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МЕХАНІЗМ ДЕРЖАВНОГО РЕГУЛЮВАННЯ РОЗВИТКОМ ПЕРЕРОБНОЇ ПРОМИСЛОВОСТІ УКРАЇНИ

Актуальність. *В Україні відбувається спрощення структури української промисловості та зниження її технологічного рівня, зростання зношеності основних засобів і зменшення інвестицій, погіршення стану виробничої, транспортної та енергетичної інфраструктури, регрес інноваційного процесу, погіршення товарної структури експорту. Усе це обумовлює необхідність модернізації державної промислової політики та оновлення і розвитку механізму державного регулювання розвитком переробної промисловості України.*

Мета дослідження. *Розробка концепції механізму державного регулювання розвитком переробної промисловості в контексті його спеціальних функцій.*

Матеріали та методи. *В роботі були використані загальнонаукові та спеціальні методи дослідження: порівняння, узагальнення, синтезу, системного аналізу, логіко-діалектичного аналізу та інші. Інформаційною базою дослідження є монографії, спеціальна література, інформаційно-аналітичні матеріали, вітчизняні та зарубіжні періодичні наукові видання, дані Державної служби статистики України.*

Результати. *В статті розглянуто поняття «управління» і «регулювання» та співвідношення між ними. Визначено структуру механізму державного регулювання розвитком переробної промисловості як сукупність 6 складових: цільова, суб'єктна, функціональна, інструментальна, нормативна та ресурсна. Виходячи з визначення мети та аналізу вітчизняного та іноземного досвіду, визначені спеціальні функції механізму державного регулювання розвитку переробної промисловості України: протекціонізм; залучення інвестицій; підтримка вітчизняних виробників; розвиток високо і середньо високотехнологічних галузей; імпортозаміщення та локалізація виробництва; розвиток несировинного експорту. Здійснено аналіз стану переробної промисловості України в контексті реалізації спеціальних функцій механізму державного регулювання розвитку переробної промисловості. Розглянуто План розвитку переробної промисловості України на період 2023-2032 роки.*

Висновки. *Виходячи з аналізу вітчизняного та іноземного досвіду, запропоновано концепцію механізму державного регулювання розвитком переробної промисловості України, визначені його спеціальні функцій, здійснено аналіз негативних тенденцій розвитку переробної промисловості в контексті спеціальних функцій. Реалізація Плану розвитку та трансформації переробної промисловості України на період 2023-2032 роки повинна забезпечити зростання частки переробної промисловості у ВВП з 9,5 % у 2022 році до 21,8 % у 2032 році.*

Ключові слова: *механізм, регулювання, структура, розвиток, переробна промисловість, спеціальні функції*

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REGULATORY STATE MECHANISM FOR THE DEVELOPMENT OF PROCESSING INDUSTRY IN UKRAINE

Topicality. *Ukraine is experiencing a simplification of its industrial structure and a decline in technological sophistication, along with increasing depreciation of fixed assets and declining investment. The country faces deterioration in production, transportation, and energy infrastructure, regression in innovation, and a worsening export commodity structure. These challenges necessitate the modernization of industrial policy and the development of an effective state regulatory mechanism to support the growth of Ukraine's processing industry.*

Aim and tasks. *To develop a conceptual framework for a state regulatory mechanism governing the development of the processing industry, focusing on its specialized functions.*

Materials and Methods. *The study employs general scientific and specialized research methods, including comparison, generalization, synthesis, system analysis, and logical-dialectical analysis. The research is based on monographs, specialized literature, analytical materials, domestic and international academic journals, and data from the State Statistics Service of Ukraine.*

Research results. *The article examines the concepts of "management" and "regulation" and their interrelation. The structure of the state regulatory mechanism for the development of the processing industry is defined as comprising 6 components: target, subject, functional, instrumental, regulatory and resource. Based on an analysis of domestic and international practices, the study identifies key specialized functions of this mechanism: protectionism; investment attraction; support for domestic manufacturers; development of high- and medium-tech industries; import substitution and production localization, and expansion of non-resource exports. Additionally, the research examines the current state of Ukraine's processing industry in the context of the implementation of these special functions. The Plan for the Development of the Processing Industry of Ukraine for the period 2023-2032 is considered.*

Conclusion. *Based on the analysis of domestic and international experience, the study proposes a conceptual model for the state regulatory mechanism of Ukraine's processing industry, identifying its special functions, and analysing negative trends within the sector. Implementation of the Development and Transformation Plan for the Processing Industry of Ukraine for the period 2023-2032 is expected to increase the industry's share of GDP from 9.5 % in 2022 to 21.8 % in 2032.*

Keywords: *mechanism, regulation, structure, development, processing industry, special functions*

Problem statement and its connection with important scientific and practical tasks. The transformations that have taken place in Ukraine's economy and public administration system since independence have led to a number of negative consequences in the processing industry. First of all, it is a low level of investment, gradual depreciation and lack of equipment modernization, slow adoption of advanced technologies and innovations in the processing industry. The primary causes of these issues are ineffective national industrial policy and the absence of an effective mechanism of state regulation for the sector.

Analysis of recent publications on the

problem. The conceptual development of a regulatory mechanism for the processing industry has been the subject of scientific research by numerous Ukrainian scholars, including O. Amosha, Y. Bazhal, I. Bulieiev, B. Burkinsky, V. Vyshnevsky, V. Heets, A. Hrytsenko, L. Deineko, Y. Zaloznova, L. Zbarazska, S. Ischuk, M. Kyzym, Yu. Kindzerskyi, S. Kniazev, O. Popelo, O. Salikhova, S. Tulchynska, D. Cherevatskyi, I. Pidoricheva, Y. Shvets, H. Shevtsova, L. Shynkaruk, N. Shlafman and others. However, further refinement is needed, particularly concerning the specialised functions of this mechanism.

