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# National economy and security of Ukraine in the situations of war: results of strategic long term forecasting

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**Abstract.** The relevance of the article is due to the need to have a forecast of macroeconomic indicators of Ukraine for the long term, since the volume of these indicators directly determines the development of the economy of Ukraine. The purpose of this forecast is to further form recommendations on economic policy, possible volumes of the defense budget, and ways of restoring Ukraine in the post-war period.

The article provides a forecast of the main macroeconomic indicators of Ukraine, namely: gross domestic product, exports, imports and public debt. The forecast is presented in the range from minimum to maximum values for three periods: short-term (until 2026), medium-term (until 2029) and long-term (until 2032) for three options (scenarios): minimum values (pessimistic scenario), average (weighted scenario) and maximum (optimistic scenario). For illustrative purposes, a graphical method was used, and appropriate diagrams and graphs were constructed. The forecast was based on an economic and statistical analysis of the above-mentioned macroeconomic indicators of Ukraine for 2002–2023. In addition, the article lists the main factors for each macroeconomic indicator that affect their volumes. Thus, the success of the development of the Ukrainian economy in the long term will mainly depend on the following factors: the geopolitical situation, the demographic situation in Ukraine and the world, investments and international assistance provided to Ukraine, reforms and structural changes in the Ukrainian economy. However, the decisive factor for the development of the Ukrainian economy will be the fact of the cessation or continuation of the Russian-Ukrainian war.

The materials of the article can be used in the formation and implementation of state policy of Ukraine, in particular in determining the priorities of Ukraine's development. The article can be useful to scientists and analysts involved in the development of forecasts, making and substantiating state decisions regarding the development of the state.

Directions for further research can be directed to the formalization of the relationship between gross domestic product volumes and the main macroeconomic indicators with the costs of ensuring the state's defense capability, also the development of recommendations for improving the economic situation in Ukraine during the reconstruction period after the end of hostilities.

**Keywords:** national security, gross domestic product, public debt, armed forces, economy, export, import, international aid, macroeconomic indicators, defense capability, forecast.

## Introduction

The forecast for Ukraine's economic development is one of the most crucial tasks for making

informed decisions, both when shaping Ukraine's economic policy and ensuring the effective development of the Armed Forces of Ukraine. A long-term forecast serves as an important tool for both analysts and governments, as it helps define strategies for macroeconomic stability and growth.

The primary publication on Ukraine's economic and social development forecasts is the consensus forecast [1]–[3]. These forecasts are prepared by the Department of Strategic Planning and Macroeconomic Forecasting within the Ministry of Economy of Ukraine for the medium-term outlook. The aim of these publications is to provide recommendations on economic policy to ensure stable and balanced economic growth in Ukraine, as well as to conduct macroeconomic forecasting of potential future scenarios for the country. The consensus forecast represents the average values of key economic and social development indicators for Ukraine, calculated as the median based on expert assessments from survey participants—leading specialists in macroanalysis and forecasting [1]. These forecasts include expected growth rates for Gross Domestic Product (GDP), inflation, labour market projections, and the impact of reforms on the economy. These projections are often adjusted in response to political changes and external challenges.

The National Bank of Ukraine (NBU) regularly publishes short-term macroeconomic forecasts, based on an analysis of both domestic and external factors [4]. For example, the 2025 forecast accounts for the significant impact of the war on the economy but also highlights the possibility of positive changes should the situation stabilise. The NBU forecast typically includes expectations for GDP growth, inflation, exchange rates, and unemployment levels.

International organisations also analyse Ukraine's economic situation and provide their own forecasts, mostly for the medium term [5]–[8]. For instance, the International Monetary Fund (IMF) predicted a slowdown in Ukraine's economic growth due to the war at the end of 2024, while also noting that, under peaceful conditions, the country could restore growth [7]. The World Bank highlights the potential for growth in the agricultural sector and digital economy [8].

Moreover, publications focused on the long-term prospects for Ukraine's economic development have been produced by individual experts or independent analytical centres [9]–[13], including the Centre for Economic Strategy [12]. These forecasts consider structural reforms, investment growth, and the potential for developing small and medium-sized businesses. However, they also note the difficulty of making accurate long-term forecasts, as formalising and calculating the interrelationships between key macroeconomic indicators and the factors that influence them over the long term is a complex task.

Therefore, in this article, the long-term economic forecast for Ukraine is proposed based on an analysis of existing statistical data for key macroeconomic indicators from 2002 to 2023. The selected macroeconomic indicators for analysis include: GDP, exports, imports, and national debt. Additionally, to fully understand the potential pathways for Ukraine's economic development, it is essential to identify the main factors that will influence the volumes of these macroeconomic indicators in the long term.

Thus, the aim of this research is to present a probable forecast for the development of Ukraine's key macroeconomic indicators up to 2032 and to identify the primary factors influencing the volumes of the studied macroeconomic indicators.

**Methodological Framework**

The proposed research is based on an economic-statistical analysis of key macroeconomic indicators for Ukraine from 2002 to 2023, specifically GDP, exports, imports, and national debt. Additionally, the volume and distribution of international aid provided during russia's large-scale invasion of Ukraine (2022–2024) have been considered.

