

MAZARAKI Anatolii

 <https://orcid.org/0000-0003-1817-0510>

Doctor of Sciences (Economics),
Professor, Rector of State University
of Trade and Economics
19, Kyoto St., Kyiv, 02156, Ukraine
rector@knute.edu.ua

MELNYK Tetiana

 <https://orcid.org/0000-0002-3839-6018>

Doctor of Sciences (Economics),
Professor, Head of the Department
of International Management
State University of Trade and Economics
19, Kyoto St., Kyiv, 02156, Ukraine
t.melnyk@knute.edu.ua

THE EUROPEAN UNION AND UKRAINE: IN SEARCH FOR A NEW ECONOMIC REALITY

A comprehensive analysis of the impact of contemporary geopolitical turbulence on the economy of the European Union and Ukraine has been conducted. In the context of increasing global instability, the escalation of Russia's war against Ukraine, the transformation of energy markets, and the growing role of the USA as a geo-economic player, the depth and multidimensionality of challenges to macroeconomic stability, energy security, and the structural integrity of the European economic space are highlighted. The study is based on the hypothesis that the geopolitical turbulence of recent years has caused a significant but differentiated impact on the economy of the EU and Ukraine. The methodological basis of the research is formed by a systemic approach, comparative analysis, statistical methods for assessing macroeconomic and energy indicators, as well as structural-functional and cause-and-effect analysis. The dynamics of key macroeconomic indicators of the EU and Ukraine under the influence of foreign policy shocks are characterized. It has been established that geopolitical tension, disruptions in supply chains, sanctions policy,

MAZARAKI Anatolii

 <https://orcid.org/0000-0003-1817-0510>

д. е. н., професор, ректор
Державного торговельно-економічного
університету
вул. Кіото, 19, м. Київ, 02156, Україна
rector@knute.edu.ua

МЕЛЬНИК Тетяна

 <https://orcid.org/0000-0002-3839-6018>

д. е. н., професор, завідувач кафедри
міжнародного менеджменту
Державного торговельно-економічного
університету
вул. Кіото, 19, м. Київ, 02156, Україна
t.melnyk@knute.edu.ua

ЄВРОПЕЙСЬКИЙ СОЮЗ – УКРАЇНА: ПОШУКИ НОВОЇ РЕАЛЬНОСТІ

Проведено комплексний аналіз впливу сучасної геополітичної турбулентності на економіку Європейського Союзу та України. У контексті посилення глобальної нестабільності, ескалації війни Росії проти України, трансформації енергетичних ринків і зростання ролі США як геоекономічного гравця висвітлено глибину та багатовимірність викликів для макроекономічної стабільності, енергетичної безпеки та структурної цілісності європейського економічного простору. Дослідження базується на гіпотезі, що геополітична турбулентність останніх років зумовила значний, але диференційований вплив на економіку ЄС та України. Методологічну базу дослідження формують системний підхід, порівняльний аналіз, статистичні методи оцінювання макроекономічних та енергетичних показників, а також структурно-функціональний і причинно-наслідковий аналіз. Охарактеризовано динаміку ключових макроекономічних показників ЄС і України під впливом зовнішньополітичних шоків. Встановлено, що геополітична напруга, порушення ланцюгів постачання, санкційна політика та



and armed aggression by the Russian Federation have become factors slowing economic growth in the EU and limiting the recovery of the Ukrainian economy. The main channels of the impact of geopolitical factors on the EU economy were studied: increased defence costs, higher inflationary pressure due to energy shocks, trade reorientation, reduced investment activity, and logistics destabilization. Attention is focused on the transformation of European energy markets. A separate emphasis is placed on the impact of the energy war on the Ukrainian economy, in particular on the damage to generating capacities, the growing dependence on electricity imports, and the decline in agricultural and industrial production. The role of external financial and humanitarian assistance in stabilizing the macro-financial situation is assessed. Practical steps for Ukraine's economic policy under ongoing risks are proposed – ranging from strengthening energy resilience to developing export-oriented clusters and adapting to new requirements for integration with the EU. It is also emphasized in the conclusion that the experience of 2022–2025 should become the basis for revising the economic strategy of Ukraine and the EU towards enhancing strategic autonomy, energy diversification, investments in infrastructure resilience, and rethinking interdependence models in the context of increasing geopolitical fragmentation.

Keywords: geopolitical turbulence, EU economy, Ukrainian economy, energy security, macroeconomic indicators, post-war recovery, sanctions, foreign policy, EU integration, economic resilience.

JEL Classification: F51, F52, F15, Q43, E66.

Introduction

Modern global realities are characterized by a high level of geopolitical turbulence, which directly affects economic processes in the European Union (EU) and Ukraine. Russia's full-scale war against Ukraine, ongoing since 2022, has significantly impacted the region's economy, undermining Europe's post-pandemic recovery and creating new uncertainties regarding future development. An important negative factor has been Europe's proximity to the conflict zone. Thus, according to European Commission estimates, in 2022–2023, every 1.000 km reduction in distance to Ukraine/Russia cost the EU countries about 2 percentage points of annual economic growth, while for countries bordering Ukraine, losses reached 1.4–1.8 percentage points of growth per year (European Economic Forecast – Autumn 2025, 2025). At the same time, the war caused a large-

збройна агресія РФ стали чинниками гальмування економічного зростання в ЄС та обмеженого відновлення української економіки. Досліджено основні канали впливу геополітичних факторів на економіку ЄС: зростання оборонних витрат, підвищення інфляційного тиску через енергетичні шоки, переорієнтацію торгівлі, зниження інвестиційної активності та дестабілізацію логістики. Зосереджено увагу на трансформації енергетичних ринків Європи. Окремий акцент зроблено на впливі енергетичної війни на економіку України, зокрема на пошкодженні генеруючих потужностей, зростанні залежності від імпорту електроенергії, зниженні аграрного та промислового виробництва. Оцінено роль зовнішньої фінансової та гуманітарної допомоги у стабілізації макроекономічної ситуації. Запропоновано практичні кроки економічної політики України в умовах триваючих ризиків – від зміцнення енергетичної стійкості до розвитку експортно-орієнтованих кластерів та адаптації до нових вимог інтеграції з ЄС. Також у підсумку наголошено, що досвід 2022–2025 рр. має стати основою для перегляду економічної стратегії України та ЄС у напрямі посилення стратегічної автономії, енергетичної диверсифікації, інвестицій в інфраструктурну стійкість та переосмислення моделей взаємозалежності в умовах зростаючої геополітичної фрагментації.

Ключові слова: геополітична турбулентність, економіка ЄС, економіка України, енергетична безпека, макроекономічні показники, післявоєнне відновлення, санкції, зовнішня політика, інтеграція з ЄС, стійкість економіки.

scale inflationary shock in the EU, with inflation in 2022–2023 being 5.9 percentage points higher than expected, while in countries close to the conflict, annual inflation was 2.2–3.7 percentage points higher than the EU average. These facts confirm the relevance of studying the impact of geopolitical turbulence on macroeconomic stability in the European region.

In addition to the war in Ukraine, other geopolitical shifts also affect the EU economy and, indirectly, Ukraine. The world has entered a period of realignment of powers, which is manifested in the formation of new trade alliances, intensified competition for resources, and global trade being fragmented into blocs around the US and China. In particular, in recent years, the US has pursued an active trade policy by establishing new tariffs, industrial support through the Inflation Reduction Act (2022)¹, etc. This encourages Europe to respond with its own industrial initiatives aimed at maintaining competitiveness. At the same time, potential changes in US foreign policy add uncertainty. Thus, this year's discourse at the economic forum in Davos demonstrated a transformation of the security provision regime in the US–EU–Ukraine triangle: against the backdrop of increasing transactional nature and conditionality of American engagement, the European Union is institutionalizing a broader role as a co-guarantor of deterrence and resilience in Eastern Europe, which shifts EU–Ukraine relations from a predominantly integration-normative plane to a security-institutional one (Davos 2026, 2026, January 21). Such statements indicate risks of weakening transatlantic support, which could have serious consequences for both the security and the economy of Europe and Ukraine. Thus, this research is timely and necessary for understanding the extent of the impact of geopolitical factors on the economies of the EU and Ukraine and for developing appropriate response strategies.

Thus, the geopolitical turbulence that engulfed the Euro-Atlantic space as a result of Russia's aggression against Ukraine and the intensification of global competition has created unprecedented challenges for the economies of the EU and Ukraine. Enhanced external shocks, such as war, sanctions, the energy crisis, and changes in the foreign policy of key players (the USA, China) disrupted established economic ties, caused a surge in inflation and a slowdown in economic growth, and forced a reassessment of priorities, particularly in favour of defence and energy security spending. The EU economy faced the threat of stagflation in 2022–2023: the sharp surge in energy and raw material prices was accompanied by a significant decline in production activity. At the same time, Ukraine has suffered colossal losses in production capacity and infrastructure, losing a significant share of GDP in 2022. In this regard, the question arises: to what extent and through which channels does geopolitical instability affect key macroeconomic indicators of the EU and Ukraine, and how can these countries adapt to the new realities?

¹ Inflation Reduction Act. – US Inflation Reduction Act

For the EU, this problem is concretized in finding a balance between the need to support Ukraine and applying sanctions pressure on the aggressor while at the same time maintaining its own economic stability. The war has brought the issue of Europe's energy security to the forefront, as the urgent abandonment of Russian energy resources has led to the restructuring of gas supplies, accelerated transition to renewable energy sources, and the need to invest in energy infrastructure. EU policy has had to resolve the dilemma between short-term costs (high energy prices, support for households and businesses) and long-term benefits from increased energy independence. At the same time, Europe's security dependence on the position of the USA has increased, which, in the context of internal polarization in the USA and possible political changes, creates additional uncertainty for economic expectations in the EU.