Allocation of previously unsolved parts of the general problem. Economic and administrative changes in Ukraine that have taken place since its independence have led to a number of negative consequences, including a decline in the gross regional product per capita, deindustrialization, inefficiencies in public administration, and reduced investment attractiveness. Ukraine continues to lag in labor productivity, energy efficiency, and value-added production. The lack of investment and modernization in the processing sector, slow adoption and development of advanced technologies and limited innovations contribute to rising labor migration and loss of human potential, particularly among young, highly educated professionals.

To address the above issues and achieve the main goals of the National Economic Strategy for the period up to 2030, it is extremely important to stimulate investment in the processing sector, enhance resource efficiency and establish an effective state regulatory mechanism for the development and structural transformation of the processing industry.

Formulation of research objectives (problem statement). The purpose of the research is to develop a conceptual framework for a state regulatory mechanism that supports the growth and modernisation of Ukraine's processing industry with emphasis on its specialised functions.

Materials and Methods. The study employs general scientific and specialized research methods, including comparison, generalization, synthesis, system analysis, and logical-dialectical analysis. The research is based on monographs, specialized literature, analytical materials, domestic and international academic journals, and data from the State Statistics Service of Ukraine.

An outline of the main results and their justification. *Structure of the mechanism of state regulation for the development of the processing industry in Ukraine.* Analysis of academic literature suggests "management" is a broader concept than "regulation". Regulation is seen as one of the functions of management, alongside analysis, forecasting, planning, implementation, control, etc. When discussing management, it primarily refers to the direct intervention of the management entity in management object through targeted instructions, orders and commands. In contrast, regulation is associated with norms, rules, restrictions and prohibitions that are established in the form of laws, regulations and instructions, meaning it exerts an indirect influence (Prykhodchenko L.L., 2008; Rudnitska R.M., Sydorchuk O.G., Stelmakh O.M., 2005; Amosov O.Yu, 2001; Kuznetsov A.O., 2005; Rudnitska R.M., Sydorchuk O.G., 2014; Nyzhnyk N.R., Mashkov O.A., 1998; ESA, 2011; Knyazeva V.M., Bakumenko V.D. (eds.), 2002; Malinovsky V.Ya. 2005; Dreval Yu.D. 2009; Chechel O.M., 2013; Kovalska N., 2013).

Another crucial characteristic of regulation as a management function is its relationship to property ownership. If an asset is state-owned, the government has the full right to manage and dispose of it. However, if the property belongs to private owners, the state does not have direct ownership rights but retains the authority to regulate the processes and relations concerning the use of property. Thus, regulation is a type of limited governance that does not extend to ownership rights but rather derives from the state role as a legislator, controller, overseer and guardian of public interest.

Based on an analysis of academic research on public administration of the mechanism, the following conclusions can be drawn (Prykhodchenko L.L., 2008; Rudnitska R.M., Sydorchuk O.G., Stelmakh O.M., 2005; Amosov O.Yu, 2001; Kuznetsov A.O., 2005; ESA, 2011; Rudnitska R.M., Sydorchuk O.G., 2014; Nyzhnyk N.R., Mashkov O.A., 1998; Knyazeva V.M., Bakumenko V.D. (eds.), 2002; Malinovsky V.Ya. 2005; Dreval Yu.D. 2009; Chechel O.M. 2013; Kovalska N. 2013):

1. The core component of the state regulation mechanism is the goal (or a set of goals). This goal may have a hierarchical structure, often represented as a "goal tree".
2. Functions are derived from the goal(s).
3. Functions are categorised into general and specialised. General functions are not specific to the regulated object and remain consistent across all state regulation mechanisms. These include analysis, forecasting, planning, organization (implementation), and control. Specialised functions, on the other hand, vary depending on the specific domain in which the mechanism operates.
4. The implementation of each function is

facilitated by a distinct set of tools.

5. Functions determine both the organizational structure of the state regulation mechanism and the necessity for particular regulatory entities.

6. The subjects of regulation include public authorities, enterprises and institutions responsible for executing the functions of the mechanism.

7. The normative component establishes and governs (or constrains) the operational framework of the state regulation mechanism. It encompasses norms, principles and values that serve as both limiting and stimulating factors, forming the foundation upon which regulatory entities operate.

8. An crucial prerequisite for the effective operation of the state regulation mechanism and the fulfilment of its functions is the availability of adequate human, financial and material resources.

9. There exists an intrinsic interdependence between the organizational and functional structures of the mechanism, which in practice results in their integration into a unified, cohesive organizational and functional structure.

10. An essential characteristic of the public administration mechanism is its information nature. It consists of a structured set of procedures for data processing and information exchange.

Several key issues require further research, including following:

1. While the primary focus is on the components (elements) of the regulatory mechanism, their descriptions remain rather generalized.

2. Limited attention is given to the interrelationships among the components of the mechanism.

3. Quite often, the goal(s) and subjects of the regulatory mechanism are not clearly distinguished as separate components.

