declines across economic and social indicators. Economic stagnation caused losses in both political and economic independence and postponed Ukraine's potential integration into the EU as an equal member.

The total area of Ukraine as of January 1, 2025, was 603.6 thousand km², accounting for 5.7% of Europe's territory and 0.44% of the world's territory. Due to the annexation of Crimea (27 thousand km²) and the occupation of parts of Donetsk and Luhansk regions (19.2 thousand km²), the country's actual territory is 557.5 thousand km². Ukraine's exclusive economic zone covers 46.2 thousand km², representing 7.2% of the territory in 2025, which exceeds the area of Estonia, the Netherlands, or Switzerland.

The most critical resource of any country is its population. Since independence, Ukraine's population has decreased from 51.9 million in 1991 to 41.2 million in 2022, excluding Crimea and the occupied areas of Donbas (Table 1). Population figures are not merely statistics; they reflect faces, lives, and histories and form the foundation for future planning in economics, education, and healthcare.

In 2025, the country faces a complex situation-war, mass migration, an aging population (with a growing share of elderly people and declining youth), and a demographic crisis—all of which significantly

reshape the national landscape. On government-controlled territory, the population is estimated at 28-30 million, although precise figures are difficult to determine. Compared to 2021, when Ukraine's population was 41.1 million, this represents a substantial decline caused by migration (approximately 7 million Ukrainians, mostly women and children, left the country), natural population decrease due to low birth rates and high mortality (exacerbated by the war and healthcare challenges), labor market disruptions from the outflow of working-age citizens abroad, and extensive mobilization into the Armed Forces of Ukraine.

Table 1. Population of Ukraine, 1990–2024

Date	Population (thousands)	Change (+/-), thousands	
		'000 persons	%
на 1.01.1990	51 838,5		
на 1.01.1991	51 944,4	105.9	0.20%
на 1.01.1992	52 056,6	112.2	0.22%
на 1.01.1999	49 918,1	-452.7	-0.90%
на 1.01.2000	49 429,8	-488.3	-0.98%
на 1.01.2005	47 280,8	-341.6	-0.72%
на 1.01.2010	45 962,9	-180.8	-0.39%
на 1.01.2015	42 928,9	-2497.3	-5.50%
на 1.01.2019	42 153,2	-233.2	-0.55%
на 1.01.2020	41 902,4	-250.8	-0.59%
на 1.01.2021	41 588,4	-314.1	-0.75%
на 1.01.2022	41 167,3	-421.0	-1.01%
на 1.01.2023	34 000,0	-7167,0	-1,21%
на 1.01.2024	31 000,0	-3000,0	-1,10%

**Since 2014 - excluding the temporarily occupied territories (the Autonomous Republic of Crimea, the city of Sevastopol, and parts of the Donbas).*

Source: Ministry of Finance of Ukraine. Population of Ukraine [11]

According to information from the Ministry of Social Policy, at the beginning of the full-scale invasion in 2022 the population of Ukraine amounted to 42 million people; however, the figure of 40 million was also cited, depending on whether temporarily occupied territories were taken into account. Thus, population estimates vary depending on the inclusion or exclusion of temporarily occupied territories.

Over the past 28 years, Ukraine has lost more than 20 million people, which constitutes approximately one third of its population. Of particular concern is the persistent nature of population decline in Ukraine. The main demographic indicators for 2024, which do not include Crimea and the temporarily occupied territories, are as follows: births - 176.7 thousand persons; deaths - 649.1 thousand persons. Another alarming fact is that the mortality rate in Ukraine significantly exceeds the birth rate. For a generation of children to numerically replace the generation of parents, taking into account child and adolescent mortality, 100 women should give birth to 213-215 children, whereas in Ukraine there are only about 150 children per 100 women.

Life expectancy at birth (for both sexes) in Ukraine ranges from 64 to 71 years. This is lower than the global average life expectancy, which is approximately 73.5-74 years (according to data from the Population Division of the United Nations Department of Economic and Social Affairs). For comparison, life expectancy is 87 years in Monaco, 86 years in San Marino and Hong Kong, and 85 years in Japan.

In the first half of 2025, 249,002 deaths and only 86,795 births were registered in Ukraine, meaning that mortality exceeded fertility by 2.9 times. The most critical situation is observed in frontline regions, where mortality exceeds birth rates by 4 to 12 times. In the first quarter of 2025, civilian mortality increased by 59% compared to the same period in 2024, while average life expectancy declined to 57.3 years for men and 70.9 years for women.

In 2025, the average life expectancy in Ukraine is approximately 64-71 years. For men, this

indicator ranges from 57 to 67 years, while for women it is about 76-77 years. The figures vary depending on the data source; however, the downward trend in male life expectancy observed since 2020 persists. The main factors influencing this indicator include insufficient funding of the healthcare system, the consequences of the war, environmental conditions, and limited access to high-quality medical care.A large proportion of the population is living at or near the poverty line. The average monthly wage in Ukraine in 2024 amounted to UAH 21,473 (or USD 534; EUR 92.5). According to Eurostat data, average wages in the European Union range from EUR 1,100 in Bulgaria to EUR 4,542 in Austria; in Poland they amount to EUR 1,650, while in Germany they reach approximately EUR 4,100 (Table 2).

