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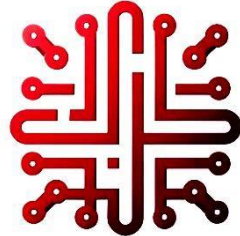


EUROPEAN PERSPECTIVE:

СУЧАСНІ ВИКЛИКИ
ТА МОЖЛИВОСТІ ДЛЯ УКРАЇНИ



Громадська організація «Інститут транскордонних ініціатив»
Лабораторія проєктів та ініціатив
Волинський національний університет імені Лесі Українки
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**«EUROPEAN PERSPECTIVE:
СУЧАСНІ ВИКЛИКИ ТА МОЖЛИВОСТІ
ДЛЯ УКРАЇНИ»**

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У монографії розкрито стратегічні аспекти євроінтеграційного розвитку з фокусом на інклюзивному та смарт підходах, зеленій трансформації, сталому розвитку промисловості та сільських територій, а також вплив економічної турбулентності на Україну та Європейський Союз. Розглянуто інституцій та інструментів інклюзивного розвитку ЄС, роль цифрових технологій та інноваційної екосистеми підприємств. Досліджено досвід ЄС у зеленій економіці. Розкрито зміст стратегічних комунікацій Європейського Союзу в умовах конфлікту з росією, а також вплив економічної турбулентності на фінансові ринки Польщі, ЄС та інших країн світу. Здійснено аналіз економічного відновлення та зростання української економіки.

Монографія має значний потенціал для наукових досліджень та реалізації практичних рекомендацій щодо європейської інтеграції та сталого розвитку України. Видання призначене для науковців, представників різних академічних дисциплін, докторантів, аспірантів, студентів й усіх зацікавлених в глибокому розумінні сучасних викликів та можливостей, пов'язаних з євроінтеграційними процесами та сталим розвитком.

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CHAPTER 5.3. ECONOMIC RECOVERY AND GROWTH OF THE UKRAINIAN ECONOMY

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For the existence and development of human society, the process of producing material and non-material goods must constantly be renewed. In order to ensure the well-being and improvement of the lives of every member of society, this process should entail positive changes and be characterized by the growth of various indicators and metrics. Therefore, economic growth must.

5.3.1. Theories and Models of Economic Growth

Economic growth is the cornerstone of socio-economic progress in society, offering prospects for increasing national wealth and improving the standard of living for every individual. There is no clear justification for the category of «economic growth» in both general economic and politico-economic aspects in scientific literature. The first mentions of the theory of economic growth can be found in the works of Adam Smith and David Ricardo, where they discuss the «stationary state» [13, p. 359]. Thus, in their opinion, the main reason for economic growth is the constant pursuit of achieving a stationary state. This state does not imply stagnation in the economy but rather a condition where population, capital, and technology remain unchanged.

According to John Maynard Keynes, characteristics of development include fluctuations and sharp declines. One of Keynes' followers, Roy F. Harrod, noted that the main issue in the problem of economic growth is the

rate of income growth necessary for the full utilization of the continually increasing capital stock. Another perspective on economic growth was formulated by Evsey Domar, who concluded that investments have a dual nature: they not only generate income but also increase productive capacity. Considering Keynes' concept of the equality of savings and investments and the mandatory return of income received in the production process, Domar believed that a more realistic concept should focus on the formation of additional capital and further expansion of productive capacity. The methodological essence of the problem lies in determining the volume of investments necessary to ensure income growth and the required level of increase in productive capacity. Thus, stability is possible if income and investments increase with accelerating growth. If the volume of investments does not correspond to the conditions of growth, excess capacity arises, which inhibits further investment [13, pp. 359-360].

Roy F. Harrod considered growth rates that ensure the continuity of investment at the expected profit level to be «justified». However, the availability of labor and the state of technology impose limitations on «justified» growth. Therefore, «justified» growth is reflected in the maximum growth rate under existing economic conditions [12, p. 360].

Robert Solow's theory of economic growth [27] is based on the neoclassical assumption of perfect competition in factor markets, ensuring full employment of resources. Production output is a function not only of capital but also of labor, which are substitutes, and the sum of the output elasticities with respect to these factors equals one. Thus, in the works of the representative of the neoclassical school, R. Solow, who supplemented the main hypotheses of Harrod-Domar, proposed a model of economic growth [3, pp. 65-94], the factors of production of which are not only capital but also labor (5.1):

$$Y = F(K, L), \quad (5.1)$$

where Y – the output (production volume); K – capital; L – labor.

Thus, model (5.1) describes the equilibrium of the economic system under conditions of neutrality of technical progress and constant returns to scale. Next, taking into account the development of the theory, technological shifts as a result of changes in consumption rates and diminishing returns to scale are added to (5.1). The scientist assumes that a necessary condition for the equilibrium of the economic system is the equality of aggregate demand and aggregate supply.

Based on the Solow model, the relationship between three sources of economic growth is revealed: investment, labor and technical progress. Thus, Solow's model demonstrated that a higher saving rate results in a higher capital-to-labor ratio and therefore a higher rate of balanced growth [27]. However, growth is not an end in itself, as the growth in the savings rate significantly limits consumption.

The next step in the development of the concept of economic growth was E. Phelps' research on the optimal amount of capital in society. For this, E. Phelps used the «golden rule» formulated by him, according to which the criterion for determining the rate of savings should be the maximization of public welfare - the largest possible amount of consumption. The rule is performed under the assumption of equality between the marginal product of capital and the rate of capital outflow (depreciation).

Moreover, neoclassical models of economic growth are utilized as tools for economic forecasting and analyzing the economic efficiency of production. Neoclassical growth theories do not explain the internal nature and mechanism of scientific and technological progress, as economic growth is treated as a techno-economic rather than a socio-economic process.

The contemporary model of economic growth that incorporates the theory of endogenous scientific and technical progress was developed by P. Romer. The key factor of endogenous growth in P. Romer's model is a variable called «knowledge» or «information». It is assumed that information found in inventions and discoveries is available to all and can

be used by everyone simultaneously. The total volume of human capital remains unchanged. Only its redistribution between the production sector and the research and development sector is possible, according to consumer preference functions. The main idea of P. Romer's theory is as follows: «There is a trade-off between consumption today and knowledge that can be used to expand consumption tomorrow». He articulates this idea as «research technology» [2], which produces «knowledge» from past consumption. Thus, the rate of economic growth in P. Romer's model is directly dependent on the amount of human capital concentrated in the sphere of gaining new knowledge. Practically, this means that the field of scientific research influences the economy not only directly through applied ideas and developments. Its very existence is a necessary (but not sufficient) condition for economic growth, as it ensures the accumulation of human capital. Therefore, according to P. Romer, countries with a larger accumulation of human capital will experience higher rates of economic growth [2]. Consequently, the development of free international trade will also contribute to increasing growth rates, as the exchange of products expands the boundaries of the economic system and thus leads to an increase in human capital.