4. There is lack of well-defined relationship between the purpose, functions of the mechanism and its structure.

Based on these considerations, the structure of the state regulatory mechanism for the development of the processing industry should be conceptualised as a system comprising 6 components (Fig. 1):

- *target component* - the goal (set of goals) toward which the mechanism is directed;
- *subject component* - a set of regulatory authorities responsible for achieving the goal;
- *functional component* – the functions of the mechanism that are essential for goal attainment;

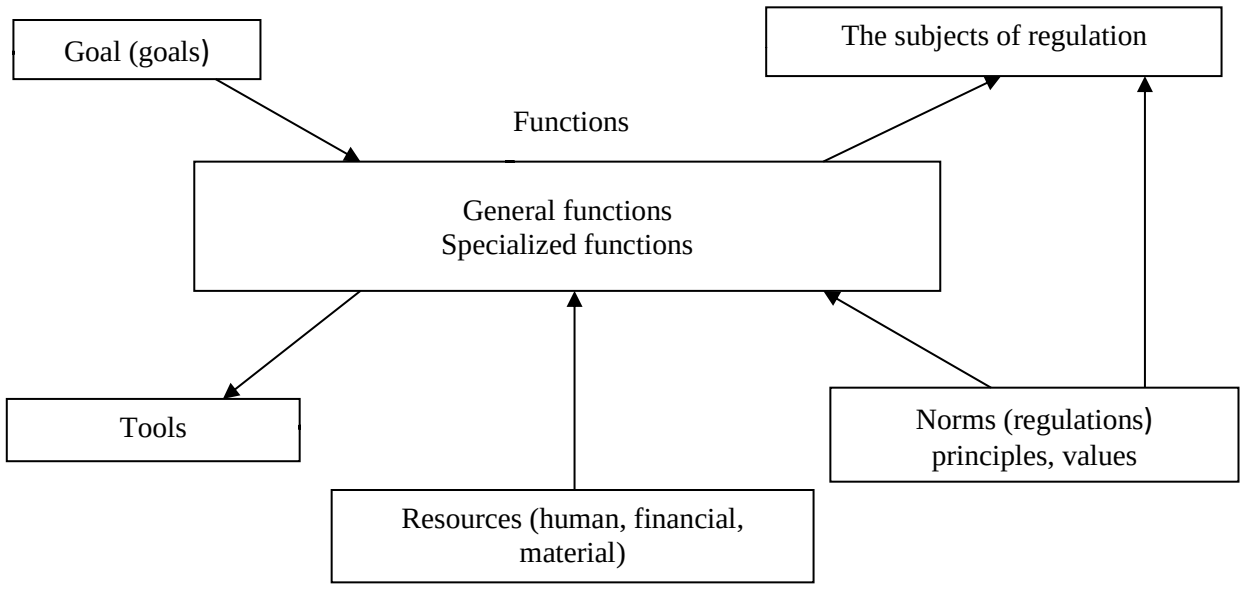

Figure 1. Generalized structure of the state regulatory mechanism for the development of the processing industry

Source: compiled by the authors

- *instrumental component* - a set of tools necessary for implementing the mechanism's functions, including directive and regulatory measures influencing the object of regulation*;*
- *regulatory component* - a set of principles, legislative and regulatory acts, norms, and rules that govern the functions and activities of regulatory authorities*;*
- *resource component* - a set of physical, intangible, financial, human, and natural assets used to support the production process and regulatory activities.

At the current stage, the objective of the state regulatory mechanism for the development of

Ukraine's processing industry can be defined as follows: the advancement of high-tech and medium-high-tech industries, increasing their share through protectionist measures, attracting investment, supporting domestic entrepreneurship, fostering innovation, promoting import substitution and production localization, developing human capital, and stimulating of non-resource exports.

An analysis of economic structures across various countries demonstrates a strong correlation between the share of the manufacturing industry in GDP and the overall level of economic prosperity. In 2021, the share of manufacturing in Ukraine's GDP was only 10%, whereas the OECD defines the standard benchmark for this indicator at 20%. To attain developed country status, Ukraine must double this figure. Achieving this objective requires national unity and commitment, as it represents the fundamental goal of economic and industrial policy. Increasing the production of goods Ukraine already manufactures while developing the capability to produce new goods for both domestic consumption and export is essential. Moreover, strengthening the processing industry presents an opportunity to create millions of jobs and reduce dependency on imports, particularly in the security and defence sectors. Ensuring economic self-sufficiency in the manufacturing industry is a key strategic priority. The economic aspect of the "Made in Ukraine" policy seeks to shift the country's economic structure from a raw material-based economy to an industrial one. Accordingly, the priorities include fostering domestic production, encouraging investment in the real sector, and promoting non-resource exports.

Based on the defined objectives and analysis of domestic and international experience, the following specialised functions of the state regulatory mechanism for the development of the processing industry in Ukraine can be identified:

- protectionism;
- investment attraction;
- support for domestic producers;
- development of high- and medium-tech industries;
- import substitution and production localization;
- expansion of non-resource exports.

Specialised functions of the state regulatory mechanism for the development of the processing industry in Ukraine. *Protectionism function.* Historically, the countries that have reached the top of the global economic rankings – such as the United Kingdom, the USA, Germany, and Japan – actively employed protectionist measures to support domestic producers, despite their contemporary advocacy for free market and free trade policy. As early as the 16th century, King Henry VII of England introduced an export duty on wool, which facilitated the country's transition from a raw material-based economy to a manufacturing economy. This shift enabled England to move from exporting raw materials to exporting finished goods, significantly contributing to national wealth. The introduction of export duties on wool increased the cost of cloth production abroad while making domestic wool processing more profitable. As a result, customs revenues rose from 30,000 to 40,000 pounds, and cloth exports increased by 60%. In the of the 16th-century economy cloth production played a role comparable to that of the automotive and electronics industries in today's global economy.

Over the three decades preceding the 2008 global financial crisis, the rapid expansion of global trade positively impacted Western economies and improved living standards. However, economic globalization has primarily benefited industrialized nations and multinational corporations, exacerbating issues such as market monopolization, economic dependence of poor countries and partly transition economies, unemployment, poverty, hunger, and environmental degradation. In essence economic globalization represents a form of corporate protectionism, shielding multinational corporations from the regulatory frameworks of democratic societies. By prioritizing narrow corporate interests, a relatively small number of global corporations have gained disproportionate control over resources and influence over the international economy, raising concerns about the long-term viability of the nation-state as sovereign political entities.