Table 2. Dynamics of the Average and Minimum Wages in Ukraine, 2010-2024

Year	Exchange rate UAH	Average wage		Minimum wage	
		UAH	USD	UAH	USD
2010	7,94	2250	283,53	869	109,51
2011	7,97	2648	332,35	941	118,10
2012	7,99	3041	380,55	1073	134,28
2013	7,99	3282	410,61	1147	143,50
2014	11,89	3480	292,77	1218	102,47
2015	21,84	4195	192,04	1218	55,76
2016	25,55	5183	202,85	1378	53,93
2017	26,60	7104	267,09	3200	120,32
2018	27,20	8865	325,90	3723	136,87
2019	25,85	10497	406,14	4173	161,46
2020	26,96	11591	429,98	4723	175,20
2021	27,29	14014	513,60	6000	219,89
2022	32,34	14847	459,07	6500	200,98
2023	36,57	17442	476,89	6700	183,19
2024	40,15	21473	534,80	7100	176,83

Source: Average Wage in Ukraine. Ministry of Finance of Ukraine (Minfin) [13]
Available at: https://index.minfin.com.ua/ua/labour/salary/average/

In 2024, the minimum wage in Ukraine increased from UAH 7,100 to UAH 8,000 as of 1 April, while the average wage for the year, according to the State Statistics Service of Ukraine, amounted to UAH 21,473. This means that the net minimum wage ("take-home pay") from 1 April 2024 amounted to UAH 6,440 after taxes and mandatory contributions.

A pressing problem for Ukraine is the substantial gap between the high cost of living and low wages. Since gaining independence, Ukraine has pursued a misguided policy of cheap labor and developed a raw-material-based economic model. As a result, labor has been devalued, professional skills have deteriorated, poverty has increased, and large-scale labor migration has occurred. Like many underdeveloped economies, Ukraine is characterized by a low share of labor costs in production costs and a low share of employee compensation in GDP. Specifically, the share of wages in Ukraine's GDP declined from 49.9% in 2013 to 38.9% in 2017 and further to 35% in 2024. The share of labor costs in the production cost of Ukrainian goods amounts to only 7-9%, compared to 30-45% in Western European countries, which indicates excessive exploitation of the Ukrainian workforce.

According to the CEOWorld magazine, Ukraine ranks 107th globally in terms of the minimum wage. This overall ranking covers the average monthly gross wage in 196 countries. For comparison, the average wage in Ukraine is estimated at USD 350-470. In 2025, Ukraine has the lowest minimum wage in Europe-UAH 8,000 per month-whereas the highest minimum wages in the EU are recorded in Luxembourg (€2,638), Ireland (€2,282), and the Netherlands (€2,193). Poland ranks 9th with a minimum wage of €1,091, while the lowest minimum wages in the EU are observed in Bulgaria (€551), Hungary (€707), and Latvia (€740).

In 2025, the poverty rate in Ukraine increased significantly due to the consequences of the full-scale war and, according to World Bank estimates, amounts to approximately 29-37% of the population

(around 9 million people). This exceeds the average European level (10-20%) and is associated with economic decline, unemployment, and rising prices. In Ukraine, poverty is defined not only by income but also by material deprivation. If a person cannot afford 7 out of 13 defined indicators (such as unexpected financial expenses, heating payments, or a vacation), they are considered poor. The main drivers of rising poverty include the full-scale war, which has had devastating economic consequences; economic recession and unemployment, although in June 2025 the unemployment rate declined to 12%, the lowest level since the start of the war; rising prices for essential goods and services, which significantly reduce purchasing power; and declining real incomes, as growth in nominal wages often fails to offset inflation, particularly for low-income groups.

It is impossible to live on the minimum wage in Ukraine, which encourages the expansion of the shadow economy. To reduce the tax burden, employers often officially pay only the minimum wage, while the actual salary is paid "in envelopes" [10]. As a result, the state does not receive sufficient tax revenues and is unable to ensure a sustainable pension system. Consequently, people who have worked conscientiously throughout their lives receive extremely low pensions that are insufficient for subsistence. This has led to an economy with a distorted wage and pension system, which is further aggravated by the lack of integrity in public administration. According to expert estimates, the shadow economy in Ukraine accounts for 40–50% of GDP, and in certain sectors reaches 60–70%.

The government plans to gradually reduce poverty by increasing social standards and developing the labor market.

According to the International Monetary Fund (IMF), in 2024 Ukraine ranked last in Europe in terms of GDP per capita, with an indicator of USD 5.6 thousand. In the same year, Ukraine ranked 58th in the global economic ranking compiled by CEBR. Estimates suggest that GDP per capita (adjusted for purchasing power parity) amounted to approximately USD 19.6 thousand. According to other data, Ukraine ranks 141st among the world's richest countries by GDP per capita and is classified as an upper-middle-income country. Experts note that Ukraine's economy experienced several consecutive years of decline after independence. Following Russia's invasion in 2022, Ukraine's GDP contracted by 30%, representing the largest loss since independence. In the European ranking, Kosovo ranks one position above Ukraine with GDP per capita of USD 6.3 thousand. Belarus and Moldova are also among the poorest European countries, each with GDP per capita of USD 7.4 thousand. In general, the poorest countries in Europe are those outside the European Union, including North Macedonia, Bosnia and Herzegovina, Albania, Serbia, and Montenegro. In 2024, the poorest EU country was Bulgaria, with GDP per capita of USD 17 thousand-almost three times higher than in Ukraine. Other EU countries with relatively low GDP per capita include Romania, Croatia, Poland, and Hungary. Luxembourg was the richest country in Europe and the world in 2024, with GDP per capita of USD 131 thousand, more than 23 times higher than that of Ukraine. Ireland and Switzerland followed, each with GDP per capita exceeding USD 100 thousand.

