DOI: https://doi.org/10.32782/2524-0072/2025-77-59

UDC 339.924:338.45(477)

IMPACT OF INTERNATIONAL ECONOMIC POLICY ON THE MODERNIZATION OF UKRAINE'S INDUSTRIAL SECTOR

ВПЛИВ МІЖНАРОДНОЇ ЕКОНОМІЧНОЇ ПОЛІТИКИ НА МОДЕРНІЗАЦІЮ ПРОМИСЛОВОГО СЕКТОРУ УКРАЇНИ

Tereshko Yuliia

PhD of Economic Sciences, Associate Professor of the Department of Digital Technologies and Digital-Analytical Solutions, Limited Liability Company "Technical University "Metinvest Polytechnic" ORCID: https://orcid.org/0000-0002-1976-6300

Kulinich Tetiana

PhD of Economic Sciences, Docent, Associate Professor at the Department of Management of Organizations, Lviv Polytechnic National University ORCID: https://orcid.org/0000-0003-0110-7080

Obushok Ihor

Postgraduate Student, Lviv Polytechnic National University ORCID: https://orcid.org/0009-0007-0317-104X

Терешко Юлія Володимирівна

Товариство з обмеженою відповідальністю "Технічний університет "Метінвест політехніка"

Кулініч Тетяна Володимирівна, Обушок Ігор Ігорович

Національний університет «Львівська політехніка»

The purpose of the article is to examine the content and specific features of the influence of international economic policy on the modernization of Ukraine's industrial sector. The study's findings indicate that international economic policy is an important factor in the modernization of Ukraine's industrial sector, as it shapes and regulates the conditions and incentives under which industrial enterprises are compelled to upgrade production capacities, implement innovations, and enhance operational efficiency in order to maintain or strengthen their competitive positions in domestic and foreign markets. The research demonstrates that the influence of international economic policy manifests through changes in industry structure, technological development, the attraction of foreign investment, and adaptation to international standards of quality, safety, and environmental sustainability. At the same time, the transmission of the influence of international economic policy is carried out through a wide range of mechanisms and corresponding tools (financial, legal, administrative, educational, and scientific-technical).

Keywords: industrial structure, technological development, foreign investment attraction, international standards of quality, safety, and environmental sustainability, international economic policy.

Метою статті є дослідження змісту та специфіки впливу міжнародної економічної політики на модернізацію промислового сектору України. У дослідженні застосовано комплекс методів, зокрема: системний підхід – для виявлення взаємозв'язків між міжнародною економічною політикою та процесами модернізації промисловості; структурно-функціональний аналіз – для оцінки трансформацій у галузевій структурі; порівняльний аналіз – для зіставлення міжнародних і національних економічних практик; метод узагальнення та синтезу – для формування підсумкових висновків. За результатами дослідження встановлено, що міжнародна економічна політика є вагомим чинником модернізації промислового сектору України, оскільки вона визначає та регулює умови й стимули, під впливом яких промислові підприємства змушені оновлювати виробничі потужності, впроваджувати інновації та підвищувати ефективність діяльності з метою збереження або посилення конкурентних позицій на внутрішньому й зовнішніх ринках. Дослідження засвідчує, що вплив міжнародної економічної політики проявляється у трансформації структури промисловості, стимулюванні технологічного розвитку, залученні іноземних інвестицій та адаптації виробництва до міжнародних стандартів якості, безпеки й екологічності. При цьому вплив міжнародної економічної політики транслюється через широке коло механізмів: відкриття ринків, інтеграцію економічної діяльності, реалізацію міжнародних фінансових програм, гармонізацію стандартів і регуляцій, трансфер сучасних технологій, впровадження інноваційних рішень, цифровізацію виробничих процесів, узгодження економічних стратегій розвитку промисловості, участь у міжнародних фінансових угодах, підтримку стабільного правового середовища, сертифікацію продукції тощо. Зазначені процеси забезпечуються за допомогою відповідних інструментів - фінансових, правових, адміністративних, освітніх і науково-технічних. Комплексне застосування зазначених механізмів та інструментів забезпечує інтеграцію української промисловості у глобальні виробничі й торговельні процеси, сприяє технологічному оновленню та підвищує інвестиційну привабливість галузі. Практична значущість дослідження полягає у можливості використання його результатів для вироблення рекомендацій щодо комплексного врахування впливів міжнародної економічної політики у державних стратегіях розвитку промисловості.