Industrialized countries – including the United States, major EU member states, China, and others – actively employ both overt and covert protectionist tools to protect their strategic (and other) sectors. In nearly all developed economies, the machine-building industry has emerged not through free market forces but as a result of targeted government interventions, including protectionist policy measures. Blind adherence to the concept of the "invisible hand of the market" in the absence of truly free market conditions is detrimental to Ukraine's manufacturing and machine-building sector. Following its declaration of independence, Ukraine rapidly integrated into economic globalization by joining the WTO and signing a free trade agreement with the EU. These steps led to the reduction or elimination of tariff and non-tariff barriers that previously protected the domestic market.

Since 2013, several additional factors have exacerbated the challenges facing Ukraine's machine-building sector, including

- the loss of traditional markets for domestic engineering products in the russian federation;
- difficulties in redirecting production and exports to developed markets due to the high competition and strict customs protection;
- insufficient development of the domestic market for machine-building products and the passive government approach to addressing this issue;
- a global increase in protectionist trends in trade while Ukraine maintains a liberalized domestic market for foreign products.
- Ukraine's passive stance in protecting its national interests amid deepening foreign trade liberalization has led to a surge in imports of machine-building products while simultaneously reducing gross value added, production, and exports in this strategically significant sector. Consequently, Ukraine has experienced a widening trade deficit in machine0building. between 2009 and 2018, the import-to-export coverage ratio for machine-building products fell to 20%. The first significant decline occurred after Ukraine joined the WTO in 2008, and the second - in 2014 after the conclusion of the free trade agreement with the EU (Figure 2).

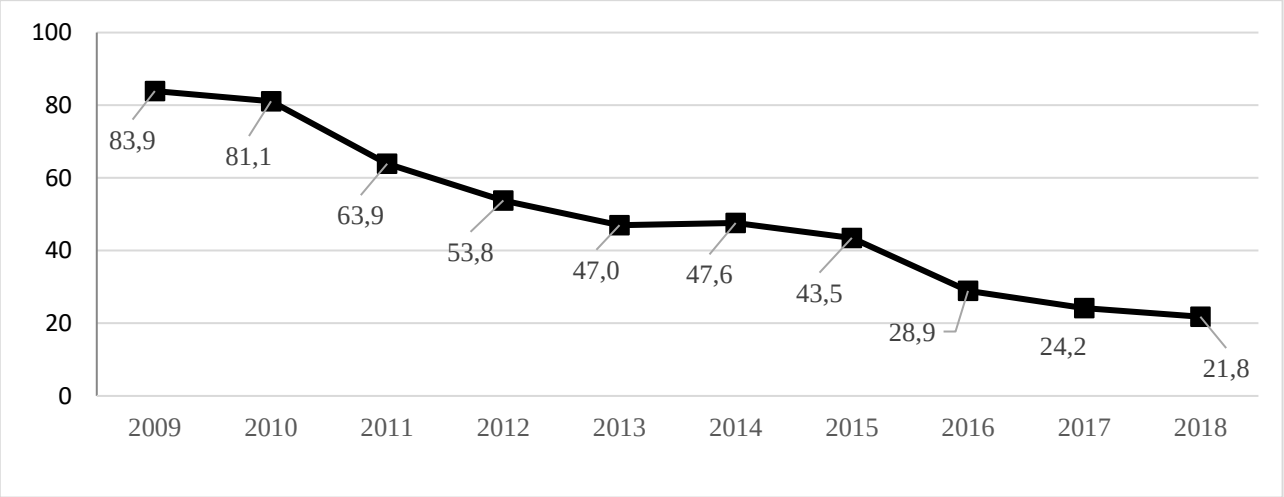

Figure 2. Import coverage ratio of machine-building products by exports in Ukraine (2009-2018), %
Source: Ishchuk S., Caputa W., Sozanskyy L. (2022)

Function "investment attraction". An essential prerequisite for the development of Ukraine's processing industry is an increase in capital intensity and, accordingly, the attraction of investments. Ukraine significantly lags behind developed countries in terms of the provision of workers with fixed assets – by a factor of 5 to 10. This limitation restricts the ability of workers to fully realize their skills, competencies, and knowledge across various economic activities, leading to a relatively low technological level of production (Table 1).

Table 1

Fixed assets per capita in Ukraine and developed European countries as of January 1, 2006 (in thousand USD, at current prices)

Country	Fixed assets
Ukraine	18,2 на 01.01.2011 р.
Austria	185,5
Ireland	162,0
Italy	158,6
Netherlands (01.01.2002p.)	144,0
Germany	163,0
Slovenia	95,4
Finland	170,1
France	144,9

Source : Bobukh I.M. (2010), SFAS (2011)

A critical issue facing Ukraine's domestic machine-building industry is the urgent need for modernization of production. The depreciation rate of tangible assets in Ukrainian machine-building enterprises exceeds 70%, compared to approximately 53% in Poland. In Ukraine, this indicator is particularly alarming in the production of electrical equipment (92.5% in 2020) and other vehicle manufacturing (87.3%).

The high degree of asset depreciation is a direct consequence of insufficient capital investment. In 2020, capital investment in Ukraine's machine-building sector (€220.9 million) amounted to only 36.4% of the 2012 level (€607.0 million). For comparison, in 2019, capital investments in Poland's mechanical engineering sector reached €6269.6 million – 16.4 times higher than in Ukraine (€381.9 million) (Ishchuk S., Caputa W., Sozanskyy L., 2022).

The process of gross fixed capital formation in Ukraine between 1997 and 2021 can be divided into 2 distinct periods. The first period, from 1999 to 2008, saw an increase in gross fixed capital formation from 17.4% of GDP in 1998 to 28.2% of GDP in 2008. However, beginning in 2009, a period of decline ensued. Over the following decade (2010-2021), this downward trend persisted, with gross fixed capital formation falling to just 13.4% of GDP in 2021. These figures indicate that since 2008, Ukraine's economy has experienced adverse trends related to the shrinking investment base, which is essential for the country's socio-economic development (Fig. 3).