Under these conditions, Ukraine faces a dual challenge: it is necessary both to wage a war by mobilizing internal resources and external assistance, and to maintain the functioning of the economy and the energy system. Ukraine's dependence on external financing of the deficit and support from partners for the restoration of energy infrastructure damaged by strikes remains critical. Therefore, the urgent question arises of minimizing the economic losses from the war and ensuring the foundation for post-war recovery already now, even under conditions of ongoing hostilities.

Thus, the central problem of the research is to identify the scale and mechanisms of the impact of geopolitical turbulence (primarily the war and related global shifts) on the economies of the EU and Ukraine, as well as to develop recommendations for Ukraine's response to new risks. Solving this problem has both scientific-theoretical and practical significance, as it will allow understanding the economic consequences of contemporary geopolitical processes and outline ways to strengthen economic resilience.

To date, the issue of the impact of geopolitical turbulence on the economy is actively researched by both foreign and Ukrainian scientists. In its autumn 2025 forecast, the European Commission noted that the EU economy has proven to be fairly resilient. Despite slow growth at the beginning of the 2020s, in 2025 all member states expect positive indicators, and the EU GDP growth in 2025–2026 is forecast at approximately 1.4%. At the same time, the Commission emphasizes that the "proximity" to Russia's protracted war against Ukraine suppresses EU economic indicators, especially in countries geographically close to the conflict, and requires a consolidated strengthening of defence capability and financial support for Ukraine. Similar conclusions are confirmed by a special European Commission study on the impact of the war: the countries bordering Ukraine lost more than 1 percentage point of growth annually in 2022–2023, and their inflation exceeded the European average by several percentage points (European Economic Forecast – Autumn 2025, 2025). This indicates that EU scholars and analysts are aware of the high cost of geopolitical instability for the economy.

The study by European Parliament experts (Cinzia Alcidi, 2025) is dedicated to the development trajectories of EU–US economic relations, taking into account trade, investment, productivity, policy formation indicators, and risks for the EU. In another European Parliament work (Bottazzi et al., 2025), an assessment was carried out on how US trade restrictions (tariffs) can affect the Eurozone economy through trade, financial channels, and risk premiums. In this regard, the authors emphasize the importance of trade diversification, promotion of innovation, and prudent monetary policy to mitigate economic vulnerability and support long-term growth.

Experts at the Bruegel think tank, assessing the tariff shock in 2025, comprehensively analyse geopolitical shifts and economic consequences for Europe, including the sharp change in the US trade regime, and formulate three contrasting geopolitical scenarios for Europe for 2030–2035, which differ in two variables: the degree of intensity of geopolitical competition between the US and China and the ability of other major powers and smaller countries to organize international cooperation and institutions based on three rules: the collapse of international cooperation; return to a world of blocs; reimagined multilateral approach.

Among foreign researchers, it is also worth noting the IMF analysts. According to their assessments, the economic shock from the war, although significant, but in terms of direct macro effects for developed countries, it is less severe than the shocks of the pandemic era. Instead, emphasis is placed on long-term consequences, including structural changes in trade, energy, and security expenditures. The Vienna Institute for International Economic Studies (WIIW) (2025, October 22), in its forecast, emphasizes that the economies of Central and Eastern Europe generally maintain relative growth, but Ukraine remains in a state of a "war-stuck economy" with a growth forecast of only about 2% in 2025. WIIW experts note that the ever-increasing destruction of infrastructure from Russian shelling and the shortage of labour due to mobilization and emigration significantly limit Ukraine's economic prospects. They also warn about hybrid threats in the form of Russia's destabilization of neighbouring countries through the use of drones, cyberattacks, and sabotage, which undermines the investor confidence and can hinder the development of Eastern European economies.

Ukrainian scientists and analytical centres are also actively researching this topic. Since March 2022, the Centre for Economic Strategy (CES) has been regularly providing monthly reviews of the wartime economy. In the January 2026 publication, CES notes that in 2025 Ukraine's real GDP grew by only 1.8% due to security risks, the loss of infrastructure and production capacities, electricity shortages, and labour force constraints. However, growth was supported by resilient demand (CES, 2026, January 16). At the same time, it was emphasized that the situation in the energy sector worsened in the fall of 2025 due to the resumption of Russian attacks on infrastructure facilities, creating additional risks for further growth. Ukrainian experts are also discussing new funding opportunities: in particular, the idea of confiscating frozen Russian assets. According to CES, the total amount of frozen Russian

assets is about EUR 289.5 billion, of which 180 billion is in Belgium, and the EU is considering a mechanism to use these funds to help Ukraine (for example, a loan of EUR 140 billion euros secured by these assets). Although such an initiative could cover 2–3 years of Ukraine's military expenditures, discussions continue regarding the optimality of this way of defence financing.

Some recent works by Ukrainian authors (Ksenzuk et al., 2025; Pankovets & Shevchuk, 2024; Benedysiuk, 2025) are devoted to the study of sanctions as a means of foreign policy influence. Scholars note that international economic sanctions, imposed by many countries of the democratic world in order to force the Russian Federation to peace, although correct and coordinated and cause some economic losses to the country's economy, they are insufficient as a tool to achieve the set goal. The authors see the reason for this in the adaptation of the Russian Federation's economy to the sanctions regime, mainly due to the reorientation of foreign economic relations towards cooperation with Global South countries, "grey" imports, and insufficient pressure on the country's energy sector, which provides a significant share of its revenue. Moreover, the modern international security system has turned out to be not quite ready for new challenges, as it relies on instruments that demonstrate insufficient effectiveness under current conditions.

It is worth separately noting the contribution of Ukrainian economists to the strategic vision of post-war recovery. In the work of Gorodnichenko and Obstfeld (2026, 26 January), based on the experience of Eastern Europe, possible ways for Ukraine's rapid development after the war through integration into Europe's economic and security structures are substantiated. The authors point out that the combination of large-scale investments and the inflow of capital through private investments and EU funds, along with institutional reforms, can provide Ukraine with sustainable growth and convergence with the EU. Thus, recent scientific publications unanimously, on the one hand, note the negative effects of the impact of geopolitical shocks (war, hybrid threats, trade wars) on the economy, and on the other hand, open a discussion about new opportunities and necessary reforms for adaptation to new conditions.

The purpose of the study is to develop scientifically based recommendations for minimizing negative consequences and adapting Ukraine's economic policy to new challenges based on a comprehensive analysis of the impact of modern geopolitical turbulence on the economy of the European Union and Ukraine.

The hypothesis has been formulated that the geopolitical turbulence of recent years has caused a significant, but differentiated, impact on the economies of the EU and Ukraine. In particular, the EU economy, despite short-term slowdown and shocks, demonstrates adaptability and gradual recovery due to internal resilience and consolidated measures, whereas the Ukrainian economy has experienced a deeper decline and remains more vulnerable, but through business adaptation to wartime conditions and substantial external assistance also demonstrates relative resilience.

The methodological basis of the article consists of a systemic approach, methods of comparative, structural, and functional analysis, as well as statistical and analytical methods for evaluating macroeconomic and energy indicators. The study uses a comprehensive approach to examining the current state of the EU economy under conditions of geopolitical instability, transformations in European energy markets, as well as the impact of external shocks on the Ukraine's economy and its energy sector. To determine the most vulnerable areas and the degree of Ukraine's dependence on external support, methods of cause-and-effect, comparative, and situational analysis were applied. The justification of practical proposals regarding Ukraine's economic policy under conditions of military, energy, and financial risks has been carried out based on a forecasting approach, the generalization of analytical assessments, and the development of recommendations for short-term stabilization and long-term post-war recovery.

Structurally, the article consists of four sections. The first section analyses the current state of the EU economy in conditions of geopolitical instability. The second section is devoted to the characteristics of changes in the European energy markets. The third section examines the impact of external shocks on the economy of Ukraine and its energy sector, identifying the most vulnerable areas and the degree of dependence on external support. The fourth section is devoted to practical proposals for Ukraine's economic policy under ongoing risks (military, energy, financial), including short-term stabilization measures and long-term post-war recovery strategies.

1. The EU economy under the influence of US geopolitics

The geopolitical factor of the United States has a significant impact on the economic dynamics of the EU, both directly and indirectly. Trump's statements at this year's World Economic Forum in Davos clearly highlight a new trend in geopolitics – the combination of "transactional alliances" and coercive policy. This means that the American president is actively pushing Europe to the view that the economy and security are no longer separated: tariffs, energy policy, supply chains, and defence spending become elements of a single bargain, rather than a "neutral" economy. As a result, the trend in the EU towards strategic autonomy and the involvement of anti-coercion tools – from defence integration to trade levers – is strengthening.

The change in the EU's macroeconomic indicators over the past two years has been the result, on the one hand, of European shocks themselves, in particular the war in Ukraine and the energy crisis, and on the other hand, a reaction to the monetary, trade, and sanctions policies of the USA.

Financial conditions in Europe are influenced by the monetary policy of the United States. The aggressive increase in the Federal Reserve's interest rate during 2022–2023 (up to 4.5–5%) led to a global tightening of the cost of money. This caused the strengthening of the dollar against the euro and

the outflow of capital from emerging markets to safe assets in the USA. For the eurozone, this meant importing inflation due to the rising cost of raw material imports in US dollars and restraining its own economic growth through tighter financial conditions. The European Central Bank was also forced to raise rates, although with a lag, to curb record inflation (10% in the eurozone). However, by the middle of 2025, inflation in the EU was decreasing and approached the 2% target. According to the European Commission’s forecast for 2025, it is noted that inflationary pressure is weakening and prices are gradually stabilizing. Thus, the impact of US monetary policy had a wave-like character, in particular, initially contributing to an increase in inflation and a slowdown in growth in the EU, but later, after the synchronized reaction of central banks, the situation evened out (*Figure 1*).