Contrary to Romer's ideas, Lucas R. proposed an alternative to the neoclassical model. In his model, human capital serves as the engine of economic growth. He constructs two models: in one, human capital is the sole input factor influencing the production function, while in the other, production is determined by both physical and human capital. In the first model, the growth of human capital depends on how workers allocate their time between current production and the accumulation of human capital. In the second, the growth of human capital is a positive function of efforts dedicated to producing new goods [1]. The most well-known function by R. Lucas takes the form (5.2):

$$y = Ax^{\beta}h^{\gamma}, \quad (5.2)$$

where y – represents the income of a skilled worker; x – represents the capital per skilled worker; h – represents the human capital per worker; h^y – is an external effect that increases the productivity of an employee at any level of his qualification h ; A – the level of technology in the economy (according to R. Lucas, this is the average level of human capital of employed workers).

Neo-Keynesian theories of economic growth consider physical capital accumulation as the primary source, with the main instrument of growth regulation being the rate of accumulation [13, p. 360].

The theories mentioned above formed the basis of a later understanding of the essence of «economic growth». Economic growth is a central issue in evaluating the effectiveness of any economic system. Therefore, several definitions of «economic growth» are provided:

According to L. Abalkin, it is the continuous increase in the real volume of production accompanied by improvements in the technological, economic, and social characteristics of society.

According to A. Dobrynin and L. Tarasevich, it is long-term changes in the natural level of real production volume associated with the development of productive forces over a long-term time interval.

According to A. Filipenko, it is simply the increase in the real GDP of a nation (country) in one period compared to another.

According to O. Ozherelyev, it is the increase in the volumes of social production, the expansion of the economy's capabilities to meet growing consumer needs, and ensuring consumption in necessary amounts.

M.P. Butko provides the following definition of «economic growth»: «Economic growth as an economic category characterizes the harmonized interaction of productive forces and production relations in society, leading to improvements in quantitative development indicators, stimulating economic activity, business, and investment activity» [6, p. 302]. The author considers the most important criteria of economic growth to be the

intensity, nature, degree, and efficiency of resource utilization; vectors of interaction between regional, national, and global economies; legal factors; and the foundational level on which economic growth is based. Generalization of types of economic growth is presented in Fig. 5.7.

Danilyshyn B.M., Chernyuk L.G., Fashevsky M.I. emphasize that stability or maintaining proportions and growth rates is a necessary condition for the development process. Therefore, the goal of balanced development of the region is efficient management ensuring social and environmentally comfortable living conditions for the population [7, p. 135-136].

Varnalii Z.S. emphasizes that economic growth should be understood as an increase in the scale of production, improvement in the quality of goods and services, and ultimately, this will ensure an increase in the standard of living of the population [8, p. 407]. For observing the development of regional economy, Varnalii Z.S. proposed a monitoring system for the region based on economic, social, and environmental indicators of sustainable regional economic development [9, pp. 505–508]. Furthermore, Dolishniy M. I., while studying the factors of regional development, noted that established determinants of development have exhausted themselves since they are based on old principles of development: industrialization of all territories and principles of intensification of industrial development of resources. Considering global experience, Dolishniy M. I. emphasizes that the goal of regional development is to increase the capitalization of regions, which involves increasing the value of assets located in the territory of a particular region. Capital concentration occurs where the value of assets is maximal. Therefore, it is necessary first and foremost to determine which assets located in a specific region of the country can positively influence the level of capitalization and which regional formations are capable of attracting asset flows.