Ключові слова: структура промисловості, технологічний розвиток, залучення іноземних інвестицій, міжнародні стандарти якості, безпеки та екологічності, міжнародна економічна політика.

Problem statement. Currently, the development of states' international economic policies and their integration into the global economy largely depends on the efficiency of the industrial sector, which constitutes a significant share of national GDP. According to World Bank data, the average share of industry (including construction, energy, etc.) in GDP was 26% in 2023 (across 178 countries). In Ukraine, the industrial sector (including extraction. manufacturing. construction. electricity generation, and water accounted for approximately 19% of GDP as of 2024, which is slightly below the global average. Therefore, for our country, which is undergoing structural reforms and aims to strengthen its competitive positions amid the Russian military aggression, the key driver of growth should be the modernization of the industrial sector. These transformational processes should be directly linked to international economic policy - a system of principles, objectives, methods, and measures through which the state regulates its economic relations with the external world, creating conditions for attracting investment. transferring technologies, expanding markets, and implementing innovative production practices.

Analysis of research and publications. The problems of shaping international economic policy in Ukraine have been studied by Ye. Ye. Vedeneyev [1], O. M. Chechel [7], L. M. Tytarenko [6], S. Kvasha, O. Pavlenko, V. Vakulenko, and M. Moroz [3]. In particular, scholars have mostly focused on the mechanisms of Ukraine's integration into the global economy, the impact of international economic agreements

on the national industry, the challenges of harmonizing Ukrainian legislation with international standards, and regulatory barriers to attracting foreign investment.

At the same time, studies on the direct influence of international economic policy on the modernization of Ukraine's industrial sector have so far remained largely overlooked by researchers, even though this area is extremely important. Its significance lies in the fact that the results of such research allow for a deeper understanding of the interconnection between foreign economic processes and domestic structural changes, an assessment of the of international mechanisms effectiveness and instruments, and the development of wellgrounded strategies for adapting national production to the requirements of the global market.

Formation of the objectives of the article (task statement). The purpose of the article is to examine the content and specific features of the influence of international economic policy on the modernization of Ukraine's industrial sector.

Summary of the main research material. The influence of international economic policy on the modernization of Ukraine's industrial sector is evident through changes and transformations in the economy's production sphere, driven by the application of international economic rules, agreements, standards, and cooperation mechanisms in which Ukraine participates. In other words, these changes and transformations shape how foreign economic decisions and integration processes affect: structural changes in industry (including the upgrading of production capacities and diversification of sectors);

technological development (technology transfer, implementation of innovations, digitalization of production); attraction of foreign investment (in the form of financial and material-technical resources); and the raising of standards (in accordance with international norms of quality, safety, and environmental sustainability).

In fact, international economic policy affects the modernization of Ukraine's industrial sector by creating and regulating the conditions and incentives under which entities engaged in the production of goods and industrial activities – both for the domestic market and for export – are compelled either to modernize or risk losing competitive positions, as illustrated in Figure 1.

At the same time, the influence of international economic policy is transmitted through specific mechanisms and corresponding tools. These mechanisms serve as the means of exerting influence. The tools include specific financial, legal, administrative, educational, and scientifictechnical instruments used to implement the mechanisms.

Thus, international economic policy influences structural changes in industry. It stimulates upgrading of production capacities, diversification of sectors, and improved efficiency.

These are achieved through adaptation to global standards, investment attraction, and integration into global processes. The foundation for this influence lies in mechanisms such as market opening, integration of activities, international financial programs, and harmonization of standards and regulations. The main tools used for these purposes are shown in Table 1.

Let us examine the mechanisms of structural changes in industry and their corresponding tools.

Market opening within the framework of the EU Association Agreement and the free trade regime has enabled Ukrainian producers to increase the supply of agricultural products, foodstuffs, rolled metal, and electrical equipment, thereby stimulating modernization and the adoption of new technologies.