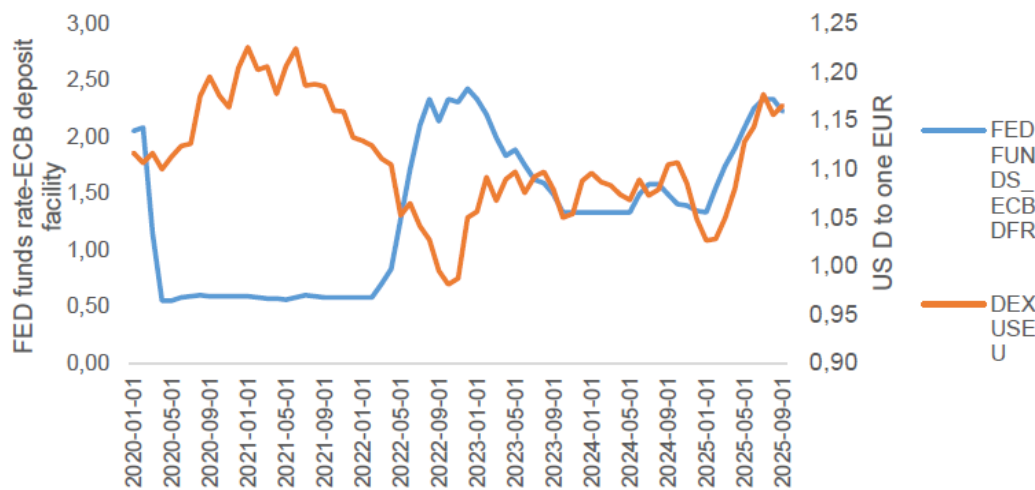


Figure 1. Differences in ECB and FED interest rates and the USD to EUR exchange rate, 2020–2025 (September)

Source: Federal Funds Effective Rate (n. d.).

According to the U.S. Bureau of Economic Analysis (BEA), U.S. exports of goods to Europe (the EU plus the Great Britain and Switzerland) are more than three times higher than U.S. exports to China (U.S. International Trade in Goods and Services December and Annual 2025, 2026). Forty-eight of the 50 U.S. states exported more goods to Europe than to China. Together, they account for nearly 30% of global trade in goods and services and 43% of global GDP. In 2024, transatlantic trade in goods and services exceeded EUR 1.68 trillion.

As shown in *Figure 2*, the USA and the EU are the two largest partners in trade in services in the world, the most important trading partners and service markets for each other. It should be noted that the USA consistently has a surplus in trade in services with the EU.

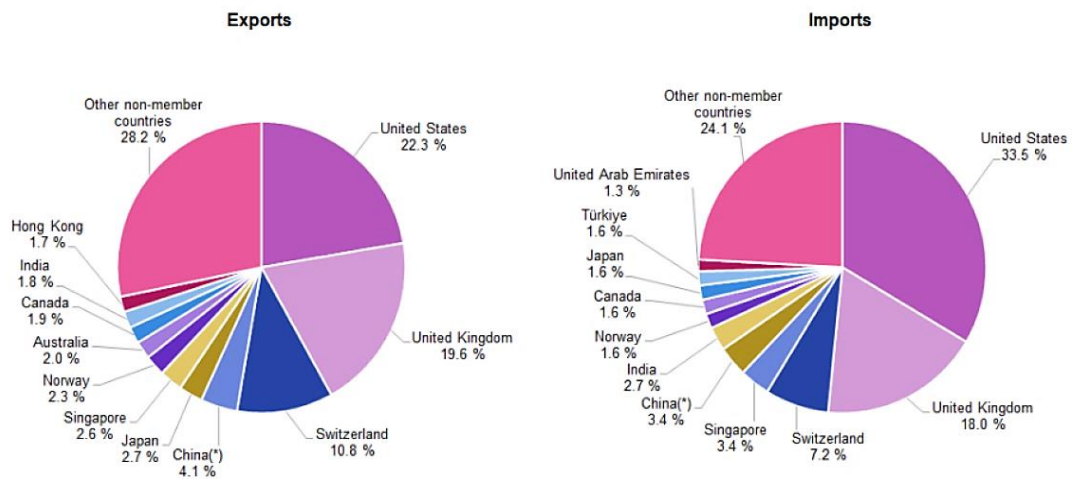


Figure. 2. Geographical structure of EU service exports and imports, 2024

Source: compiled by the authors based on Eurostat data (International trade in services (since 2010), 2026, January 13).

The volume of trade in services between the EU and the US in 2024 amounted to approximately EUR 817 billion, of which EU imports of services were EUR 482 billion and exports EUR 334.5 billion, resulting in a US surplus of \$148 billion. In contrast, the EU had a surplus of EUR 98 billion in trade in goods with the US, while in trade in services the deficit amounted to almost USD 148 billion (EU–US trade: facts and figures, 2026, January 22). In this regard, the economies of the EU and the US complement each other very well.

Since the beginning of the financial crisis, research and policy debates have increasingly shifted from transatlantic synchronization of cycles to growth differentials. Since approximately 2010, the USA has been systematically outpaced the EU in terms of nominal and real GDP growth (Figure 3.1). This marked a change from previous trends and reinforced the perception that the EU is losing ground compared to the US. However, this picture looks different when comparing GDP based on purchasing power parity (PPP) (Figure 3.2). The divergence between EU and US GDP, measured in current US dollars, and their close convergence by PPP, indicates differences in price levels, exchange rates, and domestic purchasing power, rather than actual output. Nominal GDP reflects relative market valuations and external competitiveness (for example, the growth of the US dollar exchange rate), whereas GDP adjusted for PPP reflects comparable real economic capabilities and living standards. When price differences are taken into account, the economies of the EU and the US have grown at roughly the same real rates over time.

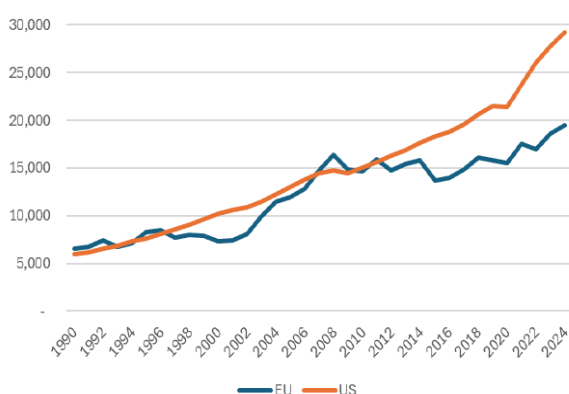


Figure 3.1. GDP of the EU and the USA at the current US dollar exchange rate, billion US dollars

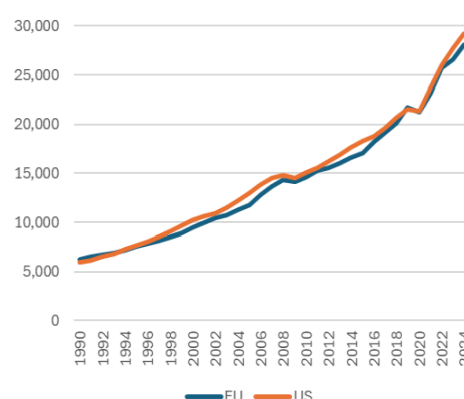


Figure 3.2. EU and USA GDP by PPP, billion US dollars

Source: World Bank (GDP (current US\$) – United States, European Union, n. d.).

However, the gap in labour productivity persists, which is recognized as a key driving force behind the better performance of the USA (The future of European competitiveness: Report by Mario Draghi, n. d.). There are several explanations for this productivity gap between the EU and the USA, but two of them are most often identified as the main ones. First, EU markets (from capital markets to sectoral markets) remain fragmented compared to the USA, and regulatory differences are an obstacle to scaling up and spreading best practices, production and implementation of advanced technologies, as well as the effective allocation of capital and labour. Secondly, the United States quickly gained global leadership in the development and implementation of advanced digital technologies and productivity enhancement based on artificial intelligence, which has contributed to widening the gap with EU companies, especially in the high-tech and service sectors.

Regarding the US trade and industrial policy, it had a dual effect. On the one hand, the conclusion of a new trade agreement between the EU and the USA in the summer of 2025 reduced uncertainty in the trade sphere. This positively influenced the sentiment of European businesses, resulting in improved export targets, with some companies even increasing supplies to the US, especially against the backdrop of expectations of possible tariff disputes. In the first half of 2025, an upturn in EU exports was observed, partly due to frontloading – the early shipment of goods to the US ahead of potential new tariffs. As noted in the materials of the European Commission, this emphasizes the adaptability of the EU economy – businesses were able to quickly reorient themselves, which supported GDP in difficult times. On the other hand, the U.S. Inflation Reduction Act (2022), which provides large subsidies for the "green" industry in the U.S., has caused concern in the EU about the outflow of investments. In 2023–2024, some European companies (for example, in the automotive and chemical sectors) announced plans to expand production in North America, where conditions have become more

favourable. The EU responded by preparing its own initiatives – the Net-Zero Industry Act (Regulation (EU) 2024/1735, 2024, June 13), the Critical Raw Materials Act (Regulation (EU) 2024/1252, 2024, April 11), and so on – to create similar incentives within the EU. Although this aspect relates more to structural policy, in the short term it affected investment sentiment, as governments of individual EU countries have expanded industrial support programs to retain investors, which, in turn, impacted fiscal balances.

The security component of U.S. policy towards Europe indirectly affects the EU economy through changes in defence spending and the investment climate. After the start of the war in Ukraine, the European allies sharply increased defence budgets (Germany, Poland, and other countries announced multibillion-dollar rearmament plans). In 2024–2025, NATO countries' defence spending in Europe reached record levels for the past decades. This stimulated the relevant sectors of the economy, especially the military-industrial complex and high-tech industries, which, by estimates, provided an additional approximately +0.2–0.3% to GDP growth in Eastern European countries (WIIW, 2025). At the same time, the uncertainty about the future position of the U.S. (due to Trump's political statements about NATO) made the EU countries consider accelerating the development of "strategic autonomy". Economically, this means a potential increase in investments in the domestic defence-industrial complex, cybersecurity, and energy infrastructure, which could reshape the structure of government budget expenditures. Moreover, despite political risks, the statements themselves from the U.S. could also encourage Europe to greater cohesion. For example, at the 2024 NATO summit, EU countries confirmed their course to fulfil the commitment of 2% of GDP for defence, partly as a response to doubts about the sustainability of overseas support.