Time series for these indicators were constructed, highlighting the key trends in their changes, which enabled forecasting of Ukraine's major macroeconomic shifts up to 2032.

The forecast is presented within a range from minimum to maximum values across three periods: short-term (up to 2026), medium-term (up to 2029), and long-term (up to 2032), with three scenarios: minimum values (pessimistic), average values (weighted), and maximum values (optimistic). Graphical methods have been used to illustrate the results, with corresponding charts and graphs provided.

**Results and Discussions**

The key macroeconomic indicators for Ukraine from 2002 to 2023, namely GDP, exports, imports, and national debt, are presented in Table 1 [14], [15].

Given the importance of international aid to our economic development, it is crucial to focus specifically on the assistance provided to Ukraine in recent years [16]. To grasp the full scope of this aid, Table 2 outlines the volume and distribution of international support from the United States, Europe, and other countries during russia's large-scale invasion of Ukraine, i.e., from 2022 to 2024. Table 3 presents the distribution of this assistance across key sectors: financial, humanitarian, and military aid. The analysis of allocated international aid reveals that Europe provided 53% of the total, the United States 38%, and 9% came from other countries. The volume of aid remained roughly consistent across the years.

**Table 1.** Statistical macroeconomic indicators for 2002–2023 for forecasting Ukraine's economic development.

| Year | GDP | Export | Import | National Dept | |
|---|---|---|---|---|---|
| | | | | Million UAH | % of GDP |
| 2002 | 225 810,00 | 22 939,00 | 6 368,81 | 75 692,93 | 33,50% |
| 2003 | 267 344,00 | 24 117,00 | 7 810,05 | 77 511,68 | 29% |
| 2004 | 345 113,00 | 29 747,00 | 10 933,37 | 85 310,12 | 24,70% |
| 2005 | 441 452,00 | 227 252,00 | -223 555,00 | 78 145,77 | 17,70% |
| 2006 | 544 153,00 | 253 707,00 | -269 200,00 | 80 546,99 | 14,80% |
| 2007 | 720 731,00 | 323 205,00 | -364 373,00 | 88 744,76 | 12,30% |
| 2008 | 948 056,00 | 444 859,00 | -520 588,00 | 189 410,37 | 19,90% |
| 2009 | 913 345,00 | 423 564,00 | -438 860,00 | 316 884,60 | 34,70% |
| 2010 | 1 082 569,00 | 549 365,00 | -580 944,00 | 432 235,40 | 39,90% |
| 2011 | 1 316 600,00 | 707 953,00 | -779 028,00 | 473 121,60 | 35,90% |
| 2012 | 1 408 889,00 | 717 347,00 | -835 394,00 | 515 510,60 | 36,60% |
| 2013 | 1 454 931,00 | 681 899,00 | -805 662,00 | 584 114,10 | 40,10% |
| 2014 | 1 566 728,00 | 770 121,00 | -834 133,00 | 1 100 564,00 | 70,20% |
| 2015 | 1 979 458,00 | 1 044 541,00 | -1 084 016,00 | 1 572 180,20 | 79,40% |
| 2016 | 2 383 182,00 | 1 174 625,00 | -1 323 127,00 | 1 929 758,70 | 81,00% |
| 2017 | 2 982 920,00 | 1 430 230,00 | -1 618 749,00 | 2 141 674,40 | 71,80% |
| 2018 | 3 558 706,00 | 1 608 890,00 | -1 914 893,00 | 2 168 627,10 | 60,90% |
| 2019 | 3 974 564,00 | 1 636 416,00 | -1 947 599,00 | 1 998 275,40 | 50,30% |
| 2020 | 4 194 102,00 | 1 637 399,00 | -1 681 526,00 | 2 551 935,60 | 60,80% |
| 2021 | 5 459 574,00 | 2 224 704,00 | -2 286 067,00 | 2 671 827,60 | 48,90% |
| 2022 | 5 191 028,00 | 1 840 563,00 | -2 712 325,00 | 4 071 683,10 | 78,40% |
| 2023 | 6 537 825,00 | 1 868 904,00 | -3 237 014,00 | 5 519 483,90 | 84,40% |

An analysis of aid distribution by sector (financial, humanitarian, and military) shows that the largest proportion of aid expenditure was allocated to military assistance (on average 52%), followed by financial assistance (41%), with the smallest share directed to humanitarian aid (7%). Notably, humanitarian aid in 2024, in absolute terms, is almost 3.5 times lower than in 2022 (or

halved in percentage terms). In 2022, humanitarian aid accounted for 10.5% of total international assistance, while in 2024, it accounted for just 4.5%.

Ukraine's economic development will remain dependent on investment support from international partners. With active financial and logistical assistance from organisations such as the IMF, the European Union, the United States, and other countries, Ukraine could secure significant investments for the restoration of infrastructure, industry, energy, and other critical economic sectors. This could lay the groundwork for sustained GDP growth. However, Ukraine must also implement key reforms, including improvements to the legal system, combating corruption, energy sector reform, deregulation, and others. Ukraine's GDP forecast, especially for the long term, including up to 2032, is complex due to numerous internal and external factors such as political stability, economic reforms, investment activity, post-war recovery progress, global economic shifts, and foreign trade development. However, based on the trends revealed in the analysis of actual GDP data from 2002 to 2023 (Table 1), a likely GDP forecast for Ukraine up to 2032 can be presented, as shown in Figure 1.