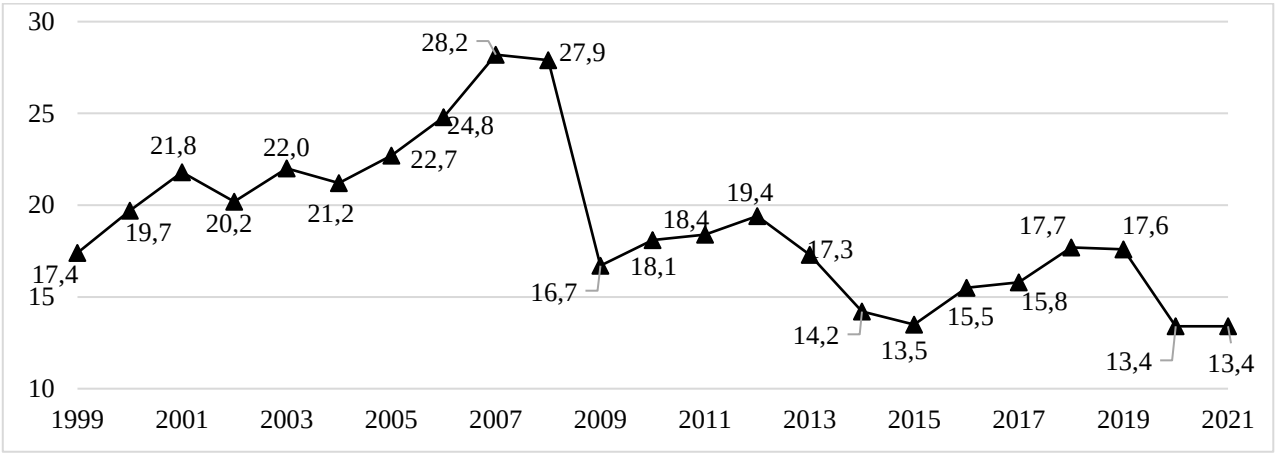

Figure 3. Gross fixed capital formation, % of GDP

Source: Statistical Yearbooks of Ukraine

Foreign direct investment (FDI), on which was initially expected to be a key driver of economic growth, has instead resulted in a net outflow rather than an inflow to the country. The total volume of FDI decreased from USD 67.0 billion in 2013 to USD 48.9 billion in 2021. In 2021 alone, the outflow accounted for nearly 30% (Vlasyuk V., 2022). Furthermore, the share of funds from non-resident investors in total capital investment in 2021 was only 0.1% (SSS, 2022).

Low levels of investment in fixed assets, coupled with high asset depreciation rates and the outflow of foreign direct investment, have resulted in a significant lack of capital equipment in Ukraine. This indicator per employee in Ukraine is 4 to 5 times lower than in EU countries, leading to considerably lower labor productivity. Moreover, the technological structure of production remains predominantly low-tech and medium-low-tech (IMPEER, 2014).

The function of "support for domestic producers". Providing preferential treatment to domestic enterprises in public procurement can serve as an effective tool for supporting national industries. However, the efficiency of this measure depends on a rational approach to determining the range of goods and products subject to such policies. If not carefully implemented, this state regulatory instrument may foster corruption and reduce competition based on product quality. Additionally, if Ukrainian-made products do not surpass those of foreign competitors in terms of technical sophistication and quality, their higher prices may necessitate additional financial burdens on Ukrainian consumers or increased reliance on taxpayer subsidies (Kalita Petro, 2014).

In 2017, the Verkhovna Rada adopted in the first reading of Draft Law No. 7206, known as "Buy Ukrainian, Pay Ukrainians", which proposed a mandatory quota for domestically produced goods in public procurement. In 2019, the Verkhovna Rada decided to withdraw this Draft Law from

consideration. According to the Ministry of Economic Development and Trade, the proposed legislation distorted market competition and primarily served the interests of select producers under the pretext of protecting domestic manufacturers.

Many experts argue that the most effective means of supporting domestic enterprises should primarily focus on simplifying regulatory procedures, reducing bureaucratic barriers, alleviating pressure from regulatory and law enforcement agencies, providing access to affordable long-term loans, and stimulating investment.

Function "development of high-tech and medium high-tech industries". The increasing globalization of markets, intensification and complexity of technological processes and materials, and shorter product life cycles have significantly heightened the role of innovation in ensuring the sustainability and global competitiveness of a country's economy. This trend is particularly relevant for Ukraine's manufacturing sector.

In Ukraine, the share of innovative products in total industrial output fell to 1.9% in 2020, compared to 3.8% in 2010. In contrast, this figure stood at approximately 11 % in Poland, and 22% in Germany during the same period (Ishchuk S., Caputa W., Sozanskyy L., 2022).

Ukraine's economy is gradually losing its capacity to produce high-tech industrial goods with significant added value. Instead, there has been an increasing shift towards a primary-sector-based economy, characterised by growing share of agriculture and raw material extraction, accompanied by a decline in the technological sophistication of the manufacturing industry.