Thus, the macroeconomic indicators of Europe in recent years indicate a complex interaction of factors. The EU's GDP, after zero growth in 2023, began to increase moderately. In the first quarter of 2025, the eurozone GDP increased by +0.4% compared to the same period, and over the year showed 1.5% growth (GDP up by 0.3% in both the euro area and the EU, 2026, January 30). Inflation decreased from double-digit values in 2022 to 3–4% in 2024 and reached the target level (2%) as of December 2025. The labour market remains strong – the unemployment rate in the EU is holding at a historically low level – 6% (even lower in some countries). However, due to ongoing uncertainty, business and consumer confidence is recovering more slowly – the PMI business sentiment indices at the beginning of 2026 were balanced around 50 points (between decline and growth) (HCOB Eurozone Composite PMI, 2026, January).

Thus, in 2022–2023, the EU was subjected to the impact of two external shocks: a monetary one, which was associated with a sharp increase in interest rates in the USA and other developed countries (primarily the US Federal Reserve) and led to capital outflows from Europe, increased currency exchange rate volatility, higher borrowing costs, and a general tightening of

financial conditions, risks to the banking system, and a slowdown in lending, as well as an energy-related one, caused by the cessation of gas and oil supplies from Russia, resulting in a sharp increase in gas and electricity prices in the EU and household utility payments, losses or shutdowns of enterprises, and a rise in inflation, especially in the energy and food sectors. But already in 2024, the EU was able to adapt to them, implementing a new energy policy (REPowerEU, joint purchases and the Market Correction Mechanism (MCM) (European Commission, 2023, November 28); anti-crisis monetary coordination with the ECB; subsidies for businesses and households; structural changes in energy supply (transition to LNG, RES).

As Interfax-Ukraine expert Maksym Urakin summarizes, as of 2025, the global economy shows signs of a "multi-speed economy": the US is somewhat cooling down, Europe is moving onto a trajectory consistent with inflation targets, China's growth is 5%, India is leading (around 8%), and Turkey is experiencing high inflation (30%) (Urakin, 2026, January 31). For Ukraine, the expert notes, this means a new configuration of opportunities: cheap global money will not appear soon, but the "window" for investments in production relocation, energy, and the military-industrial complex is already open. This context confirms that Europe has adapted to the turbulence and remains capable of supporting Ukraine, although it is aware that global risks (including the US stance) will continue to affect the economic planning horizon for a long time.

2. Changes in the EU energy markets

The war in Ukraine has caused the largest shift in European energy markets since the beginning of the century. In the energy supply sector, by 2022 the EU was closely integrated with the Russian Federation – more than 40% of imported gas and significant shares of oil and coal came from Russia. Exploiting this dependence, after its invasion, the Russian Federation began gas blackmail, sharply reducing pipeline supplies in the summer of 2022. As a result, Europe experienced an energy shock in the form of a rapid rise in natural gas prices (at the *TTF* hub they reached over 300 euros per MWh in August 2022, compared to the pre-crisis period of 20–30 euros). European governments have been forced to take extraordinary measures – from subsidizing consumer bills to seeking emergency alternative supplies of liquefied natural gas (*LNG*).

During 2022–2023, the European Union managed to achieve an almost revolutionary restructuring of gas supply. *Firstly*, gas consumption has been significantly reduced due to energy-saving measures and switching to other types of fuel. The total gas demand in the EU in 2022–2023 decreased by about 20% compared to the level in 2021. This became possible both due to warmer weather and lower consumption for heating, as well as temporary reductions in industrial production in energy-intensive sectors

(chemicals, metallurgy), partially offset by government programs. *Secondly*, import flows were reoriented through a sharp increase in *LNG* imports from the global market. Its main supplier became the United States – they accounted for up to 40% of *LNG* imports to Europe in 2022–2023, making the US effectively the new main gas supplier to the EU. Supplies from Qatar, Nigeria, Algeria, and other countries also increased. Regasification capacities were utilized: Germany built its first *LNG* terminals in record time, while other countries (France, the Netherlands, Poland) expanded theirs. *Thirdly*, the remainder of russian gas supplied via pipelines (through Ukraine and the "Turkish Stream") as well as in the form of *LNG* significantly decreased. According to Brookings, in 2023 Europe still received about 14.8% of its gas from russia (8.7% by pipelines, 6.1% *LNG*) – that is, less than one-fifth of total supply, compared to almost half before the war (Gross & Stelzenmüller, 2024). The European Commission reported that the share of russian gas in imports fell from 45% to 19%. Although in 2024 there was some deviation (the russian federation increased *LNG* exports to Europe, which some traders took advantage of), a clear strategic course was determined toward a complete refusal of russian energy resources by 2027. In May 2025, the EU approved the "Road Map", in particular committing to suspend new contracts for russian gas and completely eliminate its import by the end of 2027 (European Commission, 2025, May 12). Thus, the disconnection is not yet complete, as of November 2025, russian gas accounted for about 12% of total EU imports (7% – pipeline, the rest – *LNG*).

At the same time as diversifying supplies, Europe experienced an acceleration of the green transition. The energy crisis became a catalyst for massive investments in renewable energy sources and infrastructure. According to the World Economic Forum (WEF), as a result of the "energy shock" following the war, the share of renewable electricity in the EU increased from 38% to 47% of generation in just four years (World Economic Forum, 2026, January 12). This is an impressive increase, largely explained by the introduction of new wind and solar power capacities, as well as energy efficiency measures that have reduced fossil fuel consumption. Some regulatory barriers for the installation of renewable energy sources (RES) were removed, and permit issuance procedures were accelerated. For example, Spain, which suffered from droughts and high gas prices, added a record amount of solar power plants to the grid in 2023, while Germany simplified regulations for the construction of wind farms. Demand for solar panels and heat pumps in EU households has sharply increased due to high gas prices in 2022. This surge in investment in RES has not only contributed to achieving climate goals but is also considered as a matter of national security.

In addition to successes, there are also bottlenecks. The main problem has become the energy infrastructure, primarily the electricity grids. The rapid development of renewable sources has revealed the inadequacy of network capacity to integrate new volumes of electricity. In 2025, in Europe, incidents became more frequent where wind power generated in northern

Germany had to be curtailed due to grid overloads, while deficits arose in southern EU countries. Such "bottlenecks" increase costs and slow the further growth of the share of renewables (*Figure 4*). Investments in networks are currently lagging: although the EU is increasing expenditures (EUR 70 billion in network investments are expected in 2025, which is twice as much as ten years ago), it is still not enough to achieve the goals. Therefore, another priority is cross-border interconnectors and energy storage.

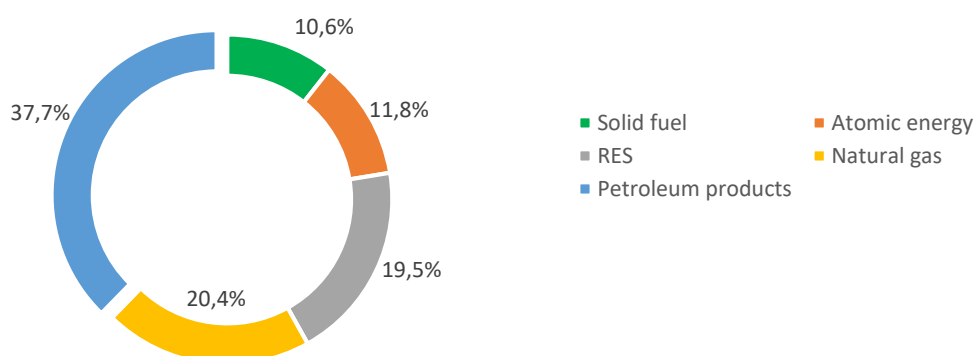


Figure 4. Energy consumption structure in the EU by sources, 2023

Source: compiled based on Eurostat data (Energy statistics – an overview, 2025, May).

From the perspective of energy security, 2024–2025 were relatively successful for the EU. Europe managed to get through the winter of 2022/2023 without gas outages, filling gas storage facilities to over 90% before the start of the heating season. The winter of 2023/2024 also passed more calmly, as prices fluctuated within the range of EUR 50–70 per MWh, which is several times lower than the peak values in 2022 (IEA, 2024). Another achievement is the mechanism for joint gas purchases and the EU Energy Platform, which allows EU countries to coordinate gas imports, preventing "price races" among themselves. Additionally, to avoid speculative jumps, cap prices for gas at European hubs have been introduced.

Thus, by the end of 2025, the EU energy market has significantly recovered and become more resilient to shocks. The strategic goal – a complete abandonment of Russian energy resources – is already close to being achieved without excessive economic losses. On the contrary, the crisis has been turned into an opportunity: Europe has accelerated energy innovation, increased the share of clean energy, and strengthened transatlantic energy ties (through LNG imports from the USA). Challenges ahead include modernizing infrastructure and ensuring energy affordability, since although wholesale prices have decreased, consumer bills in 2023 were still higher than pre-war levels, negatively affecting industrial competitiveness. However, overall the EU has demonstrated that even under conditions when energy is used as a weapon (energy weaponization), coordinated and timely actions can protect the economy from destructive consequences.