In 2025, Ukraine ranked 111th in the World Happiness Report, falling six positions compared to the previous year. This is lower than in 2024 (105th place) and significantly lower than in 2012, when the country ranked 87th. The ranking is based on survey data and evaluates factors such as GDP per capita, social support, freedom, generosity, and perceptions of corruption. Ukraine ranked between Niger (110th) and Morocco (112th), with an average score of 4.68 out of 10. Ukraine's neighboring countries ranked higher: Poland (26th), Romania (35th), Hungary (69th), and Russia (66th). Finland was ranked the happiest country in the world for the eighth consecutive year.

In the Economic Freedom Ranking compiled by the Fraser Institute, Ukraine ranked 143rd out of 165 countries. At the same time, Ukraine placed 20th in the ranking of the world's armies according to Global Firepower. In the Fraser Institute's Economic Freedom Index, Ukraine ranked 143rd out of 165 countries, improving its position by seven places compared to the previous year. In the ranking of the wealthiest countries by GDP per capita, Ukraine ranked 141st out of 221 countries.

A comprehensive indicator reflecting socio-economic development is the Human Development

Index (HDI). The Human Development Index (HDI) (known prior to 2013 as the Human Development Potential Index) is an integral indicator calculated annually for cross-country comparison and for measuring living standards, literacy, education, and longevity as the key characteristics of human potential in a given territory. It serves as a standard tool for comparing the overall level of development and quality of life across countries and regions. The HDI is published as part of the United Nations Development Programme (UNDP) Human Development Reports and was introduced in 1990 by a group of economists led by Mahbubul Haq. The conceptual framework of the index was developed with significant contributions from Amartya Sen. The index has been published annually by the United Nations since 1990.

The HDI is measured using three dimensions: a long and healthy life, access to education, and a decent standard of living. A long and healthy life is measured by life expectancy at birth. The level of education is assessed through the mean years of schooling for the adult population, while access to education and knowledge is measured by expected years of schooling for children entering school-that is, the total number of years of education a child of school-entry age can expect to receive, assuming current age-specific enrollment rates remain constant throughout the child's life. The standard of living is measured by gross national income (GNI) per capita in U.S. dollars.

In Ukraine, there is a trend toward gradual improvement in human development; however, significant challenges remain. According to the 2025 ranking, Ukraine ranks 87th out of 193 countries with an HDI value of 0.779. Its indicators include a life expectancy of approximately 71 years, a high level of literacy, and an expected duration of schooling of 14.7 years. This level allowed Ukraine to be classified within the group of countries with high human development.

In 2010, the family of indicators used to measure human development was expanded, and the HDI itself underwent substantial revision. In addition to the traditional HDI, which is a composite indicator based on average statistical values and does not account for internal inequality, three new indices were introduced: the Inequality-adjusted Human Development Index (IHDI), the Gender Inequality Index (GII), and the Multidimensional Poverty Index (MPI).

Depending on HDI values, countries are conventionally classified into four groups according to their level of development: very high (42 countries), high (43 countries), medium (42 countries), and low (42 countries) human development (Table 3).

Countries with very high human development include advanced economies characterized by strong economic performance and high HDI values, such as Iceland, Norway, Switzerland, Denmark, Germany, Sweden, Australia, Hong Kong, the Netherlands, and Belgium.

Table 3. Classification of Countries by Level of Development, 2023

Very high		High		Moderate		Low	
Iceland	0,972	Iran	0,799	Iraq	0,695	Pakistan	0,544
Norway	0,970	Thailand	0,798	Tajikistan	0,691	Senegal	0,530
Switzerland	0,970	China	0,797	Bangladesh	0,685	Gambia	0,524
Denmark	0,962	Peru	0,794	India	0,685	Congo	0,522
Germany	0,959	Grenada	0,791	Equatorial Guinea	0,674	Malawi	0,517
Sweden	0,959	Azerbaijan	0,789	Palestine	0,674	Benin	0,515
Australia	0,958	Mexico	0,789	Namibia	0,665	Guinea-Bissau	0,514
Hong Kong	0,955	Colombia	0,788	Guatemala	0,662	Djibouti	0,513
Netherlands	0,955	Brazil	0,786	Congo	0,649	Sudan	0,511
Belgium	0,951	Moldova	0,785	Honduras	0,645	Liberia	0,510

Source: Calculated data of the Statistical Division of the United Nations Economic Commission for Europe (UNECE). Available at: https://w3.unece.org/PXWeb2015/pxweb/ru/STAT/STAT__20-ME/ [13]

Developing countries are characterized by a medium level of economic and human development. This group includes Iraq, Tajikistan, Bangladesh, India, Equatorial Guinea, Palestine, Namibia, Guatemala, Congo, and Honduras. The least developed countries, where the level of human

development, economy, and infrastructure is the lowest, include many African countries as well as some Asian countries such as Pakistan, Senegal, Gambia, Congo, Malawi, Benin, and others.