In 2021, the production of computers, electronic and optical products fell by 25% compared to 2006. The machine-building industry, a core segment of the manufacturing sector, experienced significant losses, with its total output index falling by almost 2 times. Production of metalworking machinery and machine tools (CEA 28.4) decreased by 5 times, machinery and equipment for mining and construction (CEA 28.92) by 6 times, and production of motor vehicles (CEA 29.1) by almost 12 times (Table 2)

Table 2

Index of industrial production in the machine-building industry in 2021 compared to 2006

CEA	Type of economic activity	Index of industrial production, %
26	Manufacture of computers, electronic and optical products	25,0
28	Manufacture of machinery and equipment	53,2
28.4	Manufacture of metalworking machines and workbenches	20,5
28.91	Manufacture of machinery and equipment for metallurgy	36,9
28.92	Manufacture of machinery and equipment for the mining industry and construction	15,6
29	Manufacture of motor vehicles, trailers and semi-trailers	58,7
29.1	Manufacture of motor vehicles	8,6

Source: SSS (2022)

In 2021, the production of other vehicles declined to 41.6% of its 2012 level (CEA 30), while the production of railway locomotives and rolling stock decreased even further to 21.5% (CEA 30.2).

The technological sophistication of Ukraine's manufacturing industry has deteriorated significantly. The share of high-tech and medium-high-tech economic activities in total value added declined from 36.5% in 2013 to 25.3% in 2020[3].

A key priority of the new industrialization policy should be the promotion of innovations and the stimulation of demand for domestic high-tech products. Intensifying innovation should be a strategic objective for both the government and private sector.

The function of "import substitution and localization of production". International experience shows that most countries, at certain stages of their economic development, have implemented import substitution policies to protect specific sectors industries until they achieved sufficient competitiveness in the global market. For Ukraine, the necessity of import substitution arises from its potential role as a catalyst for structural transformations in the economy, a prerequisite for innovative development, and a stimulus for increased business activity.

In 2021, Ukraine ranked among the countries

[3] Calculated on the basis of data from the statistical collections "Activities of large, medium, small and microenterprises in 2021" and "Activities of business entities in 2020"

with the highest share of imports in domestic consumption of manufactured products, surpassing only Slovenia, Hungary, Slovakia, and Belgium (Ishchuk S., Caputa W., Sozanskyy L., 2022). Compared to Poland, Ukraine exhibited a significantly higher dependence on imports in high-tech and medium-high-tech industries (machine building). Conversely, Ukraine demonstrated a greater reliance on low-tech and medium-low-tech industries (Table 3).

Table 3

Share of imports in domestic consumption of manufacturing products in Ukraine and Poland, %

	Ukraine	Poland
High-tech industries	80,5	71,9
Medium-high-tech industries	79,0	65,8
Medium-low-tech industries	36,9	65,0
Low-tech industries	30,0	33,2
Total manufacturing industry	49,2	34,3

Source: Ishchuk S., Caputa W., Sozanskyy L. (2022)

Additionally, the proportion of imports in intermediate consumption of manufacturing enterprises accounts for approximately 50% (Table 4).

Table 4

Share of imports in intermediate consumption of manufacturing products in Ukraine in 2013-2021, %

Industry groups	2013	2016	2021
High-tech industries	77,0	72,2	78,8
Medium-high-tech industries	71,1	81,2	72,1
Medium-low-tech industries	42,7	43,1	26,9
Low-tech industries	22,7	29,0	28,1
Total manufacturing industry	**46,2**	**52,4**	**47,3**

Source: Ishchuk S., Caputa W., Sozanskyy L (2022)

Dependence of the country's economy on imports of fixed assets. An important dependency ratio of countries on imports is the share of imports in gross fixed capital formation. A high value of this indicator signifies challenges in the manufacturing industry, particularly:

- a low level of investment in fixed assets;
- a high degree of fixed assets depreciation;
- an ineffective policy of renewal of fixed assets;
- low investment and innovation activity.

Moreover, excessive dependence on imports of products from industries that produce fixed assets poses a significant challenge to economic security, competitiveness, and innovative development of the national economy. This is because fixed assets, machinery, and equipment used in production play a crucial role in fostering technological innovation and creating competitive advantages. In turn, this contributes to the overall economic efficiency of both the industrial sector and the economy. In 2021, 84% of gross fixed capital formation was attributed to imports (Table 5).

Table 5

Share of imports in gross fixed capital formation in Ukraine, %

Type of economic activity	2013	2016	2021
Manufacture of fabricated metal products, except machinery and equipment	8,8	62,6	30,6
Manufacture of computers, electronic and optical products	96,7	98,0	98,1
Manufacture of electrical equipment	90,5	83,3	85,4
Manufacture of machinery and equipment not elsewhere classified	91,6	98,8	98,5
Manufacture of motor vehicles, trailers and semi-trailers	88,9	98,3	97,0
Manufacture of other transport vehicles	16,2	23,2	48,2
Manufacture of furniture; other products; repair and installation of machinery and equipment	76,5	68,6	66,7
Total manufacturing industry	**71,5**	**85,0**	**84,0**

Source: Ishchuk S., Caputa W., Sozanskyy L. (2022)

The Ukrainian economy is almost entirely dependent on imports of computers, electronic and optical products (98.1%); motor vehicles, trailers, and semi-trailers (97%). The share of imports of electrical equipment is critically high (85.4%).

The share of the domestic component in the total consumption of machine building products in Ukraine in 2019 amounted to 30.9% compared to 56.6% in 2009 (-25.7 percentage points), while in Poland the value of this indicator in 2019 was 67.3% and decreased by only 1.8 percentage points during this period (Fig. 4).