Integration through customs unions and free trade zones, particularly with Canada and the United Kingdom, has provided access to new niche markets, where Ukrainian clothing, footwear, and furniture successfully compete due to the removal of customs barriers.

International financial programs and loans from the IMF, EBRD, World Bank, and EU have ensured macroeconomic stability and

Transmission of influence $\rightarrow \rightarrow \rightarrow$ Result of the Influence of Direction of influence influence of international (factories, plants, and industrial complexes that international process raw materials, manufacture products, and economic economic policy policy provide industrial services both for the domestic market and for export) Heavy industry (metallurgy, mechanical engineering, power equipment) Entities engaged Formation in the production Light industry (textiles, leather, clothing) and regulation of goods and Chemical and petrochemical industry (fertilizers, of conditions industrial pharmaceuticals, plastics) and incentives → activities are for compelled either Food industry (production of food and beverages, modernization to modernize or agricultural processing) risk losing their Energy industry (production of electricity and fuel) competitive positions Woodworking and paper industry

Figure 1. Specifics of the influence of international economic policy on the modernization of Ukraine's industrial sector

Note:

*The influence is transmitted through a set of measures aimed at ensuring that, via various mechanisms and tools, enterprises upgrade production, implement new technologies, and enhance the efficiency of their operations.

**The mechanisms (the ways in which the influence is implemented) and the corresponding tools (specific means used to implement these mechanisms) of international economic policy.

Source: created by the authors based on [1-2; 4; 7]

Table 1

Mechanisms and tools of international economic policy that shape structural changes in industry

Mechanisms of international economic policy	Instruments of international economic policy	Incentives driving structural changes in industry:
Market opening	Free trade agreements, tariff reductions*	Increased exports, heightened competition, and market expansion
Activity integration	Customs unions, free trade zones that reduce barriers to the movement of goods and capital**	Access to a common market, reduction of barriers to the movement of goods and capital
International financial programs	IMF and World Bank loans, investment funds supporting structural reforms***	Financing modernization, supporting reforms, attracting investment.
Harmonization of standards and regulations	International ISO standards, WTO agreements that facilitate access to foreign markets and promote improvements in product quality****	Improving product quality, adapting to global standards, and facilitating exports.

Note:

- * In Ukraine, these tools are represented by the Association Agreement with the EU (DCFTA), and tariff reductions under the WTO.
- ** In Ukraine, these tools are represented by free trade zones (with the EU, Canada, the United Kingdom) and participation in regional initiatives.
- *** In Ukraine, these tools are represented by programs of the IMF, EBRD, World Bank, and EU investment grants.
- **** In Ukraine, these tools are represented by the implementation of ISO standards, adaptation of legislation to EU requirements, and commitments under the WTO.

Source: created by the authors based on [1-2; 7]

financed the modernization of the energy sector, ports, utilities, and small and medium-sized enterprises.

Harmonization of standards with EU and WTO requirements has facilitated certification according to international ISO standards, easing access to foreign markets and encouraging technical re-equipment of enterprises.

The influence of international economic policy promotes the technological development of Ukraine's industrial sector through mechanisms and instruments, the main ones of which are highlighted in Table 2.

Let us examine in practice the mechanisms that foster the technological development of Ukraine's industrial sector and their corresponding instruments in greater detail.

The mechanisms for technological development in the Ukrainian industry are implemented through the transfer of advanced technologies, joint projects, and licensing agreements with international companies. For instance, ArcelorMittal has modernized Ukrainian metallurgical plants, while participation in Horizon

Europe programs has facilitated automation and robotics in mechanical engineering.

The introduction of innovative solutions in the Ukrainian industry is largely supported by international grants and innovation support programs, such as EU4Innovation and GIZ. Through these instruments, Ukrainian enterprises receive resources to develop and implement new products and technologies.

The digitalization of production is carried out through programs of the Ministry of Digital Transformation and the Diia platform, as well as through platforms such as SoftServe and Prometheus. At the Enzym and Karpatinaftokhim plants, IoT, digital twins, and automated process management have been implemented, reducing raw material losses and increasing productivity.