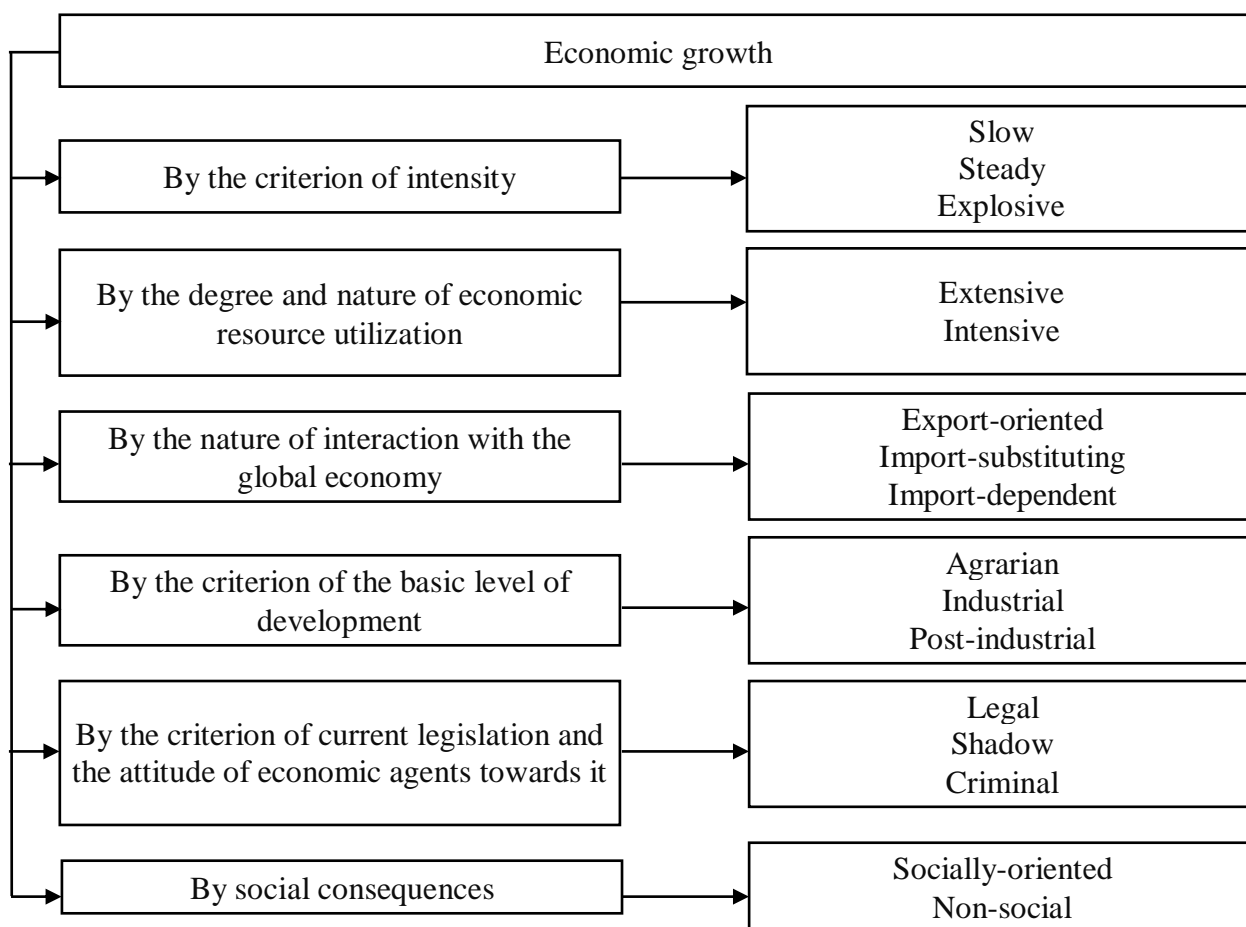


Fig. 5.7. Classification of types of economic growth [6]

Thus, when studying economic growth, the main issue is the assessment of quantitative and qualitative development of production, identifying the dynamics of quantitative increase and qualitative improvement of social product and its production factors. Economic growth is a necessary and most important precondition, a fundamental component of economic development.

5.3.2. Factors of Economic Growth in Ukraine

The factors of economic growth in Ukraine include macroeconomic factors, which are divided into supply factors, demand factors, and distribution factors [21, p. 22–23]. Supply factors determine the capacity for economic growth. Alongside factors that drive economic growth, there are also those that restrain it. These factors include legislative activities of

the state in the areas of labor protection, environmental protection, and others. Additionally, there are factors that significantly influence the pace of economic growth but are difficult to quantitatively assess. These factors include the country's abundance of natural resources, quantity and quality of arable land, climatic conditions, social, cultural, political atmosphere, and even national traditions. International specialization and external trade also contribute to economic growth: a country can create combinations of goods and services beyond its production capabilities, but it should be remembered that this may lead to an increase in the trade deficit due to excess imports over exports [21, p. 27].

One of the most important factors of economic growth for Ukraine is capital (investment or capital investment), which must be attracted for the general activation of entrepreneurial activity, structural transformations in the national economy, technological and technical rearmament, modernization and rearmament. - profiling of existing production, overcoming the raw material orientation of the economy, development of production infrastructure, training and retraining of highly qualified personnel to meet international standards.

The level of investment activity has a significant impact on the amount of national income in society, many macroeconomic proportions in the domestic economy depend on its dynamics. Regarding the formation of investment capital for structural changes in the economy, it is necessary to take into account the country's ability to mobilize both internal and external investment resources.

As there are factors of economic growth such as labor (quantity and quality of labor resources), land (quantity and quality of natural resources), capital (investment or investments) taking into account the technological level of production means provided by scientific and technological progress, entrepreneurial abilities (understood not only as the economic activities of entrepreneurs but also as an economic mechanism that can either promote or inhibit economic development), labor productivity [14].

All factors are closely interrelated. On the one hand, high rates of

economic growth are possible with the presence and rational use of production resources, achievements in science and technology, but the limitation of natural resources restrains it. On the other hand, a country may possess abundant natural resources but lack funds for their development. Regarding the availability of skilled labor, Ukraine has significant potential.

Factors contributing to increased investment activity include: increasing investment resources of the population due to growth in real monetary incomes; improvement of the financial condition of economic entities; formation of a positive investment image of Ukraine.

Therefore, let's perform an assessment and analysis of one of the indicators of socio-economic development of the country – Gross Domestic Product (GDP), which reflects the final market value of all goods and services produced within a country's borders in all sectors of the economy for consumption, exports, and accumulation. Considering the dependence of our economy on the exchange rate of the US dollar (due to the high share of imports into Ukraine of goods, raw materials, semi-finished products, and energy resources), let's examine this indicator in dollar equivalent (Fig. 5.8).

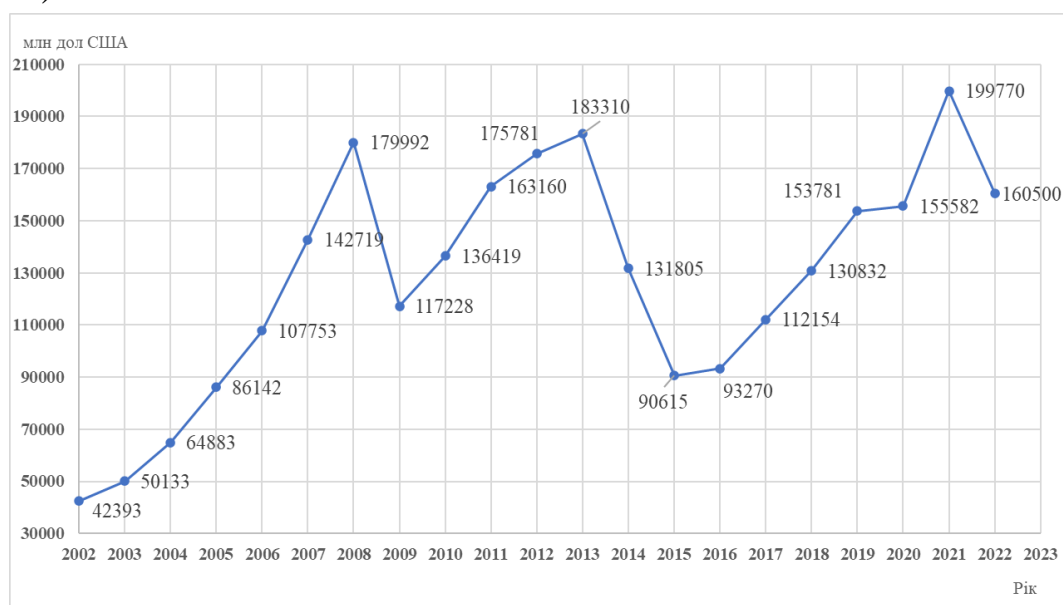


Fig. 5.8. Dynamics of GDP of Ukraine for the years 2002-2022 (billion US dollars, compiled based on data from the National Bank of Ukraine)