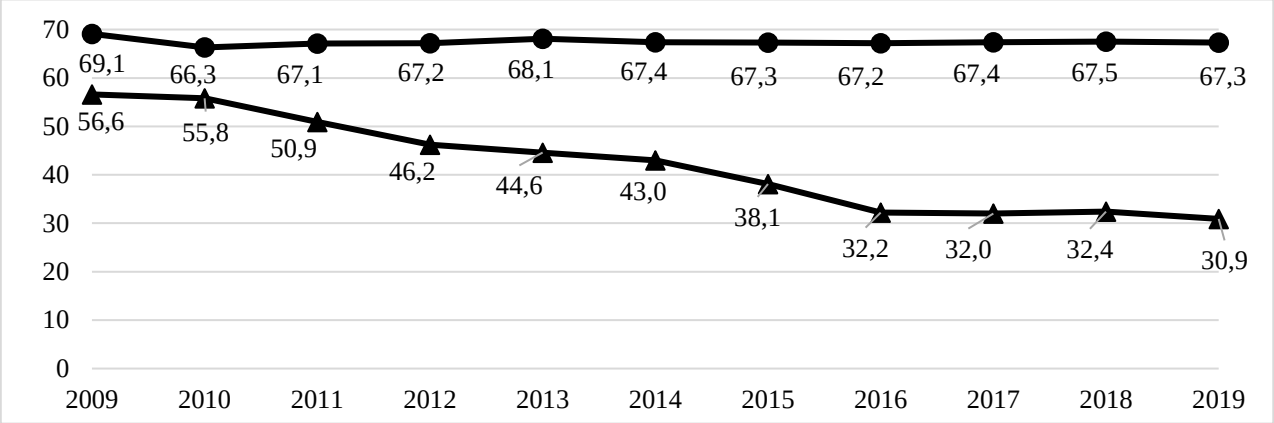

Figure 4. Share of the domestic component in the total consumption of machine building products, %.
Source: Ishchuk S., Caputa W., Sozanskyy L. (2022).

An important component of import substitution is the localization of multinational companies' production and the encouragement of foreign companies to establish assembly facilities in Ukraine with an appropriate localization ratio of domestic potential. It is proposed that multinational companies incorporate a certain share of local resources – such as raw materials, intermediate consumption goods produced in Ukraine, labor, and scientific achievements – rather than relying on imports. This approach will facilitate the formation and expansion of domestic value chains.

At the initial stage of implementing an import substitution policy, it is economically justified to enhance domestic production to replace simple imports or products for which there is a substantial current and future demand in Ukraine. This demand arises from the development of the agricultural sector, implementation of energy-saving projects, and the modernization of industrial and social infrastructure. Import substitution should be regarded as a comprehensive set of measures aimed at stimulating the development and utilisation of domestic potential in the production of industrial goods for various types of consumption^ as well as fixed capital, to fill potential niches in both domestic and international markets. An effective import substitution policy can generate significant multiplier effects, including jobs creation in the industrial sector, increased domestic demand, and expansion of the domestic market. Consequently, this can lead to higher GDP growth and increased tax revenues at various governmental levels.

Function "development of non-resource exports". In international value chains, Ukraine has increasingly shifted toward raw materials and low-tech segments. Between 2006 and 2021, the share of commodities in total exports increased from 7.7% to 35,2 %[4]. Simultaneously, the share of ferrous metals and products thereof declined from 40.2% to 22.4%, while the share of high-tech goods decreased from 14.5% to 9,6 %[5] (Table 6). The decline in technological sophistication of exports is indicative of deindustrialization, as Ukraine transitions from an industrial economy to one dominated by agriculture.

Table 6

Changes in the commodity structure of Ukraine's exports in 2006-2021, %

Goods	2006 рік	2021 рік
1	2	3
Raw materials	7,7	35,2

[4] cereals; seeds and fruits of oil plants; livestock and products of animal origin; ores, slag and ash

[5] machinery, equipment and mechanisms; electrical equipment; means of land transport; aircraft, floating craft; optical and photographic instruments and apparatus

End of Table 6

1	2	3
including:		
grains	3,5	18,1
ores, slag and ash	2,4	10,5
oilseeds and fruits	0,8	3,6
ferrous metals and products thereof	40,2	22,4
high-tech goods	14,5	9,0

Source: SSS (2022)

For the state, there is a fundamental distinction between the export of raw materials and the export of processed products, particularly machinery. While in 2007, the share of processed goods in Ukraine's exports was 75%, by 2021 this figure had declined to 36%. Furthermore, the share of the processing industry in GDP decreased to 8% in 2022.

Development Plan for the Processing Industry of Ukraine for 2023-2032. One of the general functions of the state regulatory mechanisms in the development of the processing industry is strategic planning. A team of experts, established under the Verkhovna Rada Committee on Economic Development to elaborate a plan for the development and transformation of Ukraine's processing industry (CVRED, 2023). The main areas of development and transformation include:

- increasing the degree of raw material processing and establishing new value chains;
- promoting the growth of economic sectors capable of stimulating the expansion of related industries;
- enhancing public procurement of domestically produced goods;
- implement import substitution strategies;
- expanding non-resource-based exports.

A significant proportion of Ukraine's raw materials are exported without further processing, including cereals - 60%, iron ore - 57%, titanium ore - 69%, refractory and kaolin - 67%, wood - 29%, and oilseeds - 17% (The Verkhovna Rada Committee on Economic Development). The high degree of raw material processing could significantly enhance value-added production.

The following sectors have been identified as growing sectors of the economy: agriculture, food production, wood and paper manufacturing, printing and duplication, electricity, gas supply, steam and air conditioning, construction, and transportation.

The public procurement market in Ukraine accounts for about 13% of the GDP annually. In 2021, Ukraine's nominal GDP amounted to UAH 5.46 trillion, indicating that the estimated value of the public procurement market was approximately UAH 700 billion. Notably, around UAH 266 billion was spent on imported goods. Ukraine has one of the highest shares of imports in public procurement in the world (Table 7). This suggests that a significant potential for domestic production development remains underutilised.