An important aspect of a country's development and the most significant factor in socio-economic issues is economic growth, which is one of the primary long-term goals of a country's economic policy. Ensuring the satisfaction of the population's needs, improving the standard of living, and addressing the challenges facing Ukraine raises the issue of achieving stable economic growth rates, as recently the country has been lagging behind developed countries with market economies. Therefore, to achieve stable economic growth, the Government of Ukraine needs to develop a clear economic policy. To determine and assess Ukraine's economic condition, its priority areas, and changes in recent years, it is necessary to use macroeconomic indicators that reflect changes in the national output of the national product and the improvement of the population's welfare.

When constructing a system of economic growth indicators, the following features are used: quantitative/qualitative indicators, absolute/relative indicators, macro/micro-level indicators, and direct/indirect indicators.
Economic growth analysis is conducted using three groups of indicators: changes in absolute quantitative indicators, changes in relative quantitative indicators, and changes in qualitative indicators [1, 2, 4, 6, 10].

The first group includes: annual growth (or decline) rates of GDP, annual growth (or decline) rates of national income, annual growth (or decline) rates of net national income, national wealth, and the value of gold and foreign exchange reserves.

The second group includes GDP per capita, net national product per capita, disposable income per capita, consumption per capita, and others. These indicators more accurately describe the economic situation in the country, and studying their dynamics reflects the growth of production in the economy.

The third group consists of qualitative indicators, such as the sectoral structure of the economy, the level of infrastructure development, the educational level of the population, population health, degrees of social and political stability, environmental conditions, and the development of various institutions-in other words, factors of economic well-being. This group of indicators shows improvements (or deterioration) in the population's quality of life, but does not directly reflect economic growth itself.

Table 4. Gross Domestic Product (GDP)

	At Current Prices		Physical Volume Indices			GDP Deflator
	GDP	GDP per Capita	GDP	GDP per Capita	GDP, % relative to 2021	
	million UAH	UAH	Year-on-Year % Change			% Change from Previous Year
2010	1 120 585	24429	104,1	104,5	104,5	113,7
2015	1 988 544	46413	90,2	90,6	89,7	138,9
2018	3 560 302	84228	103,5	104,0	97,3	115,4
2019	3 977 198	94633	103,2	103,8	100,4	108,2
2020	4 222 026	101138	96,2	96,9	96,7	110,3
2021	5 450 849	131734	103,4	104,4	100,0	124,8
2022	5 239 114	-	71,2	-	71,2	134,9
2023	6 627 961	-	105,5	-	75,2	119,9

Note: GDP per capita for 2022 and 2023 is unavailable due to the unknown total population in the country.

Source: Calculated based on the Statistical Yearbook of Ukraine 2023 and data from the State Statistics Service of Ukraine [16]

However, annual GDP growth rates, annual national income growth rates, and annual net national product growth rates should not be classified as absolute indicators [12-14]. Absolute indicators in statistical analysis are obtained directly through observation, as a result of measurement, evaluation, or counting of a quantitative characteristic that reflects the level of development of a process or phenomenon. Absolute indicators have dimensions. Relative indicators are the result of comparing or relating two absolute values [12-14]. In statistics, relative values include: relative dynamics indicators,

relative structure indicators, relative plan and coordination indicators, relative comparison indicators, and relative intensity indicators. Therefore, by content, annual GDP growth rates, annual national income growth rates, and annual net national product growth rates are classified as relative dynamic indicators.

This indicator can be calculated both in aggregate terms and on a per capita basis, where the total GDP is divided by the country's total population to obtain a measure of the average economic output per individual. For instance, in 2021, Ukraine's nominal GDP amounted to UAH 5,450,849 million, which corresponded to UAH 131,734 per capita, or approximately USD 1,167. By 2023, the country's GDP had increased to UAH 6,627,061 million, reflecting economic growth despite ongoing challenges in the domestic and global economy.

For comparative purposes, GDP indicators for 2024 for the most economically developed countries are presented in Table 5. According to these projections, the top ten countries by nominal GDP in 2024 include the United States, China, Germany, Japan, and India, highlighting their dominant positions in the global economy. In this context, Ukraine ranks 58th globally, indicating a considerable gap between its economic output and that of the world's leading economies. This ranking underscores the ongoing need for structural reforms, investment attraction, and policies aimed at enhancing productivity and per capita income in order to strengthen Ukraine's position in the global economic hierarchy.

Table 5. GDP Calculated by Purchasing Power Parity (PPP) in 2024, USD Trillions (compiled from IMF data)

Global Ranking	Country	GDP, USD Trillion	GDP per Capita, USD	Annual GDP Growth Rate, %
1	United States	27,36	81 630	+2,5
2	China	17,66	12 040	+5,2
3	Germany	4,46	52 730	-0,3
4	Japan	4,21	33 810	+1,9
5	India	3,57	2 500	+7,8
6	United Kingdom	3,34	49 100	+0,1
7	France	3,03	43 780	+0,9
8	Italy	2,25	38 330	+0,9
9	Brazil	2,17	11 350	+2,9
10	…	2,14	52 730	+1,1
…	Canada	…	…	…
58	Ukraine	0,19	19603	+3,0