The dynamics of GDP demonstrate crisis phenomena in the economy of Ukraine. The highest GDP indicators are characteristic of the pre-crisis years of 2008, 2013, and 2021. Starting from 2015, there is a positive GDP growth trend: +2.9% in 2016, 0.3% in 2017, and 28.4% in 2021. However, there is a significant reduction in GDP by 19.7% in 2022 due to the onset of hostilities on the territory of Ukraine. According to official data from the State Statistics Service, the change in real GDP of Ukraine (in % compared to the previous year) demonstrates economic growth from 2015 to 2021. The best value of the real GDP indicator was observed in 2016, while the lowest values were in 2020 and 2022 (Fig. 5.9).

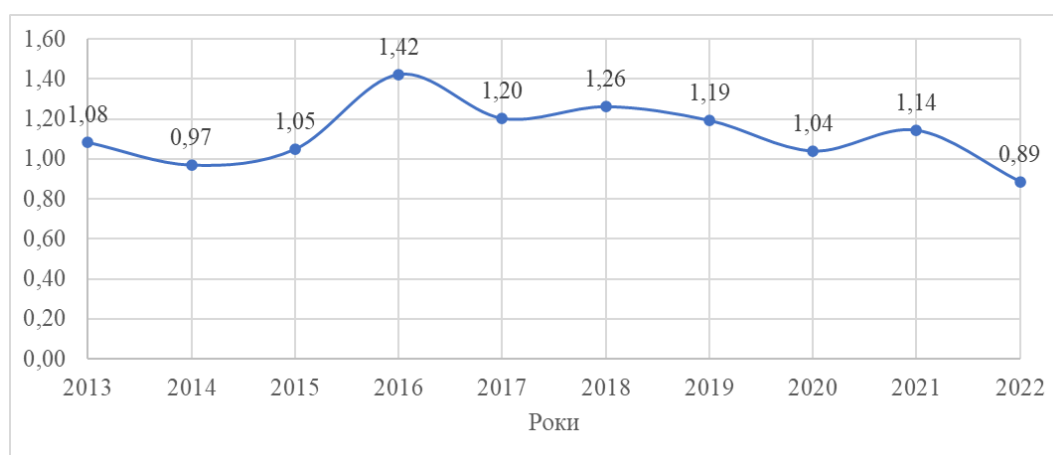


Fig. 5.9. Dynamics of real GDP of Ukraine
(in % compared to the previous year, compiled based on data from the State Statistics Service of Ukraine)

The economic policies of the years 2013–2015 resulted in the neutralization of positive shifts in Ukraine’s economic dynamics. The year 2020 marked the beginning of a global pandemic, while 2022 saw a full-scale invasion of Ukraine’s territory. All of these events necessitate new approaches to stimulate the country’s economic growth.

The devaluation of the hryvnia in recent years has led to a situation where labor in Ukraine has become the cheapest among European

countries (with an average salary of about 135 euros; for comparison, the least-paid neighbors are Moldova – 181 euros, Bulgaria – 333 euros, Belarus – 353 euros, Romania – 395 euros [23, с. 270]). The low level of wages stimulates labor migration, including that of highly skilled workers.

The deterioration of the population's savings capacity is evidenced by the low level of gross domestic product per capita (Fig. 5.10): by the end of 2022, GDP per capita stood at 3900.5 US dollars, which is 1.2 times lower than the maximum indicator for Ukraine in 2021.

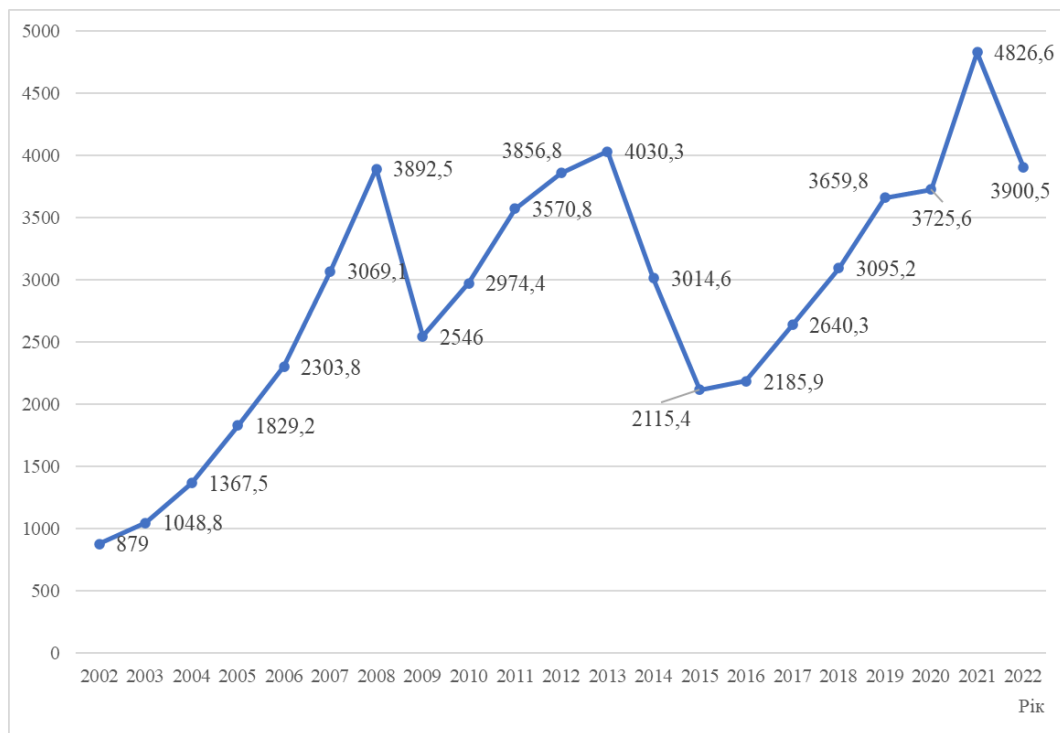


Fig. 5.10. Dynamics of GDP per capita in Ukraine for 2002–2022 (in US dollars, compiled from data provided by the Ministry of Finance of Ukraine)

During the period from 2010 to 2022, the volume of foreign direct investment, where the ultimate controlling investor is a resident (round tripping), was estimated at 10.5 billion US dollars, which constitutes 24% of the inflow of foreign direct investment into Ukraine (43.8 billion US dollars).