The influence of international economic policy promotes the attraction of both financial investments (in the form of funds invested in enterprises, banks, securities, or projects) and material and technical resources (equipment, technologies, construction materials, software that help modernize production or establish

Table 2

Mechanisms and tools of international economic policy that promote
the technological development of the industrial sector

Mechanisms of international economic policy	Instruments of international economic policy	Incentives driving technological development.
Transfer of modern technologies	Joint projects with foreign companies, licensing agreements, participation in international scientific and technical programs*	Providing access to advanced production methods, new materials, and equipment; improving efficiency and product quality.
Implementation of innovative solutions	International grants, innovation support programs, partnerships with R&D centers abroad**	Development and implementation of new technologies and products; increasing competitiveness; reducing production costs.
Digitalization of production processes	Support for the creation of digital platforms and production digitization services, training programs, consulting services, Industry 4.0 standards***	Production automation, enhanced management efficiency, reduction of errors and energy consumption, integration into global value chains.

Note:

- * In Ukraine, these instruments are represented by joint projects with European and international companies (e.g., in mechanical engineering and metallurgy), licensing agreements, and participation in Horizon Europe programs.
- ** In Ukraine, these instruments are represented by international grants such as EU4Innovation and GIZ, partnerships with EU R&D centers, and participation in programs supporting startups and innovation clusters.

 *** In Ukraine, these instruments are represented by initiatives of the Ministry of Digital Transformation and Dija Digital Education, platforms for production automation (e.g., solutions from SoftServe or Prometheus)

Diia.Digital Education, platforms for production automation (e.g., solutions from SoftServe or Prometheus), employee training programs under EU4Digital, IT schools and international partner-led trainings, as well as projects in Ukrainian enterprises integrating Industrial Internet of Things (IoT), digital twins, and automated production management systems.

Source: created by the authors based on [1; 7]

new enterprises) from foreign companies, banks, international financial organizations, or private investors through mechanisms and their corresponding instruments (Table 3).

These investments are particularly important because they: provide new resources that may be scarce in the country (capital, advanced equipment, technologies); enhance the competitiveness of the national economy; stimulate the modernization and development of industry; and facilitate the integration of the country into the global economy.

Let us examine in practice the mechanisms that promote the attraction of investments for the development of Ukraine's industrial sector and their corresponding instruments in more detail.

Coordinated economic strategies for industrial development provide a clear definition of priority investment areas through the creation of roadmaps and industrial development strategies, developed in cooperation with the EU and international financial organizations, aimed at creating favorable conditions for business.

Such conditions guide foreign investors toward specific sectors – for example, mechanical engineering, energy, or the IT sector.

Ukraine's participation in international financial agreements with the IMF, the World Bank, the EBRD, and private companies creates new business opportunities. These agreements contribute to macroeconomic stabilization and signal the country's and its economic actors' readiness to cooperate with foreign investors.

Support for a stable legal environment – specifically, the adaptation of Ukrainian legislation to EU standards, strengthening investor protection, and the implementation of international arbitration norms – creates conditions under which investors' funds and assets are securely protected.

This facilitates the implementation of longterm industrial modernization projects, including the establishment of new production facilities and the introduction of advanced technologies. Examples include investments in the reconstruction of thermal power plants and the

Table 3
Mechanisms and instruments of international economic policy that facilitate investment in the development of the industrial Sector

Mechanisms of international economic policy	Instruments of international economic policy	Incentives that promote investment attraction
Coordinated economic strategies for industrial development	Agreed sectoral modernization plans, industrial development roadmaps, etc.*	Creating transparent and predictable business conditions, and identifying priority sectors for investment.
Participation in international financial agreements	Loans and investment projects from the World Bank, EBRD, private investors.**	Attracting financial resources for industrial modernization and reducing project risks
Support for a stable legal environment	Adaptation of key laws and regulations to ensure conditions for attracting and protecting foreign and domestic investments in line with EU and global standards.***	Reducing legal risks, ensuring the safety of investments, and protecting property rights.