3. The impact of external shocks on Ukraine's economy and energy sector

Signs of geopolitical turbulence, confirmed at the 2026 Davos Economic Forum, indicate that the "new reality" in EU–Ukraine relations goes beyond a purely integration track and increasingly acquires a security-institutional dimension. In particular, the European Union is gradually moving from the role of a primarily financial donor and sanctions actor to the function of a co-guarantor of regional security, carrying this out through the mobilization of resources, the development of the military-industrial complex, and political coordination amid the growing conditionality and transactional nature of American security involvement.

The Ukrainian economy suffered an unprecedented blow in scale as a result of military aggression. According to official data, Ukraine's real GDP in 2022 has decreased by more than 29%, almost by a third, which is the largest decline in the history of independent Ukraine and one of the sharpest economic downturns in the world in recent decades. The reasons are obvious: occupation and hostilities in part of the territory, destruction of productive capacities (factories, infrastructure), blockade of seaports (which before the war provided about 70% of foreign trade), and mass displacement of the population (both abroad and internally). The loss of control over part of the economically active regions (Donetsk, Luhansk, Kherson, Zaporizhzhia regions), which traditionally made a significant contribution to GDP (metallurgy, chemistry, engineering, agriculture sector), immediately affected the overall indicators.

Despite these extreme circumstances, the Ukrainian economy already showed signs of adaptation and growth in 2023. According to the State Statistics Service, in 2023, GDP increased by +5.5% compared to the catastrophic 2022 (State Statistics Service of Ukraine, 2025, March 31). Such recovery growth is explained by the low base effect (after a deep decline, even partial recovery results in a large percentage increase) and some revitalization of domestic economic activity: businesses and the population have adapted to life under wartime conditions. For example, in the central and western regions in 2023, new enterprises were actively developing, particularly due to the relocation of businesses from dangerous regions. Agriculture, after the failure of 2022, restored production volumes, although it faced difficulties in exports due to the blockade (alternative logistics routes were established – "solidarity routes" through the western border, Danube ports). Government spending, financed by international aid, supported consumer demand (payment of salaries, social expenditures, and pensions was carried out without significant delays). Inflation in Ukraine, which sharply rose to 26.6% in 2022, slowed down in 2023 (annual inflation was 12%, and by the end of 2023 – about 9.8%, according to official data). This became possible thanks to the strict monetary policy of the NBU (fixing the

hryvnia exchange rate in 2022–2023 and raising the discount rate to 25% per year), the stabilization of fuel prices, and international financial support, which helped finance critical imports.

In 2024, growth rates slowed down – over the year, Ukraine’s GDP increased by only 2.9%. In fact, after a short-term upturn in 2023, the economy entered a phase of slow recovery. The reasons for this situation were: exhaustion of the easy recovery resource (many sectors have already recovered as much as possible under wartime conditions), as well as new shocks – in 2023, the grain export situation deteriorated after Russia withdrew from the "grain agreement" in July, which reduced foreign currency inflows. In addition, while 2022–2023 were characterized by some macro-financial stabilization (thanks to international inflows), in 2024 the risks associated with delays in deficit financing increased (in the fall of 2024, the US temporarily suspended aid funding, which caused tension).

Thus, the sharp decline in GDP in 2022 due to the full-scale war was followed by a partial recovery in 2023–2025 (*Figure 5*).

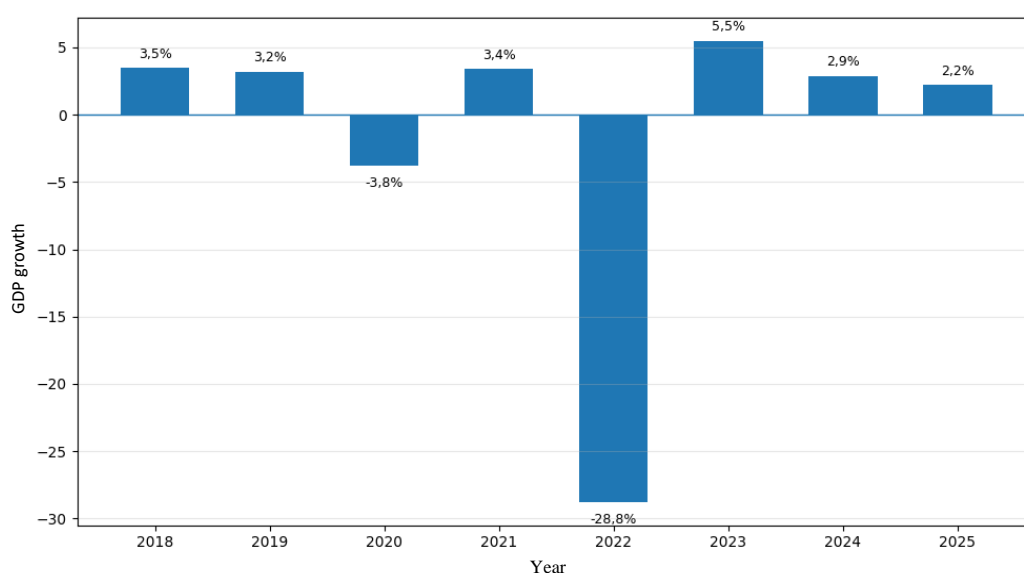


Figure 5. Real GDP growth of Ukraine (2018–2025), %

Source: compiled by the authors based on data from the State Statistics Service of Ukraine (2025, March 31) and the Ministry of Economy of Ukraine (2026, January 16).

During the war, the structure of the Ukrainian economy also changed. The shares of agriculture and IT in GDP increased, while industry, especially metallurgy, declined. The energy crisis at the end of 2022 – beginning of 2023 (massive attacks on power grids) led to a temporary decline in industrial production – in December 2022, industrial production was 40% below the pre-war level. After the stabilization of energy supply in spring of 2023, the industry partially recovered, but it is still far from pre-war volumes. In contrast, the IT sector, which became one of the largest service exporters (the share of IT in service exports exceeded 40%), continued to operate and even

grew due to many IT companies relocating employees abroad or using remote work.

Ukraine’s energy sector has turned into one of the fronts of the war. The Russian army carried out hundreds of missile and drone strikes on Ukraine’s energy infrastructure from October 2022 to March 2023. These attacks were aimed at leaving the country without electricity and heat during the winter period, in order to undermine the morale of the population and the viability of the economy. President Zelensky even declared an energy emergency on January 14, 2026, after another series of power plant attacks. At peak times (December 2022, November 2023), up to 50% of Ukraine’s energy system was damaged or disconnected, with millions of people left without light for several hours a day every day. For the economy, this meant production shutdowns, disruptions in transport, communications, and critical infrastructure.

In the winter of 2026, Russia again began carrying out massive attacks on the energy system. The events were accompanied by a sharp cold snap in January 2026, which led to peak loads on the energy system and complicated the balance between electricity production and consumption. The consequences of the crisis included disruptions in the operation of industrial enterprises, disturbances in the functioning of critical infrastructure, a decline in economic activity, and a deterioration of living conditions for the population in certain regions. Emergency crews in Ukraine continue around-the-clock efforts to restore electricity and heat supply while night-time temperatures drop to -20°C .

Large-scale damage to the energy system has become a key factor in revising forecasts. The NBU worsened its estimate for real GDP growth in 2026 to 1.8% (previously expected to be 2%). The estimate of the electricity deficit in Ukraine has doubled – from 3% to 6%. This forces enterprises to spend more resources on autonomous generation, which affects the cost of final products. As of Q1 2026, the NBU estimates an unprecedented electricity deficit of 12% (Figure 6).

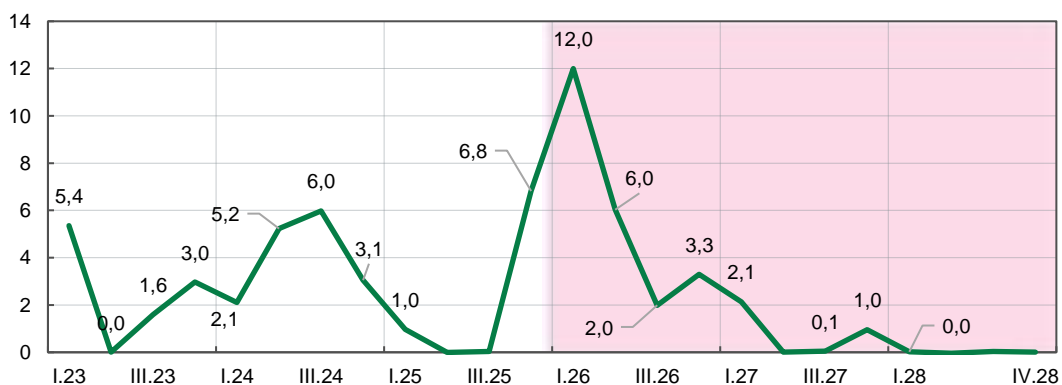


Figure 6. Electricity deficit (2023–2028), %

Source: compiled by the authors based on data from the NBU (National Bank of Ukraine, 2026, January).

The economic and energy war is costing Ukraine very dearly. According to estimates by the Ministry of Economy, in 2022–2023, direct damages to the energy sector exceeded 10 billion USD (dozens of high-voltage transformers were destroyed or damaged, hundreds of kilometres of power lines, over 50% of key thermal power plants and combined heat and power plants were damaged). Indirect losses – underproduction, forced downtime – are even greater. The government is forced to spend reserve funds on purchasing fuel for generators, emergency repairs, and importing electricity at high prices (ACAPS, 2024, *September 13*). In the winter of 2022/2023, the National Bank of Ukraine even estimated that blackouts could cost the economy up to –0.5% of GDP per month in the worst-case scenario, and also forecasts the departure of another 400.000 people due to constant power outages and shelling of energy infrastructure (Dobrovolska, 2024, *September 2*).