The largest volumes of round tripping investments were observed during the period from 2010 to 2013, averaging 32.7% of the total volume. 89% of such investments were directed to enterprises in the real sector.

In 2014-2015, there was a capital outflow from Ukraine due to political changes in the country, as well as the onset of hostilities in the East.

From 2016 to 2020, there was a gradual increase in the net inflow of funds through round tripping operations, but in smaller volumes than before the crisis. In 2016, they accounted for 3.8%, in 2017 – 12.1%, in 2018 – 19.6%, in 2019 – 34.6%, in 2020 – 50.9% of the inflow of foreign direct investment into Ukraine. In 2021, the net inflow through round tripping operations continued to increase. Its volume was estimated at 1.6 billion US dollars, which accounted for 68.5% of the inflow of foreign direct investment into Ukraine.

In 2022, the volume of round tripping was estimated at -0.6 billion US dollars. The outflow of funds from these operations was associated with the full-scale invasion of Russian troops into Ukraine in February 2022, which significantly complicated the economic situation in the country and critically reduced its investment attractiveness (Fig. 5.11).

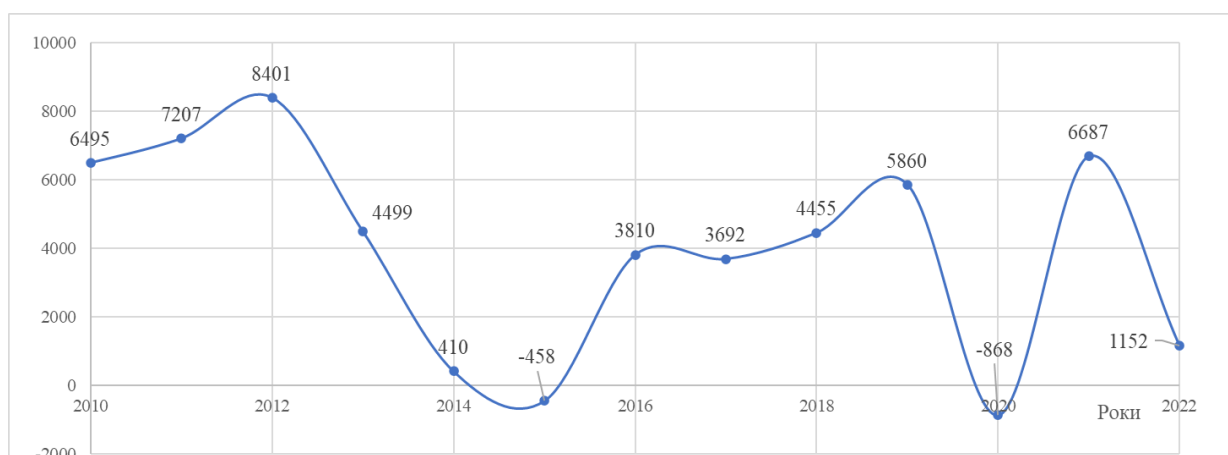


Fig. 5.11. Dynamics of Foreign Direct Investment in Ukraine (in million US dollars) [18]

Among the main factors restraining investment activity and those requiring elimination are:

1. Unsatisfactory state of the financial market and monetary regulation. The development of the financial market is assessed as 121st place out of 140 countries in the “Global Competitiveness Index 2015–2016” [4] and 120th place in 2017-2018 [5]. Therefore, the main factors that determined such a low rating were inflation, expensive credit resources (according to the National Bank of Ukraine, the weighted average interest rate on corporate hryvnia loans as of June 6, 2018, was 15.4%), bank reliability (135th place out of 137 countries), and currency regulation.

2. Corruption (In the Transparency International study «Corruption Perception Index» for 2017, Ukraine ranked 130th out of 180 countries, becoming the most corrupt country in Europe [25]).

3. Political instability. Ineffective tax regulation: the absence of effective mechanisms for tax incentives for investment activity while maintaining a high tax burden on businesses, instability of tax legislation.

4. Excessive administrative barriers to entrepreneurial activity.

5. Increase in government debt.

6. Insufficient legal protection for domestic and foreign investors.

7. Unsatisfactory infrastructure (according to the assessments of experts from the World Economic Forum, Ukraine ranks 132nd in the world in terms of the development level of roads. In addition, more than 9,600 bridges do not meet modern standards and actual loads by technical parameters, 1923 bridges require urgent repair, and 86 bridges are in emergency condition [22]).

8. Insufficiently educated workforce.

9. Inadequate potential for innovation.

10. Crime.

11. Military situation in Ukraine since February 2022.

Addressing the mentioned problems will contribute to improving positions in global rankings, thus fostering the inflow of foreign

investments, activating the economic activities of entities, creating new job opportunities, increasing the tax base, and revenues to budgets and social security funds, as well as raising the income level of the population.

Certain steps in this direction are already being taken, including the recognition by the government of Ukraine of the need for infrastructure modernization as a prerequisite for economic development. The Concept of the State Targeted Economic Program for the Development of Public Roads of National Importance for 2018-2022 has been approved [22].

The next priority for government action should be shifting away from the «Ukraine as a raw material exporter» model and supporting the export of goods with a high value-added component (including through the signing of intergovernmental agreements, providing informational and advisory services to exporting manufacturers, and providing legal and methodological support).

Considering the attractiveness of technologically oriented market economies for foreign investors, in the context of competing for foreign capital, it is necessary to increase the production and export of high- and medium-technology goods. Achieving this task is linked to the modernization of Ukraine's industrial potential, raising its technological level, and structurally restructuring Ukraine's industry. Therefore, the next priority should be measures of state support aimed at the development of production (credit support, tax incentives).

In terms of stimulating import substitution as an additional source of national production growth, it is appropriate to utilize non-tariff protectionism methods in foreign trade, such as the requirement for local content. This method of hidden trade policy involves legislatively establishing the share of the final product that must be produced by local manufacturers if the product is intended for sale in the domestic market. Implementing this will intensify the decision-making process for non-residents regarding the registration of structural units in Ukraine, which will at least perform certain production (assembly, mixing, packaging) functions with the prospect of full-scale production in Ukraine.