Table 7

Share of imports in public procurement across various countries

Country	Imports in public procurement, %	Country	Imports in public procurement, %
Ukraine	**38,0**	Australia	5,8
Taiwan	17,3	EU	5,3
Korea	14,4	USA	4,8
Indonesia	8,0	Japan	4,8
Mexico	7,4	China	4,7
World	6,7	Canada	4,3
India	6,2	Brazil	3,7
Turkey	6,0		

Source: CVRED (2023)

Projected expenditures on machine-building products over the next 5 years are estimated at $9143.7 million. The plan for the construction of new enterprises in the processing industry envisages investments of about USD 90 billion. Specifically, the plan includes the construction of over 570 plants during 2023-2024. The expected outcomes are presented in Table 8.

Table 8

Expected outcomes of the implementation of the Ukrainian Processing Industry Development Plan for 2023-2032

GDP - ($113.9 billion in 2020 prices)	+ 73,2%
Output	+ 108,3%
Industry	+ 158,1%
Services	+ 44,9%
Construction industry	+ 368,1%
Agriculture	+ 6,3%
Exports	+ 138,2%
Imports	+ 100,0%
Employment - new jobs	+ 575 000
Payroll (total for the country)	+ 81,5%
Profit of enterprises	+ 58,1%
Tax revenues (net effect)	UHA 384,2 billion (52,7% from 2020 level)
Increase in tax revenues (2023-2032)	UHA 2,7 trillion

Source: CVRED (2023)

According to forecasts, the implementation of the Plan for the Development and Transformation of the Ukrainian Manufacturing Industry is expected to increase the share of the manufacturing sector in GDP from 9.5% in 2022 to 21.8% in 2032 (CVRED, 2023).

Conclusion and perspectives for further research.

Based on an analysis of both domestic and international experience, the conceptual framework of a state regulatory mechanism aimed at developing Ukraine's processing industry has been proposed. Its specialised functions include: protectionism; investment attraction; support for domestic producers; development of high- and medium-tech industries; import substitution and localization of production; development of non-resource exports. The core aspects of these functions have been analysed. The implementation of the Plan for Development and Transformation of the Processing Industry of Ukraine for the period 2023-2032 is projected to increase the share of the processing industry in the GDP from 9.5 % in 2022 to 21.8 % in 2032.

REFERENCES

Amosov O.Yu. (2001). Transformation of public administration mechanisms of economic development. *Public administration and local self-government*, 2, 10 – 16.

Bobukh I.M. (2010). Proportions and prospects of the formation of the national wealth of Ukraine: monograph. – K., Inst. of Economics and Forecasting of the NAS of Ukraine

Chechel O.M. (2013). Principles and Mechanism of State Regulation of the Economy. *Bulletin of the Ukrainian State Administrative Service. Series: "State Administration"*, 2 (9), 103-111.

CVRED (2023). Development and Transformation Plan of the Processing Industry of Ukraine. Committee of the Verkhovna Rada on Economic Development https://komprompol.rada.gov.ua/news/main_news/74547.html/.

Dreval Yu.D. (2009). Mechanisms of Public Administration as a Scientific *Problem. State Construction*, 2, http://nbuv.gov.ua/j-pdf/DeBu_2009_2_4.pdf.

ESA (2011). Encyclopedia of state administration. - Kyiv: NAPU.

IMPEER (2014). Institutional Mechanisms of Capitalization of the Economy of the Ukrainian Black Sea Region Regions. - Odesa: Institute of Market Problems and Economic and Environmental Research of the National Academy of Sciences of Ukraine.

Ishchuk S., Caputa W., Sozanskyy L. (2022). Mechanical engineering of Ukraine and Poland in the conditions of global economic changes. - Poznan: Bogucki Wydawnictwo Naukowe.

Kalita Petro (2014). Support for the Domestic Producer: A Course for Improvement and Development https://zn.ua/ukr/macrolevel/pidtrimka-vitchiznyanogo-virobnika-kurs-na-vdoskonalennya-ta-rozvitok-267384_.html/.

Knyazeva V.M., Bakumenko V.D. (eds.) (2002). Public Administration: Dictionary-Reference – Kyiv: UADU Publishing House.

Kovalska N. (2013). Theoretical and methodological principles of state administration mechanisms of the

vocational training system in Ukraine. *Current problems of state administration*, 2 (54), 6-10.

Kuznetsov A.O. (2005). Public administration mechanism: etymology of the concept - Kharkiv: region. inst. of public administration NAPU

Malinovsky V.Ya. (2005). Dictionary of Terms and Concepts in Public Administration - Kyiv: Atika

Nyzhnyk N.R., Mashkov O.A. (1998). Systemic Approach to the Organization of Public Administration – Kyiv: UADU.

Prykhodchenko L.L. (2008). The essence of the concepts of state mechanisms, public administration and public regulation. *Current problems of public administration*, 3 (35), 61-68.

Rudnitska R.M., Sydorchuk O.G. (2014). The essence and content of public administration mechanisms and principles of their functioning. *Public Administration: Theory and Practice*, 4, 50-60.

Rudnitska R.M., Sydorchuk O.G., Stelmakh O.M. (2005). Public administration mechanisms: essence and content. Lviv: LRIDU NAPU.

SFAS (2011). Stocks of fixed assets, Slovenia, 2000-2010. - Statistical Office of the Republic of Slovenia: http://www.stat.si/eng/novica_prikazi.aspx?id=4423; Estimates of the Capital Stock of Fixed Assets / Central Statistics Office of Ireland / режим доступу: http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=CSA01&PLangua.

SSS (2022). Statistical Yearbook of Ukraine for 2021. – Kyiv: State Statistics Service.

The Verkhovna Rada Committee on Economic Development), https://komprompol.rada.gov.ua/news/main_news/74547.html

Vlasyuk V. (2022). How not to repeat the mistakes of the past and build a technological, competitive economy. Why should Ukraine move away from the concept of a raw material economy for economic growth? *Ukrainian Pravda*, http://www.epravda.com.ua/columns/2022/05/17/687120/.