Another dimension is the foreign economic and financial impact. Due to the blockade of ports and the danger to shipping, Ukraine's exports in 2022 fell almost by half. In 2023, the situation improved somewhat thanks to the "grain corridor" (which operated from July 2022 to July 2023, allowing the export of up to 33 million tons of agricultural products) and alternative routes, but nevertheless, goods exports in 2024 amounted to only USD 39 billion compared to USD 64 billion in 2021. Imports decreased less (due to increased demand for fuel, machinery, and military equipment), so the trade deficit rose sharply and in January–September of 2025 amounted to USD 13.6 billion (NBU, n. d.). This gap is covered through external financial inflows – grants, donor loans, and remittances from Ukrainians abroad. Thanks to external assistance, the NBU's international reserves have grown to a record USD 57.3 billion as of January 1, 2026 (National Bank of Ukraine, 2026, *January*) – a paradoxically high level in the midst of the war, indicating unprecedented volumes of external support. This allowed for maintaining relative exchange rate stability (the official exchange rate of UAH 36.6/USD was fixed back in 2022, while the market cash rate fluctuated within UAH 41–43/USD during 2024–2025). In the future, sharp jumps in the national currency exchange rate are unlikely due to a more than sufficient level of gold and foreign exchange reserves, which allow for these interventions to be maintained.

Financially, Ukraine survives thanks to international aid. In 2023, the volume of official financing (grants and loans) exceeded USD 30 billion, in 2024 – about USD 28 billion; the EU, IMF, and World Bank are key donors. In 2025, Ukraine attracted USD 52.4 billion in external financing, of which over 70% was covered thanks to the income from frozen Russian assets. International support allowed the full funding of social and humanitarian budget expenditures, while domestic resources were directed to defence. The key donors were the EU (Ukraine Facility) and the USA (Ministry of Finance of Ukraine, 2025, *December 30*). This made it possible to finance the budget

deficit, most of which goes to military needs (as of 2025, state spending on defence and security amounted to about 50% of all budget expenditures). Ukraine’s public debt rose to almost 130% of GDP, but during the war creditors agreed to a moratorium on payments, so default was avoided. In addition, as noted by the NBU, a significant part of the public debt is considered conditional debt obligations, as it is formed through loans based on frozen russian assets (National Bank of Ukraine, 2026, January). Data on the sources of additional financing of Ukraine’s state budget during the war are summarized in the *Table*.

Table

Additional financing of the state budget of Ukraine during the war period as of December 31, 2025, USD billion

Source	Type of funding				
	grants	loans	from income from russian assets	Internal	
				Ukrainian Domestic Government Bonds	issuance of the hryvnia (2022)
The EU	4.5	52.4	–	–	–
UDGB	–	–	–	51.4	–
ERA funding	–	–	37.9	–	–
USA	30.3	–	–	–	–
IMF	–	13.3	–	–	–
NBU	–	–	–	–	12.5
Japan	1	7.6	–	–	–
World Bank	–	6	–	–	–
Canada	–	5.4	–	–	–
Great Britain	0.1	2.9	–	–	–
Others	0.7	1.3	–	–	–
Germany	1.4	0.3	–	–	–
France	–	0.4	–	–	–
Italy	0.1	0.2	–	–	–

Source: compiled by the authors based on data from the Ministry of Finance of Ukraine (2026, February 18).

The results of the analysis indicate that the impact of geopolitical turbulence on Ukraine is destructive but not fatal. The economy has lost a third of its volume, but it has managed to stabilize at a lower level and even resume growth. Ukraine’s energy sector is resisting attempts at destruction and is gradually being renewed with more decentralized, resilient technologies. Ukraine’s experience, which is already valuable for partners – in the form of rapid network repair, the creation of distributed microgrids, mobile boiler houses, and so on – can be useful to other countries in emergencies. Ukrainian businesses, having survived the shock, are beginning to look for new niches and adapt to European markets (especially considering the prospects of EU membership). Thus, despite prolonged risks, the Ukrainian economy shows signs of resilience and potential for recovery, provided external support continues and reforms are maintained.

4. Ukraine's response to emerging risks

In the context of ongoing geopolitical turbulence, Ukraine needs to implement a set of response measures aimed at reducing the economy's vulnerability, strengthening its resilience, and laying the foundation for post-war development. In this regard, the main strategic directions have been identified, related to ensuring macro-financial stability and supporting the population and businesses, developing energy resilience, stimulating critically important sectors, conducting institutional reforms, diversifying sales markets, cooperating with the EU on the use of frozen Russian assets, and forming a strategic vision for the further development of the national economy.

Regarding macro-financial stability and the continuation of cooperation with partners, it should be understood that in the coming years Ukraine will remain dependent on external financing for the budget and the balance of payments. Therefore, it is critically important to negotiate multi-year support packages in advance from the EU, the USA, the IMF, and other donors. It is necessary to develop mechanisms for insuring military risks for private investors (for example, through agencies like MIGA² or by providing state guarantees) in order to immediately launch projects in less dangerous regions. The priority direction for the NBU should be stimulating economic activity through abandoning strict control of the currency market and returning to a flexible exchange rate and inflation targeting.

Alongside this, in order to maintain social stability, the government must continue targeted assistance programs for the most vulnerable segments of the population, particularly displaced persons, the unemployed, and poor households. The expansion and accessibility of grant programs for small businesses (start-ups for veterans, entrepreneurship for displaced persons) will promote self-employment and the rapid restoration of economic activity locally. It is also necessary to start planning measures for the return of labour migrants after the war, as Ukraine is losing its labour potential, and recovery will be difficult without a workforce. These could include incentives for businesses to employ people in Ukraine, housing programs for those who return, and the development of educational initiatives to ensure that young people stay or come back.

Regarding the development of energy resilience, given that attacks on the energy sector continue, Ukraine should invest in decentralized energy. A priority direction is increasing the share of renewable sources with distributed networks (solar panels on roofs, small wind turbines, biogas plants for communities), which will reduce the load on the central grid and make each settlement less vulnerable. It is also necessary to continue installing industrial energy storage systems (batteries) at key network nodes,

² The Multilateral Investment Guarantee Agency (MIGA), which is part of the World Bank Group, specializes in insuring against political risks (war, expropriation, currency inconvertibility) to encourage foreign investments in developing countries.

which will allow faster restoration of energy supply after accidents. Ukraine is already cooperating with the EU within the framework of ENTSO-E – it is worth continuing to expand the capacity of cross-border power lines in order to import more electricity from the EU in case of a shortage. However, due to grid damage caused by Russian strikes, imported energy cannot always reach the regions where the shortage is greatest, but it reduces the overall level of deficit (DiXi Group, 2026, January 21). At the same time, import capabilities have physical and market limitations. Ukraine sometimes purchases 2100–2120 MW, which is the maximum volume of commercial imports. Moreover, if prices in neighbouring EU countries exceed Ukrainian prices, imports become economically unprofitable, and purchase volumes also decrease.

Undoubtedly, in the future, when Ukrainian renewable energy generation grows, by using integration with ENTSO-E, Ukraine will be able to export "green" electricity to Europe.

An important project is the reconstruction and modernization of the power grid based on the principle of "build back better", namely, restoring destroyed substations using modern technologies (digital substations, more resilient equipment). European investment institutions (EIB, EBRD) are ready to finance such projects, and Ukraine should attract these funds as much as possible. In addition, it is necessary to create a strategic reserve of equipment (transformers and generators), which currently does not exist, in case of new attacks, possibly together with partners who could store and quickly supply such reserves.

It is necessary to implement a series of measures *to stimulate critically important industries and import substitution*. In the context of supply disruption risks (as it happened with fuel in 2022 or with electricity), Ukraine should develop its own production of key goods, as much as possible. It is worth supporting the development of enterprises of military-industrial complex and related sectors – not only for the needs of the front, but also with an export strategy. For example, Eastern European countries are increasing defence spending, so Ukrainian companies can integrate into European defence supply chains. Cooperation with the EU in the field of critical materials is also promising: Europe is looking for alternative sources for supplies of rare earth elements, lithium, titanium, and Ukraine, rich in some of these resources, can become a partner in their extraction and processing (attracting European investments with guarantees of supply security). The government estimates the total investment potential of the sector at approximately USD 12–15 billion by 2033 (Reuters, 2025, May 1). At the same time, this will strengthen the economic base and enhance ties with the EU.

In order to prepare for post-war reconstruction, even during the war, Ukraine should continue *institutional reforms* – in public administration, the judicial system, and anti-corruption measures. This is a condition for receiving aid and a guarantee that after the war, the funds for recovery will be used effectively. It is necessary to reform the tax and customs services to

simplify trade with the EU (a duty-free regime with the EU is already applied to most goods, but technical compatibility is also needed, for example, mutual recognition of certificates, "industrial visa-free"). Corporate governance reform in state-owned companies and privatization (where possible during the wartime) will help attract investments. Integration into the EU systems also opens the way for Ukraine to receive significant resources – private investments and assets from structural funds. Therefore, it is necessary to lay the foundation for this right now: to adapt the legislation to the EU standards (to meet candidacy requirements) and create institutions for managing recovery funds (including with international oversight for trust). The goal is to implement a Marshall Plan for Ukraine when the active phase of hostilities ends. However, for this plan to work, Ukraine needs to have the capacity to effectively absorb aid – qualified personnel, transparent procedures, project readiness, etc.

Regarding trade activation, it is necessary *to diversify sales markets* and logistics routes. Since trade routes through the Black Sea remain under threat, Ukraine must develop alternative logistics. With the support of the EU, it is necessary to increase the carrying capacity of railways and roads at the western border, to build grain storage facilities and terminals in neighbouring countries (Poland and Romania). Although work is currently underway in this direction, the pace should be accelerated to reduce transportation costs – currently, transshipment via the Danube and by rail is more expensive, which makes Ukrainian products less competitive. It is also advisable to develop transportation through the Baltic ports (by trains to Lithuanian or Latvian ports), thereby reducing dependence on the Black Sea. At the same time, it is necessary to search for new markets beyond the traditional ones. For example, to expand the presence of Ukrainian food products in Asia and Africa through food security programs.