Regarding the investment activity of the population, it is worth noting that one of the most effective mechanisms for transforming savings into investments in economically developed countries has been the implementation of a pension accumulation system. The largest assets of pension accumulation systems are held by the United States – \$22.5 trillion, the United Kingdom – \$2.9 trillion, Australia – \$1.6 trillion, Canada – \$1.6 trillion, the Netherlands – \$1.3 trillion, Switzerland – \$0.6 trillion, Finland – \$199 billion [15].

In Ukraine, a mandatory accumulation level of pension insurance has not yet been introduced. To implement a mandatory accumulation system, it is necessary, first and foremost, to ensure the stability of Ukraine's financial and monetary system. Anti-inflationary measures should be the top priority in the country's economic policy because ensuring the stability of the money circulation, its regulation, and stabilization are crucial for normalizing commodity market relations. As history has shown, a sharp devaluation of the hryvnia leads to complete destabilization of the banking system, significant reduction in economic activity, and overall economic collapse.

Furthermore, an important prerequisite for implementing the accumulation level is to expand the pension contribution base through increased employment, raising wage levels, and legalizing wages.

The introduction of the second level of pension provision in Ukraine is only possible after general macroeconomic stabilization, establishing a well-functioning and efficient system of state supervision and regulation in this sphere, particularly through the formation of state priorities for minimizing financial risks when investing pension assets for the long term, and introducing a system of guaranteeing pension deposits in the accumulation pension insurance system [24].

Thus, the main strategic directions for ensuring structural changes in the Ukrainian economy towards sustainable economic growth are:

- 1) increasing investment activity;
- 2) overcoming the raw material orientation of the economy;

- 3) achieving economic independence by reducing imports through the development of import-substituting industries;
- 4) development of production infrastructure;
- 5) technological and technical re-equipment, modernization, and reprofiling of existing production facilities, including through the attraction of foreign capital;
- 6) training and retraining of highly qualified personnel meeting international standards;
- 7) reconstruction of the post-war and post-war economy of Ukraine.

The most important factor for economic growth in Ukraine is investment activity, which should be aimed at stimulating entrepreneurial activity, conducting structural transformations in the national economy, technological and technical re-equipment, modernization of existing production facilities, overcoming the raw material orientation of the economy, developing production infrastructure, and training and retraining highly qualified personnel meeting international standards.

To ensure investment attractiveness in Ukraine, certain conditions must be created, including in the areas of taxation, protection of property rights and interests of all business partners, political stability, and a balanced economic course, as well as the stabilization and absence of military actions on the country's territory.

5.3.3. Research on Economic Growth in Ukraine

Since macroeconomic assessment of the value of all goods and services produced in a country within a year at current prices is represented by nominal and real GDP, it has been proven that the growth of nominal GDP can significantly occur due to positive inflation, while real GDP mitigates the impact of this factor. Therefore, real GDP provides a more accurate understanding of the actual current economic situation of the country.

During the period from 2010 to 2022, Ukraine reached its maximum nominal GDP value in 2021 (5,450,849 billion UAH), which is 405.01%

or 4,371,503 billion UAH more than in 2010 (1,079,346 billion UAH). However, during this time, the dynamics of real GDP demonstrate a negative trend throughout the investigated period (see Table 1).

According to the State Statistics Service of Ukraine (SSSU), the highest level of this indicator was recorded in 2012 at 2,762,446 billion UAH (at 2016 prices). Over the following years, real GDP experienced slight growth, but starting from 2012, it decreased by 33.3%.

In 2022, the real GDP amounted to 3,865,780 billion UAH, indicating a 29.1% decline compared to 2021. Nominal GDP in 2022 also decreased compared to 2021 and amounted to 5,191,028 billion UAH.

The Ukrainian economy suffered the most significant losses in the early months of the war. In the first quarter of 2022, GDP losses amounted to 14.9%, in the second quarter – 36.9%, and in the third and fourth quarters – 30.6% and 31.4% respectively. Urgently introduced important regulatory innovations by the government at the beginning of the war, aimed at reducing the fiscal burden on businesses and stimulating the development of small businesses, allowed for the slowdown of the real GDP decline already in the third quarter of 2022 and maintained its value at a relatively stable level until the end of the year [10, p. 268].

Based on the statistical data [19], there is a rapid increase in nominal GDP during 2010-2021, while the negative dynamics of real GDP indicate inflation growth. Analyzing the dynamics of nominal and real GDP (at 2016 prices) allows us to identify periods of crisis in the Ukrainian economy. Considering the tendency for annual growth in nominal GDP, the volume of real GDP decreased by 433,179 million UAH or 15.7% in 2014–2015. During 2016-2019, there was a slow recovery of the economy, resulting in a 12% increase in real GDP over 4 years. In 2020, there was a decrease of 97,861 million UAH or 3.8% in the indicator. The real GDP figure in 2021 amounted to 2,593,968 million UAH, a volume that did not exceed the 2019 figure. The decline in GDP in 2022 to 1,841,312 million UAH is the largest during the period under study.

Analyzing the nominal GDP of Ukraine in dollar equivalent, the years

2014-2015 and 2022 are characterized by significant currency devaluation, confirming deep economic crises in these years.

Examining the GDP by sectors of the economy allows us to identify and assess the dynamics of each sector's development and its role in shaping the country's economy. According to the results of 2021, which is characterized by an improvement in the economic situation, Ukraine's GDP is formed by the following sectors: wholesale and retail trade – 13.61%, agriculture, forestry, and fishing – 10.89%, manufacturing industry – 10.28%, mining and quarrying – 6.44%, public administration and compulsory social security – 6.17%, real estate activities – 5.77%. The share of other sectors in the country's GDP structure is less than 5%.

In 2022, the structure of Ukraine's GDP by economic sectors underwent changes. Specifically, compared to the previous year, the share of public administration and compulsory social security increased to 21.14% or 1,097,257 million UAH, while the share of electricity, gas, steam, and conditioned air supply increased to 4.46% or 231,492 million UAH. For all other types of economic activities, a decrease in their share in forming the country's GDP is observed.