**Table 2.** Volumes of international aid provided to Ukraine in 2022–2024 (distribution by country)

| Years | USA | | Europe | | Other countries | | Overall aid sum | |
|---|---|---|---|---|---|---|---|---|
| | billion EUR | % of Ukraine's GDP | billion EUR | % of Ukraine's GDP | billion EUR | % of Ukraine's GDP | billion EUR | % of Ukraine's GDP |
| 2022 | 35,00 | 27,3% | 38,50 | 29,7% | 4,98 | 3,1% | 78,50 | 63,5% |
| 2023 | 32,99 | 31,7% | 49,15 | 21,3% | 7,79 | 4,74% | 89,91 | 58% |
| 2024* | 16,74 | 19,6% | 30,01 | 10,9% | 5,82 | 3,43% | 52,56 | 34,3% |
| total | 84,73 | | 117,55 | | 18,59 | | 220,97 | |

Note: for 8 months.

**Table 3.** Volumes of international aid provided to Ukraine between 2022 and 2024 (distribution across main areas of assistance)

| Years | Financial aid | | Humanitarian aid | | Military aid | | Overall aid sum | |
|---|---|---|---|---|---|---|---|---|
| | billion EUR | % of overall aid | billion EUR | % of overall aid | billion EUR | % of overall aid | billion EUR | % of overall aid |
| 2022 | 32,92 | 41,94% | 8,25 | 10,51% | 37,34 | 47,57% | 78,50 | 63,5% |
| 2023 | 35,47 | 39,45% | 5,40 | 6,01% | 49,05 | 54,55% | 89,91 | 58% |
| 2024* | 22,19 | 42,22% | 2,37 | 4,51% | 27,99 | 53,25% | 52,56 | 34,3% |
| 2024 (forecast) | 33,28 | | 3,56 | | 41,99 | | 78,84 | 51,45% |

Note: for the 8 months, including August.

As a result, in the short term (2024–2026), Ukraine's GDP is expected to grow by 5–10% annually under both the optimistic and weighted forecasts, depending on the pace of infrastructure recovery, political stability, and the level of international aid. In the pessimistic scenario, growth is expected to be modest at 2–3% annually.

In the medium term (2026–2029), assuming a stable situation and the implementation of reforms, GDP could increase by 4–6% annually under the optimistic and weighted forecasts. Agriculture, metallurgy, the IT sector, and energy infrastructure recovery will play a significant role in this growth. In the pessimistic scenario, there could be a slight decline of 2–3% annually.

In the long term (2029–2032), stable growth of 4–5% annually is expected under the optimistic forecast. Preconditions for such prospects include successful integration with the EU, a stable economic environment, and an active investment policy. Under the optimistic scenario,

Ukraine's GDP in 2032 could be twice the pre-war level. In contrast, the pessimistic scenario predicts a continued decline of 3–4% annually, with GDP by 2032 nearing the 2021 level.

Based on the current situation and expectations that trends will continue, key factors likely to positively impact Ukraine's GDP by 2032 are outlined below.

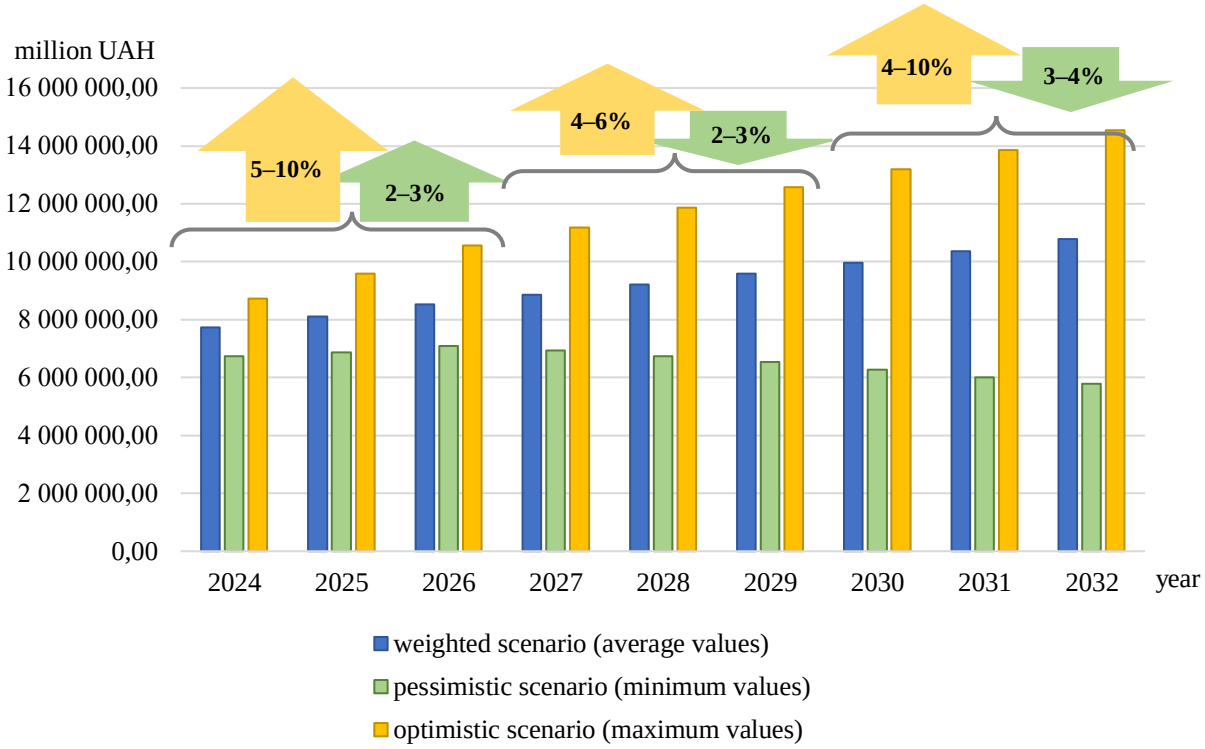



**Figure 1.** Ukraine's GPD Forecast till 2023

*The cessation of the war* in 2025, along with Ukraine's economic recovery driven by increased consumer demand, the return of businesses to operation, and infrastructure investment growth.

*Investment support* from international partners, as previously noted.

*Energy sector transformation and energy security ensurance*. Ukraine has considerable potential in renewable energy sources (solar, wind, bioenergy), as well as in restoring energy infrastructure post-damage. If the country implements a strategy for energy independence and modernisation of energy networks, this could stimulate growth in energy resource production and exports. The shift to "green" technologies could also form a key component of economic development, enhancing the competitiveness of the Ukrainian economy.

*The restoration of agricultural production* after war. The agricultural sector could achieve an annual growth rate of 3–5% in the coming years, which would positively influence overall GDP.

*The restoration of industrial production capacities*. The metallurgy sector has long been a vital component of Ukraine's economy. Following the restoration of production capabilities, metallurgy could become one of the main sectors contributing to GDP growth. In the medium term, this sector is likely to show steady growth.

*The IT sector development*. Ukraine's IT industry holds substantial growth potential. Ukrainian IT companies already hold an important position in the global market, and this sector could act as a major driver of economic growth. By 2032, IT service exports could grow by 10–15% annually, significantly increasing the sector's contribution to GDP.

One of the key macroeconomic indicators influencing GDP size is exports. Table 4 and Figure 2 present the expected export forecast for the short, medium, and long term across three scenarios: minimum values (pessimistic scenario), average values (weighted scenario), and maximum values (optimistic scenario).

In the short term (2024–2026), exports may grow by 5–8% annually according to the weighted and optimistic forecasts, driven by recovery and investment in key sectors such as agriculture, metals, energy, and IT. However, the outcome will depend on political stability and infrastructure restoration. Under the pessimistic scenario, exports are expected to shrink by at least 2–3%.

In the medium term (2026–2029), assuming successful economic recovery in Ukraine (optimistic scenario), stable export growth of 6–10% annually is likely, spurred by the development of new export markets, increased production capacity, and expansion of technical sectors. Under the pessimistic scenario, exports may begin to recover, but at a slow pace, with growth of at least 1–2% annually.

**Table 4.** The probable export forecast for Ukraine from 2024 to 2032.

| Year | weighted scenario (average values) | pessimistic scenario (minimum values) | optimistic scenario (maximum values) |
|---|---|---|---|
| 2024 | 1 926 531,00 | 1 555 092,15 | 2 297 969,75 |
| 2025 | 2 022 857,55 | 1 508 439,39 | 2 481 807,33 |
| 2026 | 2 124 000,43 | 1 463 186,20 | 2 680 351,92 |
| 2027 | 2 251 440,45 | 1 477 818,07 | 2 948 387,11 |
| 2028 | 2 386 526,88 | 1 492 596,25 | 3 243 225,82 |
| 2029 | 2 529 718,49 | 1 507 522,21 | 3 567 548,40 |
| 2030 | 2 732 095,97 | 1 462 296,54 | 3 995 654,21 |
| 2031 | 2 950 663,65 | 1 433 050,61 | 4 475 132,71 |
| 2032 | 3 186 716,74 | 1 390 059,09 | 5 012 148,64 |

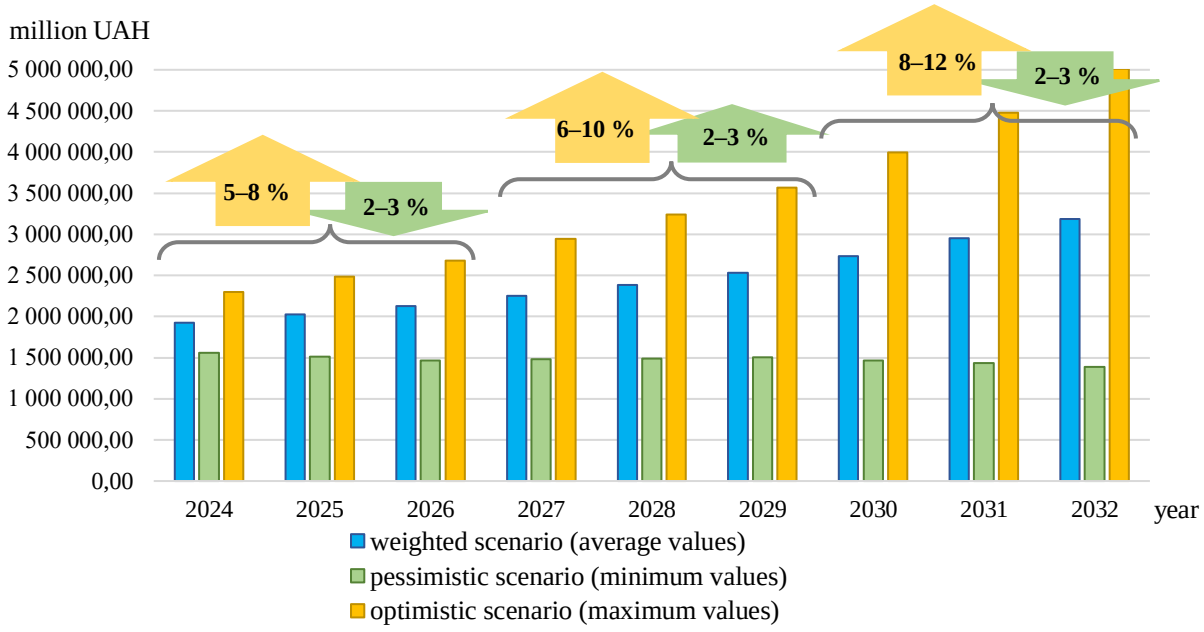



**Figure 2.** Ukraine's Export Forecast till 2023

In the long term (2029–2032), with stable economic development and successful integration into international markets (optimistic scenario), Ukraine's exports may increase by 8–12% annually, especially in the IT, energy, agriculture, and metallurgy sectors. Under the pessimistic scenario, negative trends may re-emerge, with exports declining by 2–3% annually.

Ukraine's export development by 2032 will depend on several key factors, including the country's economic situation, global markets, foreign economic policy, and integration with international economic blocs. The future dynamics of Ukraine's exports will be shaped by the following factors:

*Restoration and modernisation of ports* (primarily on the Black Sea), railway infrastructure, and logistics overall, enabling Ukraine to regain its role as a significant player in international markets.

*Agricultural sector growth and renewable energy production*. Food exports, particularly grains (wheat, corn, barley), oilseeds (sunflower, rapeseed), and food products, will remain major components of Ukraine's exports. Ukraine is one of the leading grain exporters globally. By 2032, agricultural exports may increase by 3–5% annually, driven by rising global demand for food due to climate change and the need to bolster food security. Additionally, bioenergy products (biofuels, bioelectricity) are likely to become a notable export category.

*Investment in the modernisation* of Ukraine's metallurgical capacities and prioritisation of the machine engineering sector. Metals and metallurgical products (iron ore, steel, aluminium) traditionally constitute a significant portion of Ukraine's exports. As one of the top ten steel exporters globally, Ukraine could see metal exports remain stable or even grow if investments in modernisation continue and supply stability is ensured, especially with the global recovery in demand for construction materials. Given the increasing imports of machinery and equipment, the machine engineering sector must become a priority. Exports of machinery, vehicles, and components could rise with the development of infrastructure and technologies.

*IT sector development*. The IT sector represents one of Ukraine's most promising areas. By 2032, exports of software, IT services, start-up developments, and engineering solutions could form a significant part of Ukraine's export portfolio. IT services are forecast to grow by 10–15% annually, as Ukraine has a highly skilled workforce in IT and technical fields.

*Increased role of energy exports*. Ukraine could emerge as a key exporter of renewable energy, particularly wind and solar, due to its abundant natural resources and favourable climate. Furthermore, if Ukraine invests in infrastructure for the extraction and transportation of oil and gas (such as expanding storage and export capabilities), energy exports could rise.

*Integration with the European Union* and other international economic organisations will open new markets for Ukrainian goods. Streamlined customs procedures and the introduction of free trade agreements with other countries could significantly boost exports. Joint investment projects in agriculture, energy, IT, and manufacturing capacities could strengthen Ukraine's position in international markets.

*Enhanced product quality and certification*. Ukrainian exports could increase with improvements in product quality and certification to meet international standards, particularly in agriculture, pharmaceuticals, and medical products. Technological investments and the ability to meet international consumer demands will be key, providing greater access to EU, US, and Asian markets.

The war exerts additional pressure on imports, particularly those related to defence and infrastructure reconstruction. Table 5 and Figure 3 present the likely import forecast for the short, medium, and long term across three scenarios: minimum values (pessimistic scenario), average values (weighted scenario), and maximum values (optimistic scenario).

In the short term (2024–2026), imports may remain at levels comparable to those before the war, or even lower, due to economic instability and logistical challenges caused by the conflict. Under the pessimistic scenario, imports could rise by at least 8–10% annually.

In the medium term (2026–2029), with stable economic recovery, import volumes may increase, showing positive trends towards a reduction in imports of up to 2% annually. However, negative dynamics could see imports growing by 5–7% annually.

**Table 5.** Probable Import Forecast for Ukraine from 2024 to 2032.

| Year | weighted scenario (average values) | pessimistic scenario (minimum values) | optimistic scenario (maximum values) |
|---|---|---|---|
| 2024 | -3 371 577,20 | -3 824 118,89 | -3 237 014,00 |
| 2025 | -3 439 008,74 | -4 130 048,40 | -3 107 533,44 |
| 2026 | -3 507 788,92 | -4 460 452,27 | -2 983 232,10 |
| 2027 | -3 683 178,36 | -4 772 683,93 | -2 923 567,46 |
| 2028 | -3 867 337,28 | -5 106 771,81 | -2 865 096,11 |
| 2029 | -4 060 704,15 | -5 464 245,83 | -2 807 794,19 |
| 2030 | -4 141 918,23 | -5 901 385,50 | -2 751 638,31 |
| 2031 | -4 224 756,59 | -6 373 496,34 | -2 696 605,54 |
| 2032 | -4 309 251,73 | -6 883 376,05 | -2 642 673,43 |

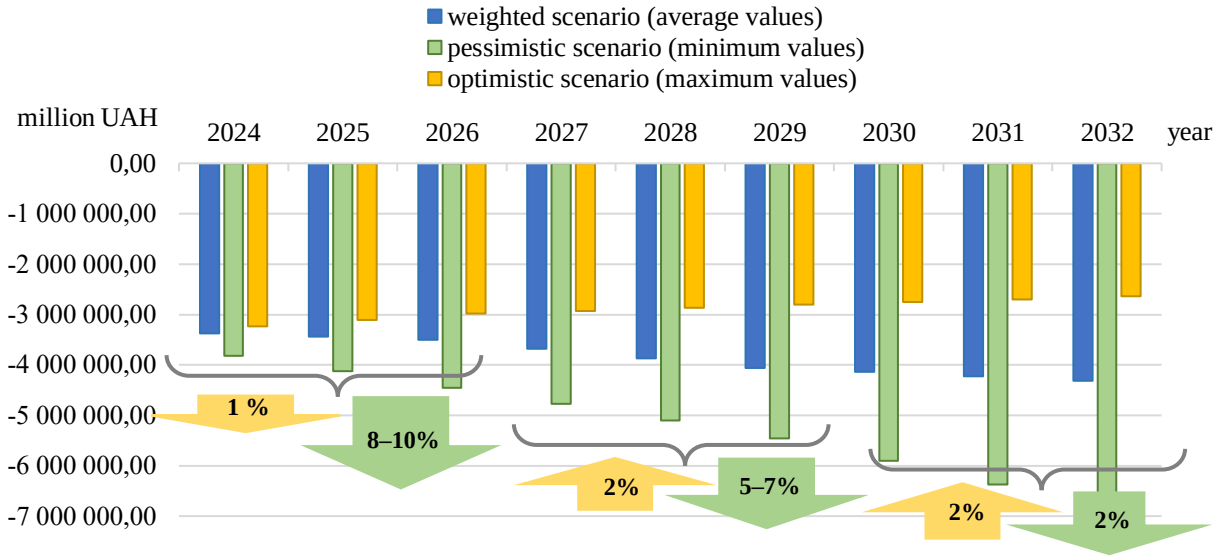



**Figure 3.** Ukraine's Import Forecast till 2023

In the long term (2029–2032), if the economy stabilises and domestic production expands, imports may continue to decline at the previous pace of 2% annually. The weighted forecast suggests import growth, particularly in technological and energy resources, at a moderate rate of 2% annually. In the event of negative trends and increased consumer goods imports, the growth rate could reach as high as 8% annually.

Overall, against the backdrop of economic and political challenges, imports in Ukraine are likely to fluctuate but generally increase by 2032, particularly in high-tech, energy, and consumer goods sectors.

The import forecast for Ukraine through to 2032 will depend on several key factors, including economic stability, foreign trade relations, the political situation, the development of domestic

production, and global economic trends. The main factors likely to influence imports by 2032 include the following.

*Economic recovery after war*. Post-conflict, an increase in demand for technology, machinery, medical equipment, and raw materials for domestic production is anticipated. This will lead to a rise in imports, particularly in sectors such as energy (oil, gas), machinery, construction materials, vehicles, and consumer goods.

*Diversification of supply sources*. Given the energy crisis and dependence on energy imports, Ukraine will seek to diversify its energy sources (particularly gas and oil) and explore alternative energy options. Therefore, imports of renewable energy sources are likely to grow, as Ukraine actively integrates new environmentally friendly technologies. This will influence the structure of energy resource imports.

*Technological import growth*. Ukraine may experience an increase in high-tech product imports (electronics, software, artificial intelligence), as the country possesses the potential to develop its IT sector. However, this will require substantial investment in infrastructure and human resources.

*Shifts in consumer goods structure*. Following the war, Ukrainians may aim to restore their standard of living, leading to higher demand for imported consumer goods, particularly food products, household appliances, clothing, and electronics. Simultaneously, due to high import tariffs or foreign economic sanctions, imported goods may become more expensive, which could impact import volumes.

*Infrastructure and logistical challenges*. The war has caused significant damage to infrastructure, but restoring transport corridors, ports, and roads (particularly under the "Silk Road" initiative and EU integration) may foster import growth. Increased use of container shipping and logistics hubs could enhance import efficiency.

*Politics and international agreements*. Ukraine is actively progressing towards European Union integration, which could result in reduced customs tariffs and more favourable conditions for imports from EU countries. A potential free trade agreement with other economic blocs or countries could also boost import flows.

*Domestic production changes*. If Ukraine can stimulate domestic production in industries currently reliant on imports (such as the agro-industrial complex, machine engineering, and pharmaceuticals), the need for imports of raw materials or finished goods could decrease. However, full substitution of imports may be challenging due to technological constraints.

Another key indicator affecting economic development is national debt. By 2032, Ukraine's national debt will be influenced by a range of economic, political, and financial factors, including the pace of economic recovery post-war, economic reforms, international financial aid, exchange rate fluctuations, inflation, and the country's ability to secure new loans or restructure existing debt. Table 6 and Figure 4 provide the projected national debt of Ukraine as a percentage of GDP in the short, medium, and long term across three scenarios: minimum values (optimistic), average values (weighted), and maximum values (pessimistic).

In the short term (2024–2026), given current war-related expenses, reconstruction costs, and budget deficit financing, national debt is likely to continue increasing by 5–10% annually relative to GDP, reaching 110–120% of GDP. Significant fluctuations in external financial markets and the need for additional funding may raise risks associated with deficits and debt servicing. The optimistic scenario suggests a slight reduction in national debt by 2026 compared to the current situation.

In the medium term (2026–2029), if the economy stabilises and infrastructure investments start to yield results, national debt may rise by 3–5% annually, with its share of GDP gradually decreasing. The expected debt level in 2029 is projected to be around 100% of GDP in the weighted

forecast. Moreover, if Ukraine successfully restructures part of its debt and attracts investments to develop key economic sectors, debt may remain at a stable level, though still high in relative terms. The optimistic scenario forecasts a modest reduction in national debt, although at a very slow pace. The pessimistic scenario suggests continued growth in national debt.

In the long term (2029–2032), with stable economic growth (4–5% per year) and the implementation of infrastructure and structural reforms, the share of national debt in GDP could decrease to 80–90% by 2032. Debt may stabilise or decrease due to economic growth, diversified financing, and debt restructuring. However, a negative forecast remains possible, with national debt continuing to rise.

Thus, the level of Ukraine's national debt by 2032 will largely depend on the pace of economic recovery, international assistance, successful debt restructuring, and the stability of currency markets. In the short term, debt may remain high (around 120% of GDP in 2025–2026), but with successful economic reforms and stable GDP growth, its share of GDP could decrease to 80–90% by 2032. The key factors influencing the long-term dynamics of Ukraine's national debt include:

**Table 6.** The probable forecast of Ukraine's national debt for 2024–2032, as a percentage of GDP.

| Year | weighted scenario (average values) | pessimistic scenario (minimum values) | optimistic scenario (maximum values) |
|---|---|---|---|
| 2024 | 85,11% | 84,02% | 103,28% |
| 2025 | 97,99% | 89,99% | 113,05% |
| 2026 | 110,83% | 92,83% | 119,81% |
| 2027 | 109,68% | 90,80% | 122,55% |
| 2028 | 107,52% | 88,77% | 127,27% |
| 2029 | 99,84% | 85,75% | 130,98% |
| 2030 | 96,21% | 84,74% | 131,67% |
| 2031 | 94,05% | 82,75% | 135,35% |
| 2032 | 90,89% | 80,77% | 138,02% |

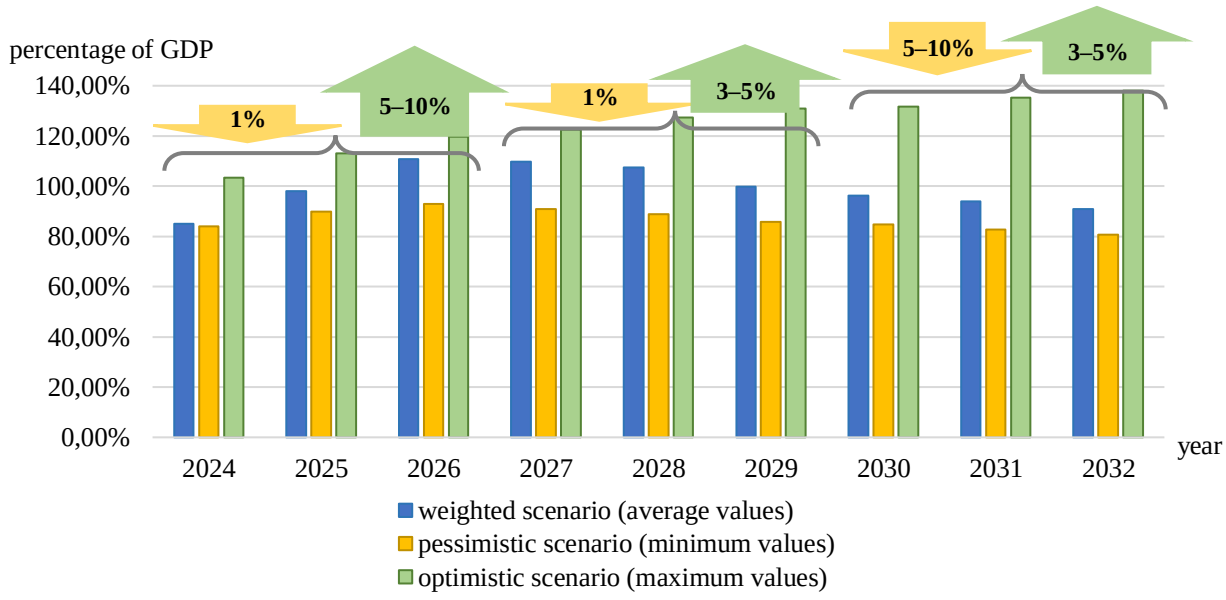



**Figure 4.** Ukraine’s National Dept Forecast till 2023

*Current national debt level*. As of early 2024, Ukraine's national debt stands at around 100–110% of GDP. The rise in debt has resulted from increased budget deficits caused by the war and the need to fund economic recovery. The significant share of external debt adds vulnerability to currency fluctuations and shifts in global economic conditions.

*Military spending and post-war reconstruction*. Given the current military situation, the national debt forecast depends on the war's duration and necessary defence spending. Reconstruction costs after the war will also heavily influence debt dynamics. If the war persists for several more years, Ukraine will need to continue securing loans to cover the budget deficit. Once the war ends or the situation stabilises, the country will require substantial investment for rebuilding infrastructure and the social and economic sectors, further increasing financing needs and potentially leading to continued debt growth.

*International assistance and debt restructuring*. Ukraine benefits from substantial support provided by international financial institutions, including the IMF, the World Bank, the EU, and the USA. However, post-war, it is likely that part of the national debt will require restructuring to ensure its sustainability and avoid economic recession. Ukraine may negotiate agreements with international creditors to extend repayment deadlines or reduce interest rates on debt obligations. Such measures would alleviate the financial burden during the recovery phase. Additionally, following the conflict, special programmes for economic recovery could be introduced, enabling Ukraine to retain access to financing under favourable terms, even with a high level of debt.

*GDP growth rates and the budget deficit.* National debt size is directly affected by GDP growth rates and the budget deficit. Economic recovery and GDP growth following the war will be pivotal in reducing the relative debt level. If the economy grows at a high rate (4–6% annually), the relative debt level may decrease, even if the absolute debt continues to rise. However, in the medium term, significant budget deficits are anticipated due to necessary expenditure on reconstruction, social payments, and ensuring economic stability.

International factors: interest rates, inflation, exchange rates. External factors, including fluctuations in global interest rates, inflation, and exchange rates, will significantly impact debt levels. Rising global interest rates could increase the cost of servicing national debt, particularly external debt. If rates rise, Ukraine could face higher debt servicing costs. Currency fluctuations will also influence national debt size, as a portion of the debt is denominated in foreign currency. A depreciation of the hryvnia could notably increase the cost of repaying external obligations.

Diversification of funding sources. Post-war, Ukraine will likely seek to diversify its funding sources to reduce reliance on external creditors and minimise debt servicing costs. This may involve attracting investments, issuing domestic bonds, and developing financial markets.

**Conclusion**

The long-term success of Ukraine's economic development will depend on numerous factors, including the geopolitical situation, demographic trends in Ukraine and globally, investments, international assistance, reforms, and structural changes in the economy, among others. However, the most crucial factor will be whether the russian-Ukrainian war ends or continues. In any case, Ukraine's economic development, according to the authors, will be shaped by the following key factors:

Economic development will rely on the level of assistance from international partners, with this support likely to gradually decrease in the medium term;

The high budget deficit, which, particularly amid the war, will remain substantial due to the state's additional financial needs, primarily for defence and social welfare. If the war ends, the deficit may reduce in the medium term;

The return of migrants to Ukraine, an important driver of economic growth, could be crucial in meeting pent-up consumer demand after the war, although the scale of the return remains uncertain;

The transformation of energy sectors, ensuring energy security, the restoration of agricultural production and industrial capacities, as well as the development of the IT sector.

**Recommendations**

The materials in this article can be used in shaping and implementing Ukraine's national policy, particularly in defining the country's development priorities. The article may prove useful to researchers and analysts involved in forecasting, as well as in formulating and justifying state decisions on the nation's development.

Further research could focus on formalising the link between GDP volumes and key macroeconomic indicators with defence spending, along with developing recommendations to improve Ukraine's economic situation during the post-conflict reconstruction period.

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