Further *interaction with the EU regarding frozen russian assets* and reparations will allow covering a significant portion of reconstruction needs without additional debt burden. As it is known, the EU has accumulated about 200 billion euros of frozen assets of the Central Bank of the Russian Federation and oligarchs (European Commission, n. d.). Ukraine must actively work with European partners on a legal mechanism for using these funds. The offer of the Ukraine Reparation Facility (borrowing against these assets and transferring the loan to Ukraine) is an interesting instrument. Ukraine needs to argue on the international stage the moral and legal right to allocate these funds for the reconstruction of what was destroyed by the aggressor.

It is also necessary to formulate a strategic vision for the development of Ukraine: a transition from survival to development. As Ukrainian experts emphasize, it is not enough to simply aim to restore the pre-war economic structure – the opportunity should be used for a structural leap in productivity (Gorodnichenko et al., 2022). In other words, reconstruction should be innovative: instead of the Soviet industrial giants – modern processing

facilities converting raw materials on-site, instead of a transit raw materials model – the development of logistics with added value, IT, and engineering services that can be scaled for export. This, in turn, will require an educational reorientation (training personnel for new industries), as well as the involvement of the diaspora and international experts in reconstruction. Ukraine has already chosen the path of integration with the EU, and future membership in the European Union is a realistic prospect a few years after the war. Therefore, all reforms and projects should be considered from the perspective of European integration. Ukraine's economic security is a component of Europe's economic security, so it is advisable to initiate closer platforms for coordinating economic policy with the EU already now.

The proposed measures aim not only to mitigate current risks, but also to prepare the foundation for rapid development after the restoration of peace. As the experience of post-war reconstruction in European countries shows, or, for example, the successes of Eastern European EU members, the right strategy and resource mobilization can ensure an economic miracle even after severe shocks. It is important that Ukraine already forms a consensus on such a strategy and acts to anticipate risks, so that the consequences of geopolitical turbulence will be significantly minimized.

Conclusions

The geopolitical turbulence of the twenties of the 21st century – primarily, Russia's war against Ukraine and the accompanying global shifts – has created serious challenges for the economies of both the European Union and Ukraine.

The impact of geopolitical shocks on the EU economy was noticeable, but, as analysis shows, controlled. Although the war highlighted Europe's vulnerabilities, in particular its energy dependence and insufficient defence spending, the EU is successfully implementing adaptation policies, and its economy has demonstrated significant flexibility and resilience to external shocks, while geopolitical challenges have even provided an impetus for accelerating transformations.

The United States of America, as a key geopolitical player, influenced the EU economy both through markets and political signals. The Fed's tight monetary policy led to a tightening of global financial conditions, which also affected the EU. At the same time, close transatlantic cooperation in response to the war (sanctions against the Russian Federation, aid to Ukraine, the new 2025 trade agreement) generally had a positive effect, reducing uncertainty and laying the foundation for long-term partnership. A restraint factor in Europe is the risk of political uncertainty, which prompts the EU to develop its own autonomy in defence and energy.

Ukraine has suffered a colossal economic blow from the war, but has demonstrated the ability to survive and adapt. However, the foreign trade imbalance and budget deficit remain critical, so currently these indicators are being covered at the expense of partners. The most destructive aspect is the

deliberate destruction of energy infrastructure, due to which Ukraine is going through the cold winter of 2026 with a long-term blackout.

The main channels of influence of geopolitical turbulence on the EU economy were:

- proximity to war – countries neighbouring Ukraine lost up to 1.5–2 percentage points of growth in 2022–2023 and experienced several additional points of inflation;
- energy shock – a peak price increase added about 5–7 percentage points to inflation in 2022;
- financial effects – the global increase in rates and capital outflows reduced investments in the EU in 2022–2023, but the stability of the eurozone was not shaken;
- migration effect – the reception of millions of Ukrainian refugees in Europe initially required fiscal expenditures, but in the medium and long term it may provide an influx of labour.

The following channels have been set for Ukraine:

direct military destructions – a significant portion of fixed assets has been lost, which suppresses growth potential for years ahead;

intervention in foreign trade – port blockades, disruption of logistics limited exports and imports, increasing dependence on international aid;

electric power industry as a target – attacks on infrastructure reduce GDP and require resources for repairs instead of directing them towards development;

mass migration – about 5–6 million Ukrainians have gone abroad, which led to the loss of part of the labour potential and further prospects regarding the loss of the workforce are bleak.

Ukraine and the EU have mutually strengthened economic ties in the face of a common threat. The EU has provided Ukraine with multi-billion financial support (macro-financial assistance, budget funding, humanitarian programs) and opened its market (abolishing tariffs and quotas on Ukrainian goods), which helped the Ukrainian economy to hold up. Ukraine, in turn, has become a factor in the consolidation of the EU – countries united in sanctions policy and in reducing dependence on the authoritarian regime of the Russian Federation, and also invested in defence. Such integration has strategic significance: in the future, Europe's economic security will be impossible without the recovery and development of Ukraine, and vice versa – a prosperous Ukrainian economy will strengthen the common European market and security. Thus, the hypothesis put forward at the beginning of the article was generally confirmed, but with some clarifications. For the European Union, the war caused short-term turbulence; however, in the medium term, the EU returned to positive growth and even accelerated transformational processes in the energy and defence sectors. The Ukrainian economy, as predicted, suffered significant losses but survived and, largely thanks to external support and the internal flexibility of businesses, transitioned to slow growth.

There are still many challenges ahead – from uncertainty on the battlefield to political changes in the world – but the acquired experience allows for better preparation for them. The most serious risks for Ukraine are energy attacks, financial dependence, and export restrictions, so proposals for their minimization should be taken into account when developing state policy. An adequate response to current geopolitical risks will become the foundation for successful post-war recovery in Ukraine.

Further research should focus on an in-depth analysis and assessment of the medium- and long-term impact of external shocks on Ukraine’s economy, its energy sector, financial stability, and capacity for structural adaptation. On this basis, it would be advisable to justify models of post-war recovery of Ukraine aimed at increasing productivity, energy resilience, technological modernization, and reducing critical dependence on external support.

REFERENCES / СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

ACAPS. (2024, September 13). Ukraine. Energy infrastructure attacks: outlook and impact during 2024–2025 cold season. Thematic Report. https://www.acaps.org/fileadmin/Data_Product/Main_media/20240913_ACAPS_Ukraine_Analysis_hub_Attacks_on_the_energy_infrastructure_in_Ukraine.pdf	
Benedysiuk, S. (2025). Genesis of the legal institution of personal and sectoral sanctions. <i>Scientific Perspectives</i> , 2(56). https://doi.org/10.52058/2708-7530-2025-2(56)-1235-1248	Бенедисюк, С. (2025). Генеза правового інституту персональних і секторальних санкцій. <i>Наукові перспективи</i> , 2(56). https://doi.org/10.52058/2708-7530-2025-2(56)-1235-1248
Bottazzi, Laura, Favero, Carlo, Fernandez-Fuertes, Ruben, Giavazzi, Francesco, Guerrieri, Veronica, Lorenzoni, Guido, & Monacelli, Tommaso (2025). Euro Area Risks Amid US Protectionism. Monetary Dialogue Papers, March 2025. <i>Economic Governance and EMU Scrutiny Unit European Parliament</i> . https://www.europarl.europa.eu/RegData/etudes/STUD/2025/764186/ECTI_STU%282025%29764186_EN.pdf	
CES. (2026, January 16). Overview of the Ukrainian economy in 2025. <i>CES Research</i> . https://ces.org.ua/ukraines-economic-review-2025/	ЦЕС. (2026, 16 січня). Огляд української економіки у 2025 році. <i>Дослідження ЦЕС</i> . https://ces.org.ua/ukraines-economic-review-2025/
Cinzia, Alcidi. (2025). Risks and opportunities in evolving EU–US financial and economic relations. <i>European Parliament</i> (STUD/764369). https://www.europarl.europa.eu/RegData/etudes/STUD/2025/764369/ECTI_STU%282025%29764369_EN.pdf	
<i>Davos 2026</i> : Special Address by Donald J Trump, President of the United States of America. (2026, January 21). https://www.weforum.org/stories/2026/01/davos-2026-special-address-donald-trump-president-united-states-america/	
<i>DiXi Group</i> . (2026, January 21). Electricity shortage in Ukraine – what is really happening? https://dixigroup.org/deficzit-elektroenergi%D1%97-v-ukra%D1%97ni-shho-vidbuva%D1%94tsya-naspravdi-rubrika-dostupno-pro-energetiku-z-dixi-group/	<i>DiXi Group</i> . (2026, 21 січня). Дефіцит електроенергії в Україні – що відбувається насправді? https://dixigroup.org/deficzit-elektroenergi%D1%97-v-ukra%D1%97ni-shho-vidbuva%D1%94tsya-naspravdi-rubrika-dostupno-pro-energetiku-z-dixi-group/
Dobrovolska, K. (2024, September 2). <i>Consequences of autumn blackouts: NBU forecasts possible population outflow</i> . https://24tv.ua/economy/nbu-sprognozuvav-naslidki-osinnih-blekautiv-lyudi-zmusheni-budut_n2631642	Добровольська, К. (2024, 2 вересня). <i>Наслідки осінніх блекаутів: НБУ прогнозує можливий відтік населення</i> . https://24tv.ua/economy/nbu-sprognozuvav-naslidki-osinnih-blekautiv-lyudi-zmusheni-budut_n2631642
<i>Energy statistics – an overview</i> . (2025, May). https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview#Final_energy_consumption	
<i>European Commission</i> . (2023, November 28). Council Regulation amending Regulation (EU) 2022/2578 as regards the prolongation of its period of application/ Brussels, 28.11.2023. COM(2023) 761 final. 2023/0443(NLE). https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52023PC0761	
<i>European Commission</i> . (2025, May 12). Communication from the commission to the european parliament, the council, the european economic and social committee and the committee of the regions. <i>Roadmap towards ending russian energy imports</i> . https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52025DC0440R(01)	