The wholesale and retail trade sector remains the leader among sectors in terms of its share in forming the country's GDP. Throughout 2016-2022, the share of this sector varies from 12.36% (in 2022) to 13.94% (in 2020). The agricultural sector, based on the results of 2021 and 2022, ranks second in terms of its share in forming the country's GDP, with shares of 10.89% and 8.22%, respectively.

Positive growth dynamics in the share of the country's GDP are observed in the information and telecommunications sector, while negative trends are demonstrated in manufacturing, transportation, warehousing, postal, and courier activities.

Thus, the reasons for the negative structural shifts in Ukraine's economy during 2010–2022 are:

trade restrictions against the aggressor country imposed in 2013, increase in the price of natural gas imported by Ukraine, annexation of

Crimea and the beginning of the military conflict in Eastern Ukraine in 2014, disruption and cessation of activities of large metallurgical and coal mining enterprises, rapid spread of the COVID-19 pandemic worldwide in 2019, unstable military-political situation in the country, which intensified in 2022 with the full-scale invasion of Russian forces into Ukrainian territory, decline in production, changes in external economic relations, allocation of significant funds for defense purposes, population migration.

According to the survey conducted by the European Business Association and published in March 2022, the full-scale invasion led to the cessation of activities for 29% of large and medium-sized Ukrainian companies. Another 27% suspended their operations but planned to resume, while 19% closed some offices or branches, and 1% shut down their businesses entirely. Only 17% of companies continued to operate without restrictions. As for representatives of small and medium-sized businesses, at the time of the survey, 42% were not working, 31% had suspended their operations but planned to resume, and 4% were planning to close their businesses.

Despite the negative external political factors affecting Ukraine's economy, which continued into 2023, including new infrastructure destruction, restrictions on the operation of the "grain corridor," and trade limitations for Ukrainian agricultural products imposed by several European Union countries, there has been a revitalization of Ukraine's economy in the manufacturing sectors and service sector during the first two quarters of 2023. Taking this into account, the National Bank of Ukraine has raised its forecast for real GDP growth in 2023 from 2.0% to 2.9%. Based on the expected reduction in security risks in the near future, the NBU also predicts real GDP growth of 3.5% in 2024 and 6.8% in 2025 [16].

Let's examine the transformational processes that have occurred in Ukraine. To do this, we will analyze the inflationary changes in GDP, price indices (GDP deflator, index of physical volume of GDP, consumer price index, and producer price index of industrial products). Therefore,

the dynamics of changes in the index of the physical volume of GDP and the deflator index show that during 2010–2012, the growth of Ukraine's GDP was determined by both forming factors, namely price increases and production expansion [19].

In 2013, the index of the physical volume remained at 100.0%, indicating that Ukraine's GDP remained at the level of the previous year, 2012. Starting from 2014, there has been a negative trend of decreasing the physical volume of Ukraine's GDP. The rapid growth of the deflator index indicates positive inflation and a reduction in the purchasing power of the country's population. The increase in the index of the physical volume of Ukraine's GDP in 2019, recorded at 103.2%, demonstrates only slight economic growth, as the value of the indicator is close to the level achieved in 2014. The slight revival of the country's economy in 2021 is also characterized by inflationary processes, but the expansion of production levels positively influenced the growth of Ukraine's GDP. In 2022, there is a sharp decline in the production of goods and services in the country and an intensification of inflationary processes.

According to [19], the GDP deflator of Ukraine for the year 2015 amounted to 38.9%. The price increase, which began in 2014, reached its peak in 2015 for all groups of goods. Prices for imported and exported goods, in particular, increased significantly: from 0.1% in 2013 to 59.4% in 2015 and from 2.1% in 2013 to 56.2% in 2015 respectively. There was a significant acceleration in the decline of industrial production during 2014–2015.

Final consumer expenditures of households increased from 6.2% in the 1st quarter of 2014 to 58.3% in the 2nd quarter of 2015, while expenditures of the general government sector increased from 1.9% to 23.4% over the same period. Gross capital accumulation increased from 4.4% in the 1st quarter of 2014 to 67.7% in the 1st quarter of 2015.

Examining the GDP composition by the production method, the highest GDP deflator figures are observed in the 1st quarter of 2015 across almost all components. In particular, the highest growth rates are

demonstrated by the deflator dynamics of agriculture, forestry, and fishing, reaching 4.4% in the 1st quarter of 2014 to 63.3% in the 1st quarter of 2015, water supply; sewerage, waste management from 4.4% to 62.6%, taxes on products from -3.1% to 99.6%, respectively. All major types of industrial activities demonstrated negative dynamics.

According to the results of 2021, the GDP deflator stood at 24.8%. There was a rapid surge in prices observed in export goods and services: from 6.1% in 2020 to 48% in 2021. Final consumer expenditures rose to 14.8% (from 4.3% in 2020), gross capital accumulation increased to 14.4% (from 1.9% in 2020), and imports of goods and services rose to 17.7% (-7.2% in 2020).

The growth of the GDP deflator in 2022 reached a level of 34.3%. The increase continued across all categories except for the export of goods and services (-3.9% in 2022). Specifically, imports of goods and services in 2022 rose to 45.4% (from 17.7% in 2021), final consumer expenditures increased to 37.5% (from 14.8% in 2021). The dynamics of the GDP deflator demonstrate annual growth from 2019 to 2022, indicating inflation outpacing real production during this period. In particular, in the sectors of mining and quarrying (record 111.4% in the 2nd and 3rd quarters of 2021); manufacturing industry; supply of electricity, gas, steam, and conditioned air (record 165.2% in the 1st quarter of 2022); construction; wholesale and retail trade, repair of motor vehicles and motorcycles; public administration and defense (record 172.7% in the 4th quarter of 2022); mandatory social insurance; subsidies for products (record 143.4% in the 1st quarter of 2022).

According to comments from the National Bank of Ukraine regarding the inflation level in September 2022, the reasons for the acceleration of the price increase in imported goods were the complicated logistics and the effects of the hryvnia exchange rate adjustment in July, as well as the significant dependency of the cost of imported goods on prices in external markets. Among the reasons for the increase in prices for non-food products are supply constraints for new batches of goods, depletion of old

stocks, and high logistics costs. The dynamics of the price increase for processed food products are linked to the growth of business production costs, particularly for raw materials, energy, and logistics, as well as high prices in global markets [17].