Note: The study includes the top 10 most developed countries and Ukraine [17, 18, 19]

The highest GDP in 2024 was recorded in the United States at USD 27.36 trillion, with a GDP per capita of USD 81,630 and an annual GDP growth rate of +2.5%. The U.S. economy is distinguished by its diversity and dynamism, driven by sectors such as technology, finance, manufacturing, healthcare, and services. It has a strong consumer market that stimulates innovation and entrepreneurship, well-developed infrastructure, and a favorable business environment [15-17]. The second-largest economy in the world is China, which has shown the highest growth rates over recent decades. Its GDP is USD 17.66 trillion, GDP per capita USD 12,040, and annual growth rate +5.2% [15-17]. China's economy relies on manufacturing, exports, and investment. The country benefits from a large labor force, developed infrastructure, and a growing consumer market. However, China faces challenges such as income inequality, demographic issues, and rising debt.

Germany remains one of the world's strongest economies, although in 2024 its GDP decreased by 0.3%, amounting to USD 4.46 trillion, GDP per capita USD 52,730, and an annual growth rate of -0.3% [11, 12, 17]. The decline is due to high inflation, rising interest rates, reduced economic activity both domestically and internationally, and increasing electricity prices, which heavily affect industrial enterprises. Nevertheless, Germany has a solid foundation due to its highly skilled workforce, innovation potential, and stable political system. The German economy is export-oriented, particularly in high-tech

products, and has a strong services and industrial sector. Japan, the fourth-largest economy globally, shows stable growth of 1.9%. Its GDP is USD 4.21 trillion, GDP per capita USD 33,810, and annual growth rate +1.9% [17]. The country is globally known for its high-tech companies in electronics, automotive, and robotics. Japan has a developed financial sector and robust infrastructure, although it faces demographic challenges, including population aging and low birth rates.

India continues its rapid economic development, with a GDP of USD 3.57 trillion, GDP per capita USD 2,500, and an annual growth rate of +7.8% [17]. The country has a large domestic market, a young and dynamic labor force, and a growing IT sector. India is also actively investing in infrastructure and implementing economic reforms. However, challenges such as poverty, inequality, and corruption persist. The United Kingdom exhibits minimal GDP growth due to the effects of Brexit and global economic challenges. Its GDP is USD 3.34 trillion, GDP per capita USD 49,100, and annual growth rate +0.1% [17]. The financial sector remains a key driver of the economy, along with industry and services. The UK also invests in infrastructure and develops renewable energy sources. France's economy in 2023 showed moderate growth of 0.9%, primarily due to increased domestic demand. GDP is USD 3.03 trillion, GDP per capita USD 43,780, and annual growth rate +0.9% [17-18]. France has one of the largest economies in the world and is the second-largest economy in the EU after Germany. However, it faces challenges such as high public debt and inflation. Italy demonstrated notable growth, overcoming previous economic difficulties. GDP is USD 2.25 trillion, GDP per capita USD 38,330, and annual growth rate +0.9% [17-18]. Key economic sectors include manufacturing, particularly in fashion, design, and food production. Tourism also plays an important role, attracting millions of visitors annually.

Brazil continues to recover from recession, with a GDP of USD 2.17 trillion, GDP per capita USD 11,350, and annual growth rate +2.9% [17-18]. Agriculture, especially soybean and sugarcane production, is a crucial sector. Mining and industry also play significant roles in the economy.Canada, despite modest GDP growth in 2024, remains a stable and developed economy. GDP is USD 2.14 trillion, GDP per capita USD 52,730, and annual growth rate +1.1% [17-18]. The country is rich in natural resources such as oil, gas, and timber, which are important export commodities. Manufacturing and services also contribute significantly. Challenges include high housing costs and uncontrolled immigration, which has affected economic growth.

The distribution of average annual GDP growth rates among the ten most developed countries provides an interval of variation for this indicator globally, ranging from 0.1% to 7.8%, with an average growth rate of 2.3%. Ukraine, with an average growth rate of 3%, also falls within this interval. Nevertheless, Ukraine significantly lags behind developed countries, ranking 58th. A high GDP per capita in world countries indicates a developed economy and a higher standard of living. However, GDP has limitations. It does not account for production in households, the informal sector, or shadow economy. Since these types of activity exist in every country, the real amount of goods produced in society is always slightly higher than GDP. Countries with less developed markets and larger informal economies have a relatively higher amount of unrecorded goods. GDP measures the production of goods and services but does not account for environmental degradation or health impacts. Negative externalities of production, excessive military production, and defense-related output are also excluded [20]. Considering these limitations, GDP may overestimate societal welfare. A more accurate measure of material well-being is the real output of society, which reflects actual production results and welfare.

Macroeconomic assessment of goods and services produced in a country annually can be expressed as nominal and real GDP. Nominal GDP is calculated at current prices, whereas real GDP is adjusted for price fluctuations relative to a base or previous year. Increases in nominal GDP may occur due to positive inflation, whereas real GDP eliminates this effect, providing a more accurate understanding of the country's actual economic condition (Table 6).

As shown in Table 3, according to the State Statistics Service of Ukraine, the country's nominal GDP exhibited a rising trend from 2012 to 2024, which can be explained by high inflation rates. Ukraine reached its highest nominal GDP in 2024 at UAH 7,658,659 million, which is 543.60% or UAH 6,249,770

million higher than in 2012 (UAH 1,408,889 million) and 17.14% higher than the previous year.