Note:

- * In Ukraine, these instruments are represented by the identification of priority investment areas through the creation of industrial development roadmaps (including the Roadmap for Modernization of the Food Industry, the Hydrogen Use in Industry Roadmap, the Dual Transition Roadmap for the Light Industry) and strategies (including the Strategy for the Development of Industrial Parks until 2030), developed in cooperation with the EU and international financial organizations.
- ** In Ukraine, these instruments are represented by loans and investment projects that provide not only financing for the construction or modernization of enterprises but also support for innovative technologies, consulting services, personnel training, and participation in public-private partnerships.
- *** In Ukraine, these instruments are represented by the implementation of provisions regarding investor protection and the adoption of international arbitration norms (UNCITRAL, ICSID, and other international arbitration institutions for resolving disputes between investors and the state).

Source: created by the authors based on [3; 5; 7]

modernization of equipment, notably projects involving the EBRD and the German KfW Bank.

The influence of international economic policy contributes to the improvement of production and operational standards of industrial enterprises through their adaptation to international quality, safety, and environmental norms. This process is carried out through mechanisms and corresponding instruments, which we have outlined in Table 4.

Let's examine in practice the mechanisms that contribute to raising production and operational standards of Ukrainian industrial enterprises and their corresponding instruments in more detail.

The implementation of ISO, EN, and CE standards enables Ukrainian enterprises to supply products to European markets. For example, JSC "Ukrainian Energy Machines" certified part of its products (specifically from its branches in Lviv, Zakarpattia, and Chernivtsi regions) according to EN and ISO standards, which allowed the company to sign contracts with

European energy companies. This increased product competitiveness and enhanced trust among international consumers.

The adoption of ISO 45001 and EU technical regulations helps reduce production risks. For instance, Lviv JSC "Galichpharm" and several food enterprises in Ukraine underwent safety audits and process certification, ensuring worker protection and minimizing emergency incidents. This also creates favorable conditions for investors who consider production safety when allocating funds.

The implementation of ISO 14001 and participation in EU "green" programs allow enterprises to reduce their environmental impact and attract "green" investments. For example, the management of LLC "Biopharma Plasma" implemented environmental standards to reduce emissions and use resources efficiently. This enhanced the company's reputation and enabled participation in international financing projects for green technologies.

Table 4
Mechanisms and instruments of international economic policy that promote
the improvement of production and operational standards in industrial enterprises

Mechanisms of international economic policy	Instruments of international economic policy	Incentives that promote the improvement of production and operational standards of enterprises
Certification of goods for export to European and global markets	Implementation of ISO, EN, CE standards; undergoing certification procedures to access international markets.	Access to new markets, increased competitiveness, consumer trust
Certification of product and production safety	Implementation of international occupational safety standards (OHSAS, ISO 45001), EU technical regulations, and safety audits.	Reduction of production risks, protection of employees, minimization of accidents and fines.
Environmental certification	Implementation of environmental standards (ISO 14001, EMAS), certification of "green" technologies and products, participation in EU and international "green" programs and funds.	Reduction of negative environmental impact, compliance with international environmental standards, attraction of "green" investments.

Source: created by the authors based on [1; 3; 6-7]

Conclusions. The study concludes that international economic policy is an important factor in the modernization of Ukraine's industrial sector, as it shapes and regulates the conditions and incentives under which industrial enterprises are compelled to upgrade production capacities, implement innovations, and improve operational efficiency in order to maintain or strengthen their competitive positions in domestic and international markets.

The study demonstrates that the influence of international economic policy is manifested through changes in the industrial structure, technological development, attraction of foreign investments, and adaptation to international standards of quality, safety, and environmental performance. This influence is transmitted through a wide range of mechanisms (market opening, integration of economic activities, international financial programs, harmonization of

standards and regulations, transfer of advanced technologies, implementation of innovative solutions, digitalization of production processes, coordinated economic strategies for industrial development, participation in international financial agreements, support for a stable legal environment, certification) and corresponding instruments (financial, legal, administrative, educational, and scientific-technical).

The comprehensive use of these mechanisms and instruments ensures the integration of the Ukrainian industry into global production and trade processes, promotes technological upgrading, and increases the investment attractiveness of the sector.

