

State Organization «Institute of Market and Economic&Ecological Researches of the National Academy of Sciences of Ukraine»

Summary of scientific novelty for the research

3.1.8.64/Б «Formation of Efficient Logistics of Commodity Markets»,

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The following scientific results have been obtained:

Originally developed:

- a theoretical proposition on the transformative impact of effective logistics on the theory of market equilibrium in terms of reducing the time to balance supply and demand in the commodity market as a result of flexible regulation of commodity flow parameters depending on price fluctuations based on the proposed modified Evans market equilibrium model by including the logistics component;

- the methodological basis for the formation of effective logistics of commodity markets, which are based on four groups of principles for forming effective market chains (general, reproductive, integration, regulatory and sustainable development) have been substantiated; a chain approach to determining the logistics structure of the commodity market, which involves the study of internal (interchain) and external (interchain) links and interactions of its entities; classification of market chains by reproductive feature, which allowed to prove the hypothetical statements: (1) the reproductive development of commodity markets is linked with the process of forming effective logistics chains within them; (2) the relations of entities of the logistics system transform into economic links with the use of organizational and economic mechanisms and become the basis for the formation of both effective logistics chains and the entire market system;

- a regularity of the multifunctional nature of the logistics operation, which involves preserving, increasing, and transforming the consumer value of goods during their movement along the links of the logistics chain in the commodity market, accompanied by an increase in the total market added value, was identified.

- a theoretical and methodological approach to diagnostics of the functioning efficiency of logistics chains in commodity markets was substantiated, which includes: (1) a set of scientific principles; (2) a conceptual basis formed by converging reproductive and regulatory approaches, balanced advantage diagrams and sustainable development concepts, which correlate with principles for developing efficient commodity market chains; (3) methodological positions for diagnostics of the effectiveness of logistics chains in commodity markets by developing a system of balanced quantitative and qualitative indicators for

diagnosing logistics trends, regularities, and problems in the development of commodity market chains.

- a theoretical and methodological basis for logistics “gaps” in commodity market flow processes, based on the reproductive approach and GAP analysis, which includes the author's definition of the category, an expanded classification of logistics "gaps" in commodity market flow processes according to nine criteria, with a focus on the nature and practical manifestations of inter-chain combined gaps; a methodological approach to diagnosing GAPS, which involves ranking the "gaps" in flow process parameters of commodity markets by their significance for the effective functioning of the chains were developed.

- a theoretical and methodological approach to evaluating the transformational impact of formal institutions on logistics processes in commodity markets by decomposing flow processes into regulated, partially regulated, and unregulated commodity movements was substantiated, which allowed for the verification of the following hypotheses: (1) there are three areas of commodity flow between adjacent processing links (flour and bread production) interacting with each other, forming a dynamic system of inter-link interactions and connections in the Ukrainian grain and bakery products market chain; (2) institutional support for the development of processing and trading links in this market chain has a transformational impact on the functioning of all three areas of commodity flow and stimulates the growth of partially regulated and unregulated commodity flows in the bread and baked goods production link with short shelf lives.

Improved:

- the theoretical and methodological basis for the formation and interaction of economic interests of logistics chain participants in commodity markets by substantiating institutional characteristics of economic interests, developing a two-level typology (internal and external) of the main contradictions in the economic interests of market chain participants, and a methodological approach to assessing their alignment, which, unlike existing ones, includes the identification of key "blocks" of interaction and evaluation of economic interests at micro, macro, and global levels, allowing to establish interrelationships between the key activity indicators of interest holders and to enhance the effectiveness of managerial decisions;

- the theoretical basis of the mechanisms for forming efficient logistics chains in commodity markets by defining their nature, structural elements, content characteristics and connections between mechanisms of two types (management and logistics interaction) at micro and meso levels, and substantiating a theoretical approach to the formation of logistics interaction mechanisms in the context of product life cycle theory;

- the theoretical positions of logