СИСТЕМА ПРИНЦИПІВ СЕЛЕКТИВНОГО РЕГУЛЮВАННЯ ТОВАРНИХ РИНКІВ В УМОВАХ НЕСТАБІЛЬНОСТІ

Актуальність. Поява селективного підходу в системі державного регулювання обумовлена "вадами" ринку, тобто його неспроможноюстю в нових секторах економіки та товарних ринків забезпечити ефективний розподіл ресурсів.

Мета та завдання. Метою статті є обґрунтування системи принципів селективного регулювання систем вертикально суміжних товарних ринків у повоєнний період.

Матеріали та методи. Результати теоретичного узагальнення наукових праць і методичних підходів у сфері регулювання систем товарних ринків, що висвітлені в публікаціях фундаментального й прикладного характеру, а також статистичні дані Державної служби статистики України формують матеріальну та методичну базу дослідження. Для вирішення поставлених завдань використано методи системного, структурно-логічного, порівняльного, статистичного аналізу.

Результати. Обґрунтовано доцільність синтезу чотирьох теорій для формування принципів системи ринків, які базуються на системі принципів, сформованій на основі синтезу чотирьох теорій, із виділенням груп загальних принципів (доцільність, системність і послідовність, адекватність, пріоритетність економічних інтересів держави, альтернативність, стійкість, різноманітність процесів регулювання), та принципів сталого розвитку (мінімізація втрат, циклічність процесів реформування ринкової інфраструктури), що взаємопов'язані між собою та мають спільну відповідальність основу. Визначено
порушення на практиці принципу відтворювальної пропорційності ринкових систем. За результатами емпіричних досліджень встановлено, що додатне сальдо української аграрної продукції на 93 % формує сальдо зернових культур. Доведено, що додана вартість, вироблена аграрним сектором, реінвестується або в інші сектори економіки, або мігрує за її межі шляхом зростаючого сировинного експорту.

**Висновки.** Обґрунтовано методологічні засади селективного регулювання розвитку систем суміжних товарних ринків в умовах нестабільності, в підтримку яких здійснено авторську концепцію селективного регулювання, систему актуалізованих принципів, комплекс механізмів селективного регулювання. Тип механізму регулювання залежить від особливостей ринкових систем, їх виду, рівня розвитку, періоду й ефективності. Наголошено, що в умовах нестабільності перевагу необхідно надати комплексним, адаптивно-превентивним механізмам селективного регулювання. Прикладна значимість результатів дослідження визначається можливістю їх використання в якості наукового підґрунтя державними органами управління різних рівнів у ході розробки адаптивно-превентивних механізмів селективного регулювання систем товарних ринків.

**Ключові слова:** товарні ринки, селективне регулювання, принципи, стійкість, адаптивні механізми, додана вартість, пропорції відтворення, стабільний розвиток.

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**SYSTEM OF PRINCIPLES OF COMMODITY MARKETS SELECTIVE REGULATION IN CONDITIONS OF INSTABILITY**

**Topicality.** The emergence of a selective approach in the system of state regulation is due to market "flaws," i.e., its inability to ensure efficient resource allocation in certain sectors of the economy and commodity markets. The need for selective regulation increases during periods of instability, martial law and post-war reconstruction of the state, characterized by limited financial, material and labor resources, and increased challenges and threats in the security environment. The introduction of adaptive mechanisms for regulating commodity market systems in wartime and post-war periods necessitates the development of a methodology for selective regulation based on the principles of resilience, an integral part of which is a system of updated principles.

**Aim and tasks.** The purpose of the article is to substantiate the system of principles of selective regulation of vertically adjacent commodity markets based on the synthesis of various scientific approaches in the context of instability.

**Materials and Methods.** The results of the theoretical generalization of scientific works and methodological approaches in the field of regulation of commodity market systems covered in publications of a fundamental and applied nature, as well as statistical data of the State Statistics Service of Ukraine form the material and
methodological basis of the study. The methods of systemic, structural and logical, comparative, and statistical analysis were used to solve the tasks set.

Research results. The expediency of synthesizing four theories for forming the principles of selective regulation of vertically adjacent commodity markets in the postwar period is substantiated: the theory of resilience, economic sustainability, resource reproduction and sustainable development. The methodological foundations of selective regulation of market systems are improved, which are based on a system of principles formed on the basis of a synthesis of four theories, with the allocation of groups of general principles (expediency, systematicity and consistency, adequacy, predictability, objectivity and accuracy, transparency), resilient (preventive, priority of economic interests of the State, alternative) sustainability (efficiency, adaptability, flexibility and maneuverability, dynamism, science), reproduction (purposefulness, rationality of the ratio of regulatory methods, reproductive proportionality, efficiency, feedback), and principles of sustainable development (minimization of losses, cyclicity of reproduction processes, market inclusion), which are interrelated and have a common reproductive basis. The author identifies violations of the principle of reproduction proportionality of market systems in practice. Based on the results of empirical studies, it is established that the surplus of Ukrainian agricultural products is formed by 93% of the balance of grain crops. It is proved that the added value produced by the agricultural sector is reinvested either in other sectors of the economy or migrates abroad through growing raw material exports.

Conclusion. The author substantiates the methodological foundations of selective regulation of the development of adjacent commodity market systems under conditions of instability, which are based on the author's concept of selective regulation, a system of updated principles, and a set of mechanisms for selective regulation. The type of regulatory mechanism depends on the characteristics of market systems, their type, level of development, period and efficiency. It is emphasized that in conditions of instability, preference should be given to complex, adaptive and preventive mechanisms of selective regulation. The applied significance of the research results is determined by the possibility of their use as a scientific basis by public authorities at various levels in the development of adaptive and preventive mechanisms for selective regulation of commodity market systems.

Keywords: commodity markets, selective regulation, principles, sustainability, adaptive mechanisms, added value, proportions of reproduction, sustainable development.

Problem statement and its connection with important scientific and practical tasks. The emergence of a selective approach in the system of state regulation is due to market "flaws", i.e. its inability in certain sectors of the economy and systems of related markets to ensure efficient allocation of resources. The need for selective regulation (hereinafter – SR) increases during periods of economic downturn, instability, martial law and post-war reconstruction of the state, characterized by limited financial, material and labor resources, changing external environment, intensification of challenges and threats in the security environment, and internal transformations of market systems.

Selectivity makes it possible to reduce (level) development imbalances in selected sectors of commodity markets over time. Selectivity is realized within the framework of purposeful formation of relative proportions in the systems of adjacent commodity markets and the national economy by regulatory entities. Under the influence of the state, relative proportions are formed differently than under the influence of spontaneous market forces or the strongest business entities with market power, since these proportions are constructed in the plane of realization of economic interests of the state and society. The introduction of adaptive mechanisms for selective regulation of commodity market systems in wartime and post-war periods necessitates the development of a SR methodology based on the principles of resilience, an integral part of which is a system of updated regulatory principles.

The study is related to the conceptual and strategic documents of Ukraine, in particular, the Concept of National Resilience dated 27.09.2021 No 479/2021 (Concept, 2021), the National Economic Strategy of Ukraine until 2030 dated 03.03.2021 No 179 (National Economic Strategy, 2021), the Food Security Strategy until 2030 (Food Security Strategy, 2021), the Sustainable Development Strategy of Ukraine until 2030 (Sustainable Development Strategy, 2017).

Analysis of recent publications on the problem. The theoretical and methodological foundations of the functioning and regulation of commodity markets are reflected in the works of O. Borodina, B. Burkynskiy, V. Heits, S. Kvasha, M. Latynin, Y. Luzan, G. Mazur, O. Oliynyk, T. Ostashko, B. Paschauser, V. Tochylin, L. Khudoliy, O. Shubravska and others. The theoretical foundations of national resilience have been studied by foreign scientists F. Bourbeau, L. Gunderson, W. Ashby, M. Cavelli, M. Kaufman, K. Christensen, S. Light, K. Holling, and others. The development of the theoretical framework and mechanisms for selective regulation of commodity markets is the subject of the works of B. V. Burkynskiy, M.L. Tarakanov and other scientists of the Institute of Market and Economic&Ecological Research of the National Academy of Sciences of Ukraine (Burkynskiy, B.,
The general principles of state regulation of the economy are defined by the Law of Ukraine «On the Principles of State Regulatory Policy in the Sphere of Economic Activity» N 1160-IV (Law of Ukraine, 2023) namely: expediency, adequacy, efficiency, balance, predictability, transparency and consideration of public opinion. These principles have been supplemented by scientists with a number of new components, including: systematicity, continuity, unity of development, validity, mandatory, and professionalism (Chechel, O., 2014). The general principles of economic regulation are specified for certain sectors of the economy. For example, M. Latynin proposed the following principles of state regulation of the agricultural sector: priority and agricultural protectionism, systematic and comprehensive, predictability and transparency, consistency and fairness, clarity and efficiency, environmental feasibility (Latynin, M., Kharchenko, T., 2020). The principles of ensuring the national resilience system are defined in the Concept (Concept, 2021); they include, in particular, complexity, broad interaction, awareness, readiness, mobility, adaptability, and subsidiarity.

Allocation of previously unsolved parts of the general problem. The general principles of state regulation of the economy set out in regulatory documents and works of domestic scholars do not take into account the specifics of market reproduction processes, peculiarities of commodity flows, target benchmarks for the development of commodity markets in certain time periods (peacetime and wartime), instability of the external environment, security challenges and threats. The principles of ensuring the national resilience system set forth in the Concept (Concept, 2021) are also of a general nature and need to be specified through the prism of commodity market systems in the spatial and temporal dimensions. It is also important to take into account the type of state regulation (selective and adaptive) in wartime and post-war periods characterized by a high level of variability and instability of the external environment. This means that market (sectoral) policies and mechanisms for their implementation should be sufficiently flexible and dynamic.

Scientists focus on the theory of state regulation, while the selective approach remains insufficiently studied. The formation of the theory and mechanisms of selective regulation of commodity markets necessitates the development of an appropriate methodology, an important component of which is the principles. As fundamental principles, the principles provide unity and logic to the entire set of methods, techniques, methods and methods of cognition included in the methodology. These circumstances determined the purpose and objectives of the study.

Formulation of research objectives (problem statement). Purpose of the article – to substantiate the system of principles of selective regulation of vertically adjacent commodity markets based on the synthesis of various scientific approaches in the context of instability – outlined the following tasks:

- to determine the theoretical basis for the formation of a system of regulatory principles;
- to substantiate the groups and composition of SR principles, their main characteristics in the market dimension;
- to identify violations of the principle of reproduction proportionality in practice;
- to substantiate the structure of the methodological principles of the SR systems of adjacent commodity markets.

Materials and Methods. The results of the theoretical generalization of scientific works and methodological approaches in the field of regulation of commodity market systems covered in publications of a fundamental and applied nature, as well as statistical data of the State Statistics Service of Ukraine form the material and methodological basis of the study. The methods of systemic, structural and logical, comparative, and statistical analysis were used to solve the tasks set.

An outline of the main results and their justification. In modern conditions of instability, the theory of sustainability, adapted to the specifics of market processes of reproduction, is the main system-forming element of the theoretical basis for the formation of the principles of selective regulation of systems of vertically adjacent commodity markets (Fig. 1).

The proposed theoretical basis for constructing a set of principles organically combined the comprehensive theory of resilience with the market dimension of economic sustainability based on the reproductive approach and the theory of sustainable (balanced) development (see Fig. 1). That is, the theoretical canvas originates from the general theory of resilience to more local theories of sustainability and reproduction of resources with a projection on the development of systems of adjacent commodity markets. It is about market resilience, thus resilient recovery of market systems and their ability to counter external and internal challenges and threats.

In accordance with the theoretical basis, it is proposed to single out 5 groups of principles of
selective regulation of the development of systems of adjacent commodity markets in conditions of instability: (1) general; (2) resilient; (3) sustainable; (4) reproductive; (5) sustainable development. The set of regulatory principles and their essence are summarized in Table 1.

Fig. 1. Synthesis of theories for the formation of principles of selective regulation of systems of vertically adjacent commodity markets*

*Developed by the authors.

Table 1

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<th>Approach</th>
<th>Principles</th>
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<tr>
<td>General principles</td>
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<tr>
<td>1. Expediency</td>
<td>There is a well-founded need for the SR functioning and development of the systems of adjacent commodity markets in order to solve existing problems</td>
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<td>2. Systematic and consistency</td>
<td>System regulation in accordance with current and strategic goals, consistent improvement of SR measures and methods</td>
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<td>3. Adequacy</td>
<td>Correspondence of the forms, measures and tools of the SR to the need to solve existing problems, the current state of the system of commodity markets</td>
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<td>4. Predictability</td>
<td>Consistency of regulatory activity, its compliance with the goals of state policy in the market dimension</td>
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<td>5. Objectivity and accuracy</td>
<td>The analytical basis for making regulatory decisions should be reliable, and the results should be based on accurate calculations</td>
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<td>6. Transparency</td>
<td>Openness for market subjects of actions of regulatory bodies at all stages of their regulatory activity</td>
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<td>Resilient</td>
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<tr>
<td>1. Preventiveness</td>
<td>Preventive regulation to anticipate challenges and threats to the functioning of market systems; preemption strategy</td>
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<td>2. The priority of the economic interests of the state</td>
<td>The regulation of the systems of adjacent markets is carried out not from the standpoint of the economic interests of individual market subjects, but from the state, as the bearer of public interests, in order to ensure national security, including military and economic, in conditions of external and internal threats</td>
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<tr>
<td>3. Alternativeness</td>
<td>Search and consideration of the maximum possible number of alternative regulatory solutions to neutralize certain challenges and threats to the sustainable development of commodity market systems</td>
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<td>Market sustainability</td>
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<tr>
<td>1. Operativeness</td>
<td>The speed of management decision-making and implementation of regulatory measures in conditions of unexpected changes</td>
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<td>2. Adaptability</td>
<td>Rapid change in the composition of regulatory measures depending on changes in the parameters of regulatory objects under force majeure conditions</td>
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<td>3. Flexibility and maneuverability</td>
<td>The possibility of rapid response of regulatory bodies and taking into account external disturbances by changing the components of SR mechanisms</td>
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<td>4. Dynamism</td>
<td>Changes in the mechanisms and measures of SR over time, taking into account the dynamics of internal and external environment variability</td>
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<td>5. Science</td>
<td>Continuous improvement of regulation methodology and use of global experience in regulation of commodity markets in conditions of instability</td>
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The group of resilient principles included three structural components (see Table 1), which are extremely important in conditions of instability and economic recovery. The principle of preventiveness provides preventive regulation to anticipate challenges and threats to the functioning of systems of vertically adjacent commodity markets. According to S.I. Pirozhkov, effective resilience means anticipating challenges and threats, but not catastrophes; their presence means failure of resilience. The scientist interprets national resilience as a "anticipation strategy" that allows timely awareness of risks and preparation for force majeure circumstances in order to minimize economic, political, military, etc. losses (Pirozhkov, S., Bozhok, E. & Khamitov, N., 2021).

The preventive nature of regulatory measures, ensuring national security and its components, is related to the second resilient principle. The principle of prioritizing the economic interests of the state as the bearer of public interests provides for the regulation of the functioning and development of systems of adjacent commodity markets, not from the standpoint of the economic interests of individual market subjects, but of the state; making regulatory decisions to ensure national security in conditions of external and internal threats. This principle is conditioned by the essential functions of the state, among which it is possible to single out three main ones: (1) the state is a monopoly expression and representative of the interests of society as a whole; (2) an entity that ensures the satisfaction of the economic needs of society as a whole; (3) defender of public economic interests (Gritsenko, A., 2021).

The principle of alternative actions involves the search and consideration of the maximum possible number of alternative regulatory solutions to neutralize certain challenges and threats to the sustainable development of commodity market systems.

The group of principles of market sustainability unites five components aimed at timely and successful adaptation of the systems of adjacent markets to new operating conditions (see Table 1). The principle of efficiency determines the speed of management decision-making and the implementation of regulatory measures in conditions of unexpected internal and external changes.

The principle of adaptability provides for a quick or preventive change in the composition of regulatory measures, depending on the change in the parameters of the objects of regulation under conditions of force majeure. This principle is the most important in its group, as it is purposefully focused on ensuring the stability of the functioning and development of adjacent market systems in conditions of instability, that is, the creation of adaptive market systems. An adaptive system is capable of restoring and maintaining its functionality in a situation of uncertainty and multi-vector variability of the external environment. It is not about passive adaptation of the system to its environment, but about a new, more complex type of it, capable of changing both internal processes and influencing external factors.

If adaptability is the basic principle of ensuring

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<th>Reproduction</th>
<th>Cycle development</th>
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<tr>
<td>1. Purposefulness</td>
<td>Minimization of resource losses</td>
<td>Minimization of losses of material resources in the process of their movement by sectors and adjacent markets of the system</td>
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<td>2. Rationality ratio of regulation methods</td>
<td>Cyclic reproduction processes</td>
<td>Formation of cyclical (closed) systems of adjacent commodity markets to ensure secondary processing of materials and waste in their sectors, increase of &quot;pure&quot; market added value</td>
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<td>3. Reproduction proportionality</td>
<td>Market inclusion</td>
<td>Ensuring free access of small and medium-sized producers to sectors of commodity markets, in particular, to the sector of distribution and sale of products; physical and economic availability of essential goods for the population</td>
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the stability of functioning and development of adjacent market systems, then the rest of the principles complement and strengthen it (see Table 1). The principle of flexibility and maneuverability provides the possibility of rapid response of regulatory bodies to transformations and taking into account unexpected disturbances in the external environment by changing the component composition of SR mechanisms. The principle of dynamism involves changing the mechanisms and measures of selective regulation in the time dimension, taking into account the dynamics of the variability of the parameters of the internal and external environment. The principle of scientificty ensures the constant improvement of the regulation methodology and the use of world experience in the regulation of commodity markets in conditions of instability.

To improve the parameters and achieve sustainability of their development, it is advisable to introduce comprehensive regulatory mechanisms based on a reproducible group of principles consisting of five components.

The principle of purposefulness corresponds to the essential feature of selective regulation and provides for the targeted impact of regulatory measures on SR objects – "gaps" in commodity and financial flows between sectors and markets of the system and resource-generating sectors ("growth points") of adjacent commodity market systems. The principle of rationality of the ratio of regulatory methods involves achieving the optimal ratio of direct and indirect, economic and administrative regulatory methods, as well as reviewing this ratio depending on changes in the market situation, internal and external factors of the functioning of adjacent market systems.

In the conditions of post-war economic recovery, the state SR is called upon to ensure positive shifts in the proportions of market reproduction, to create conditions for increasing the competitiveness of domestic producers. Therefore, one of the basic principles of SR should be reproduction proportionality, i.e. ensuring the proportionality of the expanded reproduction of resources between sectors and adjacent markets of the system, as well as the balance of commodity and financial flows in the interactions of all markets and their sectors (see Table 1). Proportions of reproduction reflect different ratios in the conditions of production, distribution, exchange and consumption in the systems of adjacent commodity markets.

The principle of reproduction proportionality is multidimensional, as is the classification of the proportions themselves: by type of flow – commodity, financial, informational; by structure – the ratio of elements (sectors and markets) of a certain system; by territory – the ratio of commodity markets in global, state, regional and local dimensions. In the systems of vertically adjacent commodity markets, it is possible to distinguish different spheres of optimization of proportions, the main of which are the following: (1) proportions of reproduction between market sectors (raw, processing, distribution and sales, consumer); (2) proportionality of commodity and financial flows in the market system; (3) qualitative and cost parameters of commodity flows; (4) spatial and temporal parameters of commodity traffic, etc.

In practice, the basic reproduction principle of proportionality is not implemented, in market systems there is a violation of the main reproducible ratios, that is, disproportions arise. Thus, in the economy of Ukraine there are structural and dynamic disproportions in foreign trade, the manifestation of which is the export of raw materials and the import of processed products with a high added value.

Another type is the disproportion of commodity and financial flows in the systems of adjacent commodity markets. According to the research of I.P. Khomyn, at the expense of the added value created in the agrarian sector of Ukraine, there is financial donation of other sectors of the domestic and foreign economies (Khomyn, I., 2018). In the systems of adjacent agrarian markets, there is an outflow of added value, its disproportionate redistribution between sectors, a reduction in the volume of reverse financial flows to the basic raw material sector. This trend is confirmed by the analysis of the foreign economic balance of the agricultural sector and the economy of Ukraine as a whole (Table 2).

Table 2

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For "Foreign economic balance of the agricultural sector and economy of Ukraine in 2005-2021, billion US dollars"
In 2021, the foreign trade balance of agricultural products amounted to $13.16 billion. USA, having increased by 6.9 times compared to 2005. The volume of this balance without grain crops is thirteen times smaller – only $0.98 billion. USA (see Table 2). Therefore, 93% of the positive balance of Ukrainian agricultural products is the balance of grain crops. The general foreign economic balance of Ukraine has a negative value and will reach – 4.77 billion dollars in 2021. USA, which is 2.6 times higher than in 2005. At the same time, if the positive balance of the agricultural sector is excluded from the foreign trade balance, the balance deficit will reach 17.93 billion dollars. USA, that is, almost four times higher than the actual indicator of the reporting year. During the studied period in 2015, the external balance became positive for the first time (USD 0.61 billion), but only at the expense of the agricultural sector.

Provided that the amount of the positive balance of agricultural products (see Table 2) is directed to the financing of the agrarian sector, it would be possible to ensure its technical rearmament. However, this did not happen, which is clearly evidenced by the comparative analysis of the shares of agriculture in the gross value added (GVA) and the value of the country's fixed assets (Table 3). According to the State Statistics Service, in 2021 the share of the agricultural sector in the state's GDP reached 10.6%, and the specific weight of this sector in the total value of fixed assets – 5.1%, which is 5% less than the level of 2001. At the same time, the share of the processing industry in the value of fixed assets is three times higher than that of the agricultural sector (15.4% in 2020), and its share in GVA (10.3%) is only 0.3 percentage points. below the agriculture indicator.

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<th>Indicators</th>
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<tr>
<td>2. The share of agriculture in the value of fixed assets, %</td>
<td>10.2</td>
<td>5.96</td>
<td>1.71</td>
<td>2.75</td>
<td>3.31</td>
<td>4.42</td>
<td>4.24</td>
<td>4.90</td>
<td>5.11</td>
<td>5.11</td>
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* Source: calculated by the authors based on the data of the State Statistics Service of Ukraine, 2022.
Agriculture finances other sectors of the Ukrainian economy with foreign currency and indirectly the economies of other countries (Khomyn I., 2018). There is a negative tendency to reduce the share of both the agricultural and processing sectors in GVA and the value of fixed assets (see Table 3), which reflects the disproportionality of commodity and financial flows in the systems of related agricultural markets. The value added produced by the agricultural sector is reinvested either in other sectors of the national economy or migrates abroad through growing commodity exports. Existing reproduction imbalances in market systems require adjusting state regulation approaches in line with European practices and justifying the priorities of the SR in the context of an innovative rather than raw material-based model of national economic development. An innovative and inclusive vector of development should be laid down at the first stage of economic recovery in order to obtain significant results of qualitative modernization of market systems in the following stages of reforms.

The principle of the effectiveness of selective regulation is logically connected with the principle of purposefulness (see Table 1). The principle of efficiency provides for the targeted orientation of regulatory measures, on the one hand, on the final economic effect – optimization of the total added value created in the systems of adjacent commodity markets, on the other hand, on the formation of a developed system of state institutions for the implementation of sustainable development policy priorities in the market dimension and the rational use of budget funds.

The principle of feedback provides for the achievement of a positive feedback of the systems of adjacent commodity markets to the mechanisms and measures of selective regulation (see Table 1). Monitoring of state regulatory measures becomes a tool for implementing this principle, i.e. constant monitoring of the depth of selective influence on the state and development trends of systems of adjacent commodity markets in order to determine the effectiveness of such influence (stabilizing action) for subjects of various market sectors, the population and the state.

As a result of managerial influence, there is feedback: (1) restorative – return of system parameters to the initial state; (2) strengthening – strengthening of the initial state; (3) balancing – achieving dynamic equilibrium of the market system; (4) preventive – anticipation of future risks and threats. In the case of deviation from the set target guidelines, destabilizing action or zero effect, the state adjusts the mechanisms and measures of selective regulation, which after a certain period of time is again subject to monitoring and evaluation.

The group of principles of sustainable development, focused on achieving economic and ecological balance of vertically adjacent commodity systems in the process of their functioning and development, combined three components (see Table 1). The principle of minimizing the loss of material resources in the process of their movement by sectors and adjacent markets of the system correlates with the second task of the SDG 12 «Responsible consumption and production», which provides for the reduction of food losses in production and sales chains.

The principle of minimizing the loss of resources applies not only to material, but also to financial resources in terms of their effective use. Institutes of sustainable development are part of the basic principles of the activity of state and public institutions in the direction of ensuring economic growth, including, in particular, focusing on one’s own resources, minimizing external borrowing and using them exclusively for the purpose of development (Sustainable Development Goals, 2017). These principles can be applied to the SR systems of adjacent commodity markets in the direction of stimulating the production of internal added value, as the main resource of sustainable development.

The principle of cyclical reproduction processes involves the formation of closed (cyclical) systems of adjacent commodity markets to ensure secondary processing of materials and waste (see Table 1). This principle is based on the key 3-R principles of the circular economy. The system of vertically adjacent commodity markets turns into a cyclical (closed) recovery system, provided that the segments of waste utilization and processing, as well as reuse of materials, function within each of its sector. The presence of these sectors complicates the structure of adjacent market systems due to the emergence of new direct and reverse relations between entities, the reverse movement of processed materials, the reuse of waste, etc. At the same time, effective systems of commodity markets should be resource-saving and ecologically oriented, contribute to the achievement of environmental safety both for society as a whole and for individual consumers. Efficiency of circular economic systems, including market, is achieved by restoring the value of used goods while simultaneously reducing the negative impact on the natural environment (Korhonen, J., Nuur, C. & Feldmann A., 2018), which corresponds to the priorities of sustainable
The principle of market inclusion is important for the least protected small and medium-sized market entities, as well as the final consumers of goods (consumer sector). It provides, on the one hand, for ensuring free access of small and medium-sized producers to the sectors of commodity markets, in particular to the sector of distribution and sale of products, and on the other hand, the physical and economic availability of essential goods for the population (see Table 1).

Market inclusion can be interpreted as an increase in the degree of participation of economic entities, in particular small and medium ones, in the market process of reproduction, the establishment of parity economic interactions between them, the objective redistribution of income between sectors of commodity markets, as well as the satisfaction of rational consumer demand, the provision of physical and economic availability of goods for the population. The author's definition of market inclusion is two-dimensional, reflecting, on the one hand, the degree of involvement of small and medium-sized commodity producers in market reproduction processes, on the other hand, the availability of goods for consumers, the level of satisfaction of internal demand, which is of primary importance in the conditions of existing territorial and sales restrictions. It should be noted that the degree of market inclusion in different sectors of commodity markets is different and depends on their type, structure, mechanisms of state regulation, etc. In practice, there is a violation of the inclusive principle of market development, which is manifested in the presence of barriers to access to its sectors, abuse of market power, redistribution of income in favor of large corporate structures, rejection of small entities from logistics infrastructure, etc. (Nikishyna, O., 2020).

Thus, the process of displacement of individual farms into the segments of production of low-profitable, but labor-intensive and socially significant types of products is characteristic of the agricultural markets of Ukraine. In 2021, households produced 97.7% of potatoes, 85.9% of vegetables, 79.2% of fruit and berries, and 68.2% of milk in the country, while the corporate sector produced 64.5% of grains and 66.5% of oilseeds, 90.6% of sugar beets, and 67.1% of meat (State Statistics Service of Ukraine, 2022). It should be noted that the lowest degree of inclusion is inherent in the sector of distribution and sale of goods. At the same time, the development of market infrastructure is the main factor of inclusive growth. According to calculations, $1 billion invested in infrastructure directly creates 15 thousand jobs and approximately 30 thousand additional jobs in related industries (Progniak, O., 2018).

Five groups of updated principles proposed by the authors are the basis of the methodological foundations of selective regulation of the development of systems of vertically adjacent commodity markets in conditions of instability, combining the theoretical and methodological basis (Fig. 2)

The main goal of selective regulation is to ensure the stability of functioning and the stability of the reproductive development of systems of vertically adjacent commodity markets in the conditions of external influences and internal changes. Among the seven tasks of the SR, the main ones are the leveling (reduction) of "gaps" in commodity and financial flows between sectors and markets of the system, the activation of the activity of processing sectors ("points" of growth) as objects of selective regulation. In the conditions of the post-war recovery of the economy, an important role belongs to the provision of national security and its components, in particular, economic and environmental security, the step-by-step implementation of strategic priorities of sustainable and inclusive development of the state and society. The theoretical basis is based on the author's concept of SR and five groups of principles substantiated during the research.

The methodical basis combined the methodical provisions for assessing the effectiveness of the functioning of systems of adjacent commodity markets and various regulatory mechanisms and measures (see Fig. 2). The methodological regulations provide for the identification of the relevant market, a comprehensive assessment of efficiency using a set of multifaceted indicators in the areas of sustainability, reproduction and sustainable development, diagnostics of the market system, calculation of cross-sectoral balances of indicators of the efficiency of commodity markets, which collectively allows to determine “gaps” in commodity and financial flows, reproductive imbalances, threats to the stability of commodity market systems. The results of calculations according to these methodical provisions form an analytical foundation for making regulatory decisions of management bodies, therefore, they must be objective and accurate.

When determining the strategic directions of the reproductive development of commodity market systems, it is important to align them with the key priorities of state policy in the market (sectoral) dimension. The stability of commodity
markets is influenced by a number of internal and external factors that must be taken into account when developing and implementing regulatory measures. The regulatory mechanism, as an ordered set of measures, tools, forms and methods of influence on reproduction processes, derives from the peculiarities of the systems of adjacent commodity markets, their type, level of development, period and efficiency. The regulatory system is quite complex, and the main subject and leader of this process is the state, which forms the institutional environment for the functioning of commodity markets in the context of national security.

**Theoretical basis**

Theories of resource reproduction, economic stability, resilience, sustainable development, circular economy, inclusive development

**The purpose of the SR:** ensuring the stability of functioning and the stability of the reproductive development of systems of vertically adjacent commodity markets in the conditions of external influences and internal changes

**The task of selective regulation:**

1. Leveling (reduction) of "gaps" in commodity and financial flows between sectors and markets of the system.
2. Activation of the activity of processing sectors ("points" of growth) in the systems of adjacent markets.
3. Ensuring the access of small and medium-sized market entities to the sector of distribution and sale of goods.
4. Formation of parity economic relations between market sectors, objectification of intersectoral redistribution of added value.
5. Ensuring the economic and ecological security of the state, as components of national security.
6. Achieving safety of consumption, economic availability of essential goods for the population.
7. Implementation of strategic priorities of sustainable and inclusive development of the state and society.

**The concept of selective regulation:** the gradual introduction of SR mechanisms and measures, purposefully aimed, on the one hand, at stimulating the production of added value in the processing sectors ("growth" points), and, on the other hand, at leveling (reducing) "gaps" of commodity and financial flows between adjacent sectors and markets, will ensure sustainable reproductive development of market systems and the national economy in conditions of instability.

**Groups of principles of selective regulation:**

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<td>3.2. Adaptability</td>
<td>4.2. Rationality ratio of regulation methods</td>
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<td>1.3. Adequacy</td>
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**Methodological basis**

Methodological provisions for assessing the efficiency of the functioning of systems of adjacent markets:

1. Identification of the relevant market: commodity, territorial and time boundaries of the market, capacity, structure and main market subjects, adjacent markets.
2. Evaluation of the efficiency of the systems of adjacent commodity markets using a set of multifaceted indicators in the directions of market stability, reproduction of resources, and sustainable development.
3. Comprehensive assessment of the relevant system of adjacent markets, cross-sectoral balances of commodity market performance indicators; predictive scenarios of functioning and development of market systems.

**Priorities of state policy in the market dimension, strategic guidelines for the sustainable reproductive development of systems of adjacent commodity markets in conditions of instability**


**Mechanisms and measures of state selective regulation:**

**Expected effects from the implementation of regulatory mechanisms and measures:**

1. Reproduction (increase in total market added value)
2. Social (creating new jobs, increasing wages)
3. Tax (increase in tax revenues and social payments from commodity market entities)
4. Inclusive (economic availability of essential goods for the population, rational satisfaction of consumer demand).

Fig. 2. Structural scheme of the methodological principles of selective regulation of the development of systems of adjacent commodity markets in conditions of instability*

*Developed by the authors*
To achieve target orientations, the state can use various mechanisms and measures of SR: administrative, financial and economic, institutional, informational, complex, preventive, adaptive, state marketing (see Fig. 2). The last three mechanisms are quite widely used in conditions of instability and external disturbances. Preventive mechanisms make it possible to predict and anticipate potential challenges and threats to the functioning of market systems, adaptive mechanisms – to quickly change the set of regulatory measures depending on changes in the parameters of market reproduction processes, state marketing tools – to support national producers and ensure the safety of consumption in conditions of sales and territorial restrictions. An important guarantee of the effectiveness of the state SR is the rationality of the ratio of direct and indirect, economic and administrative regulatory methods, as well as its operational review in case of external transformations.

To implement the principle of feedback (see Table 1), it is necessary to develop and implement methodological provisions for assessing the effectiveness of selective regulation of systems of adjacent commodity markets, as well as to calculate the expected reproductive, social, tax and inclusive effects from the introduction of regulatory mechanisms and measures (see Fig. 2). This will provide management bodies with the opportunity to form various scenarios of regulatory influence and choose the most effective SR mechanism from a set of alternatives, forecast their parameters, as well as the opportunity to monitor the rational use of budget funds based on feedback from the object of regulation.

Conclusions and perspectives of further research. The expediency of synthesizing four theories for the formation of the principles of SR systems of vertically adjacent commodity markets in the postwar period is substantiated: the theory of resilience, economic sustainability, resource reproduction and sustainable development in the market plane. It is emphasized that the theories of sustainability and resilience, adapted to market reproduction processes, are a systemic component of the theoretical framework of SR markets in conditions of instability.

The article substantiates 5 groups of principles of selective regulation of functioning and development of systems of related commodity markets in conditions of instability: general, resilient, sustainable, reproductive, and sustainable development. The general principles of SR include expediency, systematicity and consistency, adequacy, predictability, objectivity and accuracy, and transparency. The group of resilient principles is formed by preventive nature, which ensures anticipatory regulation to anticipate challenges and threats to the functioning of adjacent commodity market systems; priority of economic interests of the state as a bearer of the interests of society to ensure national security, including military and economic security, in the face of external and internal threats; and alternative nature. In the context of instability, the preventive and protective concept of economic security of the state, focused on the introduction of preventive mechanisms to counter threats, is becoming more widespread.

The group of market sustainability principles combines five components focused on the timely and successful adaptation of related commodity market systems to changing external conditions, namely: efficiency, adaptability, flexibility and maneuverability, dynamism and science. The basic principle of the sustainable group is adaptability, which implies a rapid or preventive change in the composition of regulatory measures depending on changes in the parameters of the regulated objects in force majeure circumstances. This principle results in the creation of adaptive market systems capable of changing both internal processes and influencing external factors. Unpredictable changes in the external environment prompt the development of adaptive and preventive mechanisms and measures for the SR of the functioning and development of vertically adjacent commodity market systems aimed at restoring and preserving the parameters of reproduction processes in the face of internal and external disturbances.

The reproduction group of principles combines 5 components: purposefulness, rationality of the ratio of regulatory methods, reproduction proportionality, efficiency, and feedback. The author reveals the essence of the basic principle of proportionality of the expanded reproduction of resources between sectors and adjacent markets of the system, as well as the balance of commodity and financial flows in the interactions of all markets and their sectors. It is emphasized that in practice, reproductive imbalances arise in market systems, in particular, in foreign trade, which are manifested in the export of raw materials and import of value-added processed products. Empirical studies have shown that the surplus of Ukrainian agricultural products is 93% formed by the balance of grain crops; if the surplus of the agricultural sector is excluded from the foreign trade balance, the balance deficit will reach $17.93 billion, which is almost four times higher than in 2021. It is proved that the added value produced by
the agricultural sector is reinvested either in other sectors of the economy or migrates abroad through growing commodity exports. The implementation of the principle of reproductive proportionality in market systems requires adjusting the approaches of state regulation, justifying the priorities of the SR in the context of an innovative, rather than a raw material model of economic development.

The Group of Sustainable Development Principles combines the principles of minimizing resource losses, cyclicity of reproduction processes and market inclusion. The principle of circularity of reproduction processes implies the formation of closed (cyclic) systems of related commodity markets to ensure recycling of materials and waste in their sectors, and increase the "net" market added value. The principle of market inclusion implies, on the one hand, ensuring free access of small and medium-sized producers to commodity market sectors, in particular, to the distribution and marketing sector, and, on the other hand, physical and economic accessibility of essential goods for the population, which is of paramount importance in the context of existing sales and territorial restrictions.

The methodological foundations of selective regulation of the development of systems of adjacent commodity markets under conditions of instability are substantiated in the duality of the theoretical and methodological framework, which are based on the author's concept of selective regulation, five groups of SR principles, methodological provisions for assessing the efficiency of functioning of systems of adjacent markets, a set of mechanisms and measures of the state SR. The purpose of selective regulation is to ensure the sustainability of functioning and the sustainability of the reproductive development of systems of related markets in the face of external influences and internal changes. The sustainability of commodity markets is influenced by many internal and external factors that need to be taken into account when implementing regulatory measures. The type of regulatory mechanism depends on the characteristics of market systems, their type, level of development, period and efficiency. It is emphasized that in conditions of instability, preference should be given to comprehensive, adaptive and preventive SR mechanisms and public marketing instruments.

The scientific novelty of the study is to improve the methodological foundations of selective regulation of market systems based on a system of principles formed on the basis of a synthesis of various theories (resilience, economic sustainability, resource reproduction and sustainable development), with the allocation of groups of general, resilient, sustainable, reproductive and sustainable development principles that are interrelated and have a common reproductive basis. The applied significance of the research results is determined by the possibility of their use as a scientific basis by public authorities at various levels in the development of adaptive and preventive mechanisms for selective regulation of commodity market systems. Prospects for further research in this area are the development of economic, institutional, and integrated SR mechanisms for strategic commodity markets, taking into account the methodological principles proposed in this article.

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