Prospects for further research include the development of recommendations for the comprehensive incorporation of the impacts of international economic policy into national industrial development strategies.

REFERENCES:

- 1. Vyedyenyeyev YE.YE. (2014) Mizhnarodna ekonomichna polityka Ukrayiny na suchasnomu etapi [International economic policy of Ukraine at the present stage]. *Visnyk ONU imeni I.I. Mechnykova*, no. 2/1, pp. 64–68.
- 2. Zablodska, I. V., Kudrina O. Yu. Modernizatsiia promyslovoho sektora, yak stratehichnyi napriamok rozvytku ekonomiky rehionu. *Efektyvna ekonomika* № 2, 2014. Available at: http://www.economy.nayka.com.ua/?op=1&z=3382
- 3. Kvasha S., Pavlenko O., Vakulenko V., Moroz M. (2024). Osoblyvosti formuvannya mizhnarodnykh ekonomichnykh vidnosyn v umovakh voyennoho stanu [Peculiarities of the formation of international economic relations under martial law]. *Stalyy rozvytok ekonomiky*, no. 2(49), pp. 218–222.

МІЖНАРОДНІ ЕКОНОМІЧНІ ВІДНОСИНИ

- 4. Karyy O. I., Bondarenko Y. H., Kulyniak I. Y., Ohinok S. V. (2025). Management of recreational services in ukraine during wartime: the role of state policy and best practices from europe. *The Actual Problems of Regional Economy Development*, no. 1(21), pp. 41–55.
- 5. Skrypnyk S., Portsevyat O., Voronova O. (2022) Osoblyvosti rehulyuvannya zovnishn'oekonomichnoyi diyal'nosti v umovakh voyennoho stanu [Peculiarities of regulation of foreign economic activity under martial law]. *Ekonomika ta suspil'stvo*, no. 38. Available at: https://economyandsociety.in.ua/index.php/journal/issue/view/77
- 6. Tytarenko L. M. (2018) Mizhnarodna ekonomichna polityka Ukrayiny: suchasni vyklyky ta perspektyvy [International Economic Policy of Ukraine: Current Challenges and Prospects]. *Hlobal'ni ta natsional'ni problemy ekonomiky*, no. 22, pp. 114–118.
- 7. Chechel' O. M. (2009) Zmist i funktsiyi ekonomichnoyi polityky derzhavy [Content and functions of the state's economic policy]. *Derzhavne upravlinnya: udoskonalennya ta rozvytok*, no. 2. Available at: http://www.dy.nayka.com.ua/?op=1&z=28

СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ:

- 1. Вєдєнєєв Є. Є. Міжнародна економічна політика України на сучасному етапі. *Вісник ОНУ імені І.І. Мечников*а. 2014. Вип. 2/1. С. 64–68.
- 2. Заблодська І. В., Кудріна О. Ю. Модернізація промислового сектора, як стратегічний напрямок розвитку економіки регіону. *Ефективна економіка*. 2014. № 2. URL http://www.economy.nayka.com.ua/?op=1&z=3382
- 3. Кваша С., Павленко О., Вакуленко В., Мороз М. Особливості формування міжнародних економічних відносин в умовах воєнного стану. *Сталий розвиток економіки*, 2024. № 2(49). С. 218–222.
- 4. Karyy O. I., Bondarenko Y. H., Kulyniak I. Y., Ohinok S. V. Management of recreational services in ukraine during wartime: the role of state policy and best practices from europe. *The Actual Problems of Regional Economy Development*, 2025. № 1(21). P. 41–55.
- 5. Скрипник С., Порцевят О., Воронова О. Особливості регулювання зовнішньоекономічної діяльності в умовах воєнного стану. *Економіка та суспільство*. 2022. № 38. URL https://economyandsociety.in.ua/index.php/journal/issue/view/77
- 6. Титаренко Л. М. Міжнародна економічна політика України: сучасні виклики та перспективи. Глобальні та національні проблеми економіки. 2018. № 22. С. 114–118.
- 7. Чечель О. М. Зміст і функції економічної політики держави. *Державне управління: удосконалення та розвиток.* 2009. № 2. URL: http://www.dy.nayka.com.ua/?op=1&z=28