Table 6. Dynamics of Ukraine's GDP from 2012 to 2024

Year	Nominal GDP (current prices), million UAH	Real GDP (previous year's prices), million UAH	Difference (Real – Nominal)	
			Difference (Real – Nominal)	%
2012	1408889	1304064	-104825	-7,4%
2013	1454931	1410609	-44322	-3,0%
2014	1566728	1365123	-201605	-12,9%
2015	1979458	1430290	-549168	-27,7%
2016	2383182	2034430	-348752	-14,6%
2017	2982920	2445587	-537333	-18,0%
2018	3558706	3083409	-475297	-13,4%
2019	3974564	3675728	-298836	-7,5%
2020	4194102	3818456	-375646	-9,0%
2021	5459574	4363582	-1095992	-20,1%
2022	5191028	3865780	-1325248	-25,5%
2023	6537825	5518062	-1019763	-15,6%
2024	7658659	6821088	-837571	-10,9%

Source: Calculated based on data from the World Bank and the State Statistics Service of Ukraine http://www.ukrstat.gov.ua [19-20]

The growth of real GDP in 2024 was supported by financial assistance from international partners amounting to UAH 1,747.7 billion, which was used for infrastructure reconstruction, social payments, and healthcare services, thereby increasing domestic demand. Additionally, the expansion of exports through the Ukrainian maritime corridor contributed to growth, with 76.4 million tons of cargo shipped to 52 countries in 2024 [20]. However, this growth does not indicate a genuine improvement in the national economy; on the contrary, it confirms the presence of recession and stagflation. In 2022, a decline was observed due to military actions in the country, although by 2023 nominal GDP increased 1.26 times compared to 2021, and in 2024 it increased 1.17 times compared to 2023. Nevertheless, real GDP declined in 2014 and 2022.

The decrease in real GDP in 2014 was due to the complex political situation, including the war in the east, the annexation of Crimea, and high inflation rates of 24.9% in 2014 and 31.3% in 2015. As a result of currency depreciation, nominal GDP grew 1.3 times in 2015 compared to 2014 and 1.2 times in 2016 compared to 2015. Subsequently, the situation changed: in 2016, real GDP increased 1.49 times compared to 2014 due to government measures aimed at halting the devaluation of the national currency. From 2017 to 2021, the Ukrainian economy gradually recovered from the crisis.

In 2022, real GDP amounted to UAH 3,865,780 million, reflecting a 29.1% decline compared to 2021, and nominal GDP also decreased to UAH 5,191,028 million, due to military actions on national territory. The largest economic losses occurred in the first months of the war, with GDP losses of 14.9% in Q1, 36.9% in Q2, and 30.6% and 31.4% in Q3 and Q4, respectively [19]. Urgently implemented government regulatory measures at the beginning of the war, aimed at reducing the fiscal burden on businesses and stimulating small enterprise development, helped stabilize real GDP in Q3 2022 and maintain it at a relatively stable level by the end of the year [20, p. 268].

The increase in nominal GDP from 2012 to 2024, alongside the negative dynamics of real GDP in 2014 and 2022, indicates high inflation. Thus, constraining factors on economic growth include the continuation of martial law and uncertainty regarding future events, logistical restrictions for exporters and importers due to damaged transport networks, and the destruction of production facilities and infrastructure.

Analyzing GDP dynamics allows the identification of crisis periods in Ukraine. The trend of annual nominal GDP growth shows that real GDP decreased by UAH 65,167 thousand, or 4.56%, during 2014-2015. From 2016 to 2021, the economy recovered, with real GDP more than doubling over six years. The

GDP decline in 2022 to UAH 3,865,780 million represents the largest drop during the studied period.

Studying Ukraine's nominal GDP in dollar terms during 2014–2015 and 2022 [20] reveals currency devaluation, confirming the deep economic crisis in those years. The IMF recommends that countries with "weak economies," including Ukraine, implement structural reforms to ensure stable GDP growth [20].

During 2022–2023, GDP growth in national currency reached 14.48%, while in dollar terms it was 10.37%. For 2024-2025, initial projections estimated growth at 13.1% in national currency and 2.8% in dollar terms (Table 7). However, Ukraine's economic growth in 2025 was expected to reach 3.7%, but it turned out to be lower than predicted due to intensified shelling, poor harvests, and destruction of production facilities, infrastructure, and housing.

Table 7. Dynamics of Ukraine's Macroeconomic Development Indicators for 2022–2027

Macroeconomic Indicator	YEAR					
	2022	2023	2024	2025	2026	2027
Nominal GDP, UAH billion	5 239	6 538	7 485	8 466	10 123	11 783
Nominal GDP, USD billion	162,0	178,8	183,9	188,1	217,7	253,9
GDP, % real change	-28,8	5,3	3,5	2,7	7,5	6,2
Consumer Price Index, % change December to December	26,6	5,1	7,9	9,5	10,4	5,9
Consumer Price Index, % average annual change	20,2	12,8	8,5	9,7	9,9	8,0
Official exchange rate, USD, average for the period	32,3	36,6	40,8	45,0	46,5	46,4
Unemployment rate, %, annual average*	21,1	18,2	18,7	17,7	17,4	16,5
Real wages, % annual average change	-11,4	3,5	8,5	8,1	5,2	6,8
Nominal wages, annual average, thousand UAH	14,8	17,4	21,8	24,4	28,2	32,5
Export of goods and services, USD billion	57,5	50,9	56,3	57,2	67,3	80,3
Import of goods and services, USD billion	83,3	88,6	96,4	97,9	94,6	101,3

The unemployment rate for 2022 and 2023 is based on actual data from the National Bank of Ukraine (NBU).