European Commission. (n. d.). Chapter 1 – The EU’s response to Russia’s war of aggression against Ukraine. <https://op.europa.eu/webpub/com/general-report-2023/en/chapter1.html>

European Economic Forecast – Autumn 2025. (2025). European Commission, Directorate-General for Economic and Financial Affairs. https://economy-finance.ec.europa.eu/document/download/34538512-fff6-451a-8bbc-4c8d60e4d132_en?filename=ip327_en.pdf

EU-US trade: facts and figures. (2026, January 22). <https://www.consilium.europa.eu/en/infographics/eu-us-trade/>

Federal Funds Effective Rate. (n. d.). <https://fred.stlouisfed.org/graph/?g=TH31>

GDP (current US\$) – United States, European Union. (n. d.). <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=US-EU>

GDP up by 0.3% in both the euro area and the EU. (2026, January 30). <https://ec.europa.eu/eurostat/en/web/products-euro-indicators/w/2-30012026-ap>

Gorodnichenko, Yu., & Obstfeld, M. (2026, 26 January). *You only live twice: A growth strategy for Ukraine.* <https://cepr.org/voxeu/columns/you-only-live-twice-growth-strategy-ukraine>

Gorodnichenko, Yu., Sologoub, I., & Weder di Mauro, B. (2022). *Rebuilding Ukraine: Principles and policies, CEPR Press, Paris & London.* <https://cepr.org/publications/books-and-reports/rebuilding-ukraine-principles-and-policies>

Gross, S., & Stelzenmüller, C. (2024). *Europe’s messy russian gas divorce.* More than two years after Putin’s invasion of Ukraine, reliance on russia for energy lingers. June 18, 2024. <https://www.brookings.edu/articles/europes-messy-russian-gas-divorce/>

HCOB Eurozone Composite PMI. (2026, January). NEWS RELEASE MARKET SENSITIVE INFORMATION Embargoed until 1000 CET (0900 UTC). <https://www.pmi.spglobal.com/Public/Home/PressRelease/96530bc528ed4c7d856ec7e770f9fbf9>

IEA. (2024). Europe has taken its energy destiny back into its own hands, IEA, Paris. <https://www.iea.org/commentaries/europe-has-taken-its-energy-destiny-back-into-its-own-hands>, Licence: CC BY 4.0

Inflation Reduction Act of 2022. (2022). *IRS.* <https://www.irs.gov/inflation-reduction-act-of-2022>

International trade in services (since 2010). (2026, January 13). https://ec.europa.eu/eurostat/databrowser/view/bop_its6_det/default/table?lang=en

Ksendzuk, V., Yatskivska, A., & Yatskovska, A. (2025). Economic sanctions as a tool for transforming the international business environment: a comparative analysis of the approaches of the EU, USA, and Ukraine. *Economics, Management, and Administration*, 61–69. [https://doi.org/10.26642/ema-2025-4\(114\)-61-69](https://doi.org/10.26642/ema-2025-4(114)-61-69).

Ксендзук, В., Яцківська, А., & Яцковська, А. (2025). Економічні санкції як інструмент трансформації міжнародного бізнес-середовища: порівняльний аналіз підходів ЄС, США та України. *Економіка, управління та адміністрування*, 61–69. [https://doi.org/10.26642/ema-2025-4\(114\)-61-69](https://doi.org/10.26642/ema-2025-4(114)-61-69).

Ministry of Economy of Ukraine. (2026, January 16). Ministry of Economy: in 2025, Ukraine’s GDP grew by 2.2%. <https://me.gov.ua/News/Detail/25c9685b-a465-4945-bf5d-3be9ec515ace?lang=uk-UA&title=Minekonomiki-U2025-RotsiVvpUkrainiZrisNa2-2->

Мінекономіки України. (2026, 16 січня). Мінекономіки: у 2025 році ВВП України зріс на 2,2%. <https://me.gov.ua/News/Detail/25c9685b-a465-4945-bf5d-3be9ec515ace?lang=uk-UA&title=Minekonomiki-U2025-RotsiVvpUkrainiZrisNa2-2->

Ministry of Finance of Ukraine. (2025, December 30). In 2025, the Ministry of Finance of Ukraine attracted \$52.4 billion in external financing, of which over 70% came from revenues from frozen russian assets. https://mof.gov.ua/uk/news/in_2025_ukraines_ministry_of_finance_secured_524_billion_in_external_financing_more_than_70_of_which_came_from_revenues_generated_by_frozen_russian_assets-5520

Міністерство фінансів України. (2025, 30 грудня). У 2025 році Мінфін України залучив \$52,4 млрд зовнішнього фінансування, із яких понад 70% – за рахунок доходів від заморожених активів РФ. https://mof.gov.ua/uk/news/in_2025_ukraines_ministry_of_finance_secured_524_billion_in_external_financing_more_than_70_of_which_came_from_revenues_generated_by_frozen_russian_assets-5520

Ministry of Finance of Ukraine. (2026, February 18). Financing of the state budget of Ukraine since the beginning of the full-scale war. https://mof.gov.ua/uk/news/ukraines_state_budget_financing_since_the_beginning_of_the_full-scale_war-3435

Міністерство фінансів України. (2026, 18 лютого). Фінансування державного бюджету України з початку повномасштабної війни. https://mof.gov.ua/uk/news/ukraines_state_budget_financing_since_the_beginning_of_the_full-scale_war-3435

National Bank of Ukraine. (2026, January). Inflation Report, January 2026. <https://bank.gov.ua/ua/news/all/inflyatsiyniy-zvit-sichen-2026-roku>

Національний банк України. (2026, січень). Інфляційний звіт, січень 2026 року. <https://bank.gov.ua/ua/news/all/inflyatsiyniy-zvit-sichen-2026-roku>

<i>NBU</i> . (n. d.). Statistics of Ukraine's external sector. https://bank.gov.ua/ua/statistic/sector-external	<i>НБУ</i> . (б. д.). Статистика зовнішнього сектору України. https://bank.gov.ua/ua/statistic/sector-external
Pankovets, M. P., & Shevchuk, T. V. (2024). International economic sanctions in the system of international security: experience and effectiveness of application in modern conditions. <i>Scientific Bulletin of UNFU</i> , 34(4), 34–40. https://doi.org/10.36930/40340405	Панковець, М. П., & Шевчук, Т. В. (2024). Міжнародні економічні санкції в системі міжнародної безпеки: досвід та ефективність застосування в сучасних умовах. <i>Scientific Bulletin of UNFU</i> , 34(4), 34–40. https://doi.org/10.36930/40340405
<i>Regulation</i> (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1724 and (EU) 2019/1020. (2024, April 11). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202401252	
<i>Regulation</i> (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724. (2024, June 13). https://eur-lex.europa.eu/eli/reg/2024/1735/oj/eng	
<i>Reuters</i> . (2025, May 1). What are Ukraine's critical minerals and what do we know about the deal with US? https://www.reuters.com/markets/commodities/what-are-ukraines-critical-minerals-what-do-we-know-about-deal-with-us-2025-05-01/	
<i>State Statistics Service of Ukraine</i> . (2025, March 31). The GDP for 2024 has been estimated. https://stat.gov.ua/uk/news/zdiysneno-otsinku-vvp-za-2024-rik	<i>Державна служба статистики України</i> . (2025, 31 березня). Здійснено оцінку ВВП за 2024 рік. https://stat.gov.ua/uk/news/zdiysneno-otsinku-vvp-za-2024-rik
<i>The future of European competitiveness: Report by Mario Draghi</i> . (n. d.). https://commission.europa.eu/topics/competitiveness/draghi-report_en	
U.S. International Trade in Goods and Services December and Annual 2025. (2026). <i>The U.S. Census Bureau and the U.S. Bureau of Economic Analysis</i> . https://www.bea.gov/sites/default/files/2026-02/trad1225.pdf	
Urakin, M. (2026, January 31). Key economic indicators of Ukraine and the world in 2025. https://interfax.com.ua/news/projects/1141101.html	Уракін, М. (2026, 31 січня). <i>Основні економічні індикатори України та світу в 2025 році</i> . https://interfax.com.ua/news/projects/1141101.html
<i>WIIW</i> . (2025). Forecast Report/Autumn 2025. https://wiiw.ac.at/executive-summary-dlp-7426.pdf	
<i>WIIW</i> . (2025, October 22). Autumn Forecast: Eastern Europe with robust, but slower growth. https://wiiw.ac.at/autumn-forecast-eastern-europe-with-robust-but-slower-growth-n-700.html	
<i>World Economic Forum</i> . (2026, January 12). Keeping the lights on: How power infrastructure gaps risk energy security. https://www.weforum.org/stories/2026/01/power-infrastructure-grid-energy-security/	

Conflict of interest. The authors certify that they have no financial or non-financial interest in the subject matter or materials discussed in this manuscript; the authors have no association with state bodies, any organizations or commercial entities having a financial interest in or financial conflict with the subject matter or research presented in the manuscript. Given that one of the authors are affiliated with the institution that publishes this journal, which may cause potential conflict or suspicion of bias and therefore the final decision to publish this article (including the reviewers and editors) is made by the members of the Editorial Board who are not the employees of this institution.

The authors received no direct funding for this study.

Mazaraki, A., & Melnyk, T. (2026). The European Union and Ukraine: in search for a new economic reality. *Scientia fructuosa*, 2(166), 4–30. [http://doi.org/10.31617/1.2026\(166\)01](http://doi.org/10.31617/1.2026(166)01)

Received by the editorial office 05.01.2026.

Accepted for printing 10.03.2026.

Published online 10.04.2026.