To measure the overall price level, a comparison is made between the GDP deflator and the consumer price index, which demonstrates the rate of price increase for goods and services included in a fixed consumer basket, in the reporting period compared to the base period, as well as the producer price index, which characterizes the change in the level of prices at which producers sell their products in the reporting period compared to the base period [19].

Thus, the GDP deflator during the periods from 2011 to 2013 and from 2017 to 2019 is higher than both the consumer price index and the producer price index, which can be explained by the predominance of overall inflation of all goods and services in the country.

The dynamics of the producer price index of industrial products demonstrate more significant fluctuations during the investigated period compared to the consumer price index. Periods where the producer price index exceeds the consumer price index are characterized by supply inflation.

Thus, there is a causal relationship between the increase in producer prices and the consumer price index. In 2014 and 2020, the producer price index is characterized as an early inflationary indicator, as its rapid growth in these years led to an increase in consumer inflation. After reaching a level of 31.8% for the producer price index in 2014, consumer price indices increased to 24.9% in the same year and to 43.3% in the following year. During the period of the record jump in the producer price index to 62.2% in 2021, the consumer price index increased to 10% in the same year and to 26.6% in the following year.

Analyzing the producer price index by categories in 2022, the highest figures are observed in the mining industry, particularly in oil and gas extraction – 140.5%, and metal ore mining – 134.9%. The index for the

production of coke and petroleum refining stood at 93.4%. The producer price index for other categories fluctuates within the range of 100.5% to 108.3% [20].

Consumer inflation in June 2023 slowed down to 12,8% from 26.6% at the beginning of the year. The slowdown in inflation was facilitated by market saturation with food and fuel, as well as a decrease in global energy prices. According to the expectations of the National Bank of Ukraine, published in the inflation report in July 2023, inflation in 2024 will decrease to 8,5%, and in 2025 – to 6%. The slowdown in inflation will be facilitated by the restoration of optimal logistical routes, expansion of production, increased harvests, and further decrease in global prices [16].

The country's foreign economic activity is characterized by the inflow of currency, which promotes the expansion of production through increased demand for goods and services abroad, stimulating the development of economic sectors and improving the level of employment and population incomes.

In 2021, Ukraine exported goods worth \$ 680723288. Analyzing the commodity structure of foreign trade in 2021, the largest share of the total volume – 23,5% – was derived from the export of non-precious metals and products thereof. In second place by export volume are plant-based products with a share of 22,8%, followed by mineral products with a share of 12,4%, and fats and oils of animal or vegetable origin in fourth place with a share of 10,3%. The share of exports of all other groups of goods does not exceed 10%. It is important to note that agricultural products accounted for \$27,708.93 million in total exports, which is 40,7% of the total exports. According to the results of 2021, there was an increase in export volumes across almost all groups of goods.

The loss of control over important industrial regions with the onset of hostilities on the territory of Ukraine led to a decrease in the production of heavy industry, agriculture, and other sectors, as well as to job losses and an increase in unemployment levels. The loss of markets, trade restrictions, and changes in Ukraine's trading partners affected external

trade, resulting in economic losses.

In 2022, the overall export volume decreased to 64.8% compared to 2021. However, the results of 2021 demonstrated positive dynamics in terms of exporting goods, exceeding the 2020 figure by 38.4%. According to the results of 2022, the share of non-precious metals and products thereof decreased to 13.6%, which is 62.5% less than in 2021. The export volume of plant-based products decreased by 13.3% compared to 2021. Mineral products were exported in 2022 by 48,6% less than in 2021. The export volume of fats and oils of animal or vegetable origin decreased by 15,5%.

The results of the first half of 2023 show better performance in terms of the volume of goods exports compared to the same period in 2022. Consequently, the export share increased by 85.7%. Positive dynamics in export volume growth are observed in the following groups of goods: processed food products (+28.9%), plant-based products (+23.1%), and fats and oils of animal or vegetable origin (+3.5%). The largest share, accounting for 34.5%, in the export of goods in the first half of 2023 is formed by plant-based products.

The reduction in the volume of goods exports is accompanied by an increase in imports, resulting in a significant increase in the negative trade balance (from \$25 million to \$5.2 billion). The increase in imports is a consequence of the negative impact of large-scale hostilities on the production of goods for the domestic market of Ukraine [26].

The Russian-Ukrainian war has strengthened Ukraine's role in ensuring global food security. In 2019-2021, Ukraine accounted for nearly 10% of global wheat exports, 15% of corn exports, 15% of barley exports, and almost 50% of sunflower oil exports [26]. With the onset of full-scale war by the Russian Federation against Ukraine, there has been increased global price synchronization between closely related agricultural commodity raw materials and products whose markets were not directly affected by the invasion and whose supply chains were not disrupted. Consequently, among the consequences of the war are the absence of food

security and widespread inflationary pressure [11].

Thus, it has been established that economic growth is a long-term quantitative and qualitative increase in real national income while resources are limited, aimed at ensuring societal well-being in the country and ensuring capital accumulation to the necessary extent. The paper analyzed the factors of economic growth in Ukraine. It was noted that among the macroeconomic factors of economic growth are supply factors, demand factors, and distribution factors. There are also factors that have a significant impact on the pace of economic growth, but they are difficult to quantify. These include the country's abundance of various natural resources, the quantity and quality of arable land, climatic conditions, social, cultural, political atmosphere, and even national traditions. It has been established that one of the most important indicators of socio-economic development of the country is gross domestic product (GDP). An analysis of the dynamics of Ukraine's GDP for the period from 2002 to 2022 has been performed. It has been established that there are several factors of economic growth, the main ones being labor (quantity and quality of labor resources), land (quantity and quality of natural resources), capital (investment or capital expenditure) taking into account the technological level of production means, which is provided by scientific and technological progress, entrepreneurial abilities (understood not only as the economic activity of entrepreneurs but also as an economic mechanism that can promote or hinder economic development), and labor productivity. All factors are closely interrelated. The main factors that contribute to increasing investment activity have been identified. The main factors hindering investment activity, which require elimination, have been outlined: unsatisfactory state of the financial market and monetary and credit regulation; corruption; political instability; excessive administrative barriers to entrepreneurial activity; rising national debt; insufficient legal protection of domestic and foreign investors; inadequate infrastructure; inadequately educated workforce; insufficient potential for innovation; crime; military situation in Ukraine since February 2022.

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