Sources: NBU data; On the Approval of the Main Forecasts… | dated 15 Dec 2023, No. 1315 (rada.gov.ua); On the Approval of the Main Forecasts… | dated 28 June 2024, No. 780 (rada.gov.ua); Budget Declaration for 2025–2027. Explanatory Note to the Law on the State Budget 2024.

The new forecast initially estimated GDP growth at 2.3%, which was later revised down to 2.1% [16-20]. However, GDP growth in 2026 is expected to reach 4.7% due to reconstruction-related investments. The Declaration approved by the Cabinet of Ministers of Ukraine (Resolution No. 774 of 27 June 2025) for 2026-2028 projects GDP growth as follows: 4.5% in 2026, 5% in 2027, and 5.7% in 2028 [20]. Growth in the coming years is expected to be driven by exports, industrial modernization, and the recovery of domestic demand. Specifically, exports from Ukraine are projected to increase by 40.39% during 2025-2027 (Table 4). Nominal GDP is expected to increase in national currency by 19.57% in 2025-2026 and by 16.40% in 2026-2027, while in U.S. dollar terms the growth will be 15.74% and 16.63%, respectively (Table 4). Accordingly, nominal GDP is projected to rise from UAH 10.4 trillion in 2026 to UAH 13.5 trillion in 2028 [20]. The main driver of economic growth is expected to be increased consumption, supported by rising wages and pensions, the expansion of lending, and improved consumer confidence. The indicator reflecting changes in the overall price level of goods and services purchased by households for non-production purposes is called the Consumer Price Index (CPI). It measures the change in the cost of a fixed basket of goods and services in the current period relative to the previous period, providing a key measure of inflation that affects both households and policymakers. The CPI is forecasted to decrease on average by 17.53% during 2025–2027, indicating a potential easing of inflationary pressures in the Ukrainian economy. This projected decline in CPI may result from a reduction in real wages by 16.05%, decreasing from 8.1% to 6.1%, despite a simultaneous increase in nominal wages from UAH 24,400 to UAH 32,500, or +33.20% (Table 7). Such a scenario suggests that while workers may receive higher nominal incomes, the purchasing power of these wages is constrained by slower growth in household consumption capacity and inflation adjustments. It is important to note that real GDP and GDP growth rates alone do not fully capture the standard of living. While these indicators reflect the overall size and growth of the economy, they may not accurately show how economic output

translates into individual well-being. A more precise measure of a country's economic development and population welfare, frequently used for international comparisons, is real GDP per capita. This metric represents the value of goods and services produced per person, thereby linking national production dynamics directly with living standards. By examining real GDP per capita, analysts can better understand whether economic growth leads to tangible improvements in the quality of life for the population or whether gains are concentrated among specific groups. The dynamics of Ukraine's GDP in both national currency and U.S. dollars, which reflect both domestic economic activity and international comparability, are presented in Table 8, providing a detailed picture of economic trends over the forecasted period.

Table 8. Dynamics of Ukraine's Nominal GDP per Capita for 2012–2023

Year	Nominal GDP, UAH	Change in Nominal GDP from Previous Year		Nominal GDP, USD	Change in Nominal GDP from Previous Year	
		UAH	%		USD	%
2012	30 913	2 099	7,3%	4 005	300	8,1%
2013	31 989	1 076	3,5%	4 188	183	4,6%
2014	35 834	3 845	12,0%	3 105	-1 083	-25,9%
2015	46 210	10 376	29,0%	2 125	-980	-31,6%
2016	55 854	9 643	20,9%	2 188	63	3,0%
2017	70 224	14 371	25,7%	2 638	451	20,6%
2018	84 192	13 968	19,9%	3 097	458	17,4%
2019	94 590	10 398	12,4%	3 662	565	18,2%
2020	100 433	5 843	6,2%	3 752	90	2,5%
2021	131 907	31 475	31,3%	4 828	1 076	28,7%
2022	147 998	-5 755	-4,4%	4 576	-252	-5,2%
2023	189 503	41 505	28,0%	5 181	605	13,2%

Source: Calculated based on World Bank data (worldbank) and IMF (http://www.imf.org) [20].

According to Table 8, the nominal GDP per capita in Ukraine from 2012 to 2023 shows uneven dynamics, characterized by sharp declines during crisis periods and gradual recovery in subsequent years. Overall, despite occasional increases in certain years, the indicator remains insufficient to ensure sustainable improvement in living standards and convergence with Central European economic benchmarks.

Conclusions and Prospects.

The conducted study, employing modern methods of scientific analysis, provides a comprehensive assessment of Ukraine's macroeconomic development and identifies key factors affecting economic stability and growth dynamics. The analysis allowed the formation of a holistic understanding of the current state of the national economy, its resource potential, structural imbalances, and main development challenges:

Based on statistical and systemic analysis, it was established that the dynamics of gross domestic product (GDP), GDP per capita, and the Human Development Index (HDI) in Ukraine from 2012 to 2023 are characterized by instability, periods of deep stagnation, and slow recovery. Economic growth rates remain below Central European averages, indicating systemic problems in the country's development model.

It was determined that low levels of economic freedom, institutional weakness, managerial errors, political instability, and external shocks have significantly constrained the effective use of Ukraine's natural, industrial, and human resources. This has led to a reduction in national economic competitiveness and deterioration of the country's positions in international economic rankings.

The study confirmed that the Human Development Index is an important integrative indicator for assessing the quality of economic growth. Declining income levels, demographic crises, labor migration, and inequality in access to social benefits negatively affect the long-term development prospects of

Ukraine's economy.

The research also established that Ukraine's territorial, natural-resource, and infrastructure potential remains significant; however, its effective utilization requires structural economic modernization, a move away from a raw-materials-based development model, and the activation of innovation and investment processes.

It is substantiated that the restoration of macroeconomic stability is possible through improved state economic policy, enhanced efficiency in public finance management, development of human capital, stimulation of entrepreneurship, and deeper European integration.

The prospects for further economic development in Ukraine are associated with increasing economic freedom, strengthening institutional capacity, expanding international economic cooperation, and creating conditions for sustainable improvements in living standards. Implementation of these strategies will contribute to better macroeconomic indicators and enhance Ukraine's position within the global economic system.

References

1. According to the Administration of Sea Ports of Ukraine in 2024. (2024). Ministry for Communities, Territories and Infrastructure Development of Ukraine. https://mtu.gov.ua/news/36333.html

2. Average wages in Ukraine. (2026). Minfin. https://index.minfin.com.ua/ua/labour/salary/average/

3. Boiko, Y. M., & Hapak, N. M. (2017). GDP of Ukraine: Level and dynamics trends. *Scientific Bulletin*, 69–72.

4. Cabinet of Ministers of Ukraine. (2025). *Resolution No. 774 of 27 June 2025 "On approval of the Budget Declaration for 2026–2028"*. https://www.kmu.gov.ua/npas/pro-skhvalennia-biudzhetnoi-deklaratsii-na-20262028-s774270625

5. Center for Economic Strategy. (2026). *Difficult year 2026: Shelling and poor harvests worsened Ukraine's economic prospects*. https://ces.org.ua/worsened_economic_prospects/

6. Forbes Ukraine. (2024). *Will GDP grow in 2024? What to expect for inflation and exchange rates?* https://forbes.ua/ru/money/ekonomika-ukraini-u-2024-rotsi-chogo-ochikuvati-08012024-18370

7. Gross domestic product of Ukraine in 2025. (2025). Minfin. https://index.minfin.com.ua/ua/economy/gdp/

8. Hlukha, H. Ya. (2013). System of economic growth indicators. *Economic Theory. Academic Review*, *2*(39), 5–12.

9. Klividenko, L. M., & Rusyatynska, A. O. (2016). Modern problems of macroeconomic indicators research in the context of economic development. *Money, Finance and Credit*, (10), 804–808.

10. Ministry of Economy of Ukraine. (2024). *Forecast of economic and social development of Ukraine for 2025–2027*. https://me.gov.ua/Documents/Detail?lang=uk-UA&id=428b492a-6d7c-4380-97c7-78ccb7f4a1fa

11. Pashchenko, Yu. Ye. (2020). Macroeconomic indicators of Ukraine's development. *Money, Finance and Credit*, *31*(70), No. 2, 133–141.

12. Population of Ukraine. (2026). Minfin. https://index.minfin.com.ua/ua/reference/people/

13. Public debt of Ukraine. (2025). Minfin. https://index.minfin.com.ua/ua/finance/debtgov/

14. Ranking of the 20 largest countries by GDP in 2024. (2024). PMGU Info. http://pmguinfo.dp.ua/mir/8055-rejting-20-najbilshikh-krajin-za-vvp-u-2024-rotsi

15. State Budget revenues of Ukraine. (2024). Minfin. https://index.minfin.com.ua/ua/finance/budget/gov/income/2024/

16. State Statistics Service of Ukraine. (2023). *Statistical yearbook of Ukraine, 2023*. Kyiv. https://stat.gov.ua/uk/publications/statystychnyy-shchorichnyk-ukrayiny-2023

17. Ukraine ranked 58th among the largest economies in the world. (2024). Delo.ua. https://delo.ua/news/ukrayina-posila-58-me-misce-sered-naibilsix-ekonomik-svitu-439969/

18. United Nations Economic Commission for Europe. (2026). *Calculated data of the Statistical Division of the UNECE*. https://w3.unece.org/PXWeb2015/pxweb/ru/STAT/STAT__20-ME/

19. World Bank & International Monetary Fund. (2026). http://www.worldbank.org, http://www.imf.org

20. Zolotova, O., Ivanova, V., Symak, D., Kudinov, O., & Slavuta, O. (2023). Economy under martial law: Problems and ways to overcome the crisis (Ukrainian experience). *Financial and Credit Activity Problems of Theory and Practice*, *3*(50), 265–281. https://doi.org/10.55643/fcaptp.3.50.2023.4076

Received: 02.18.2026 / Review 04.04.2026 / Accepted 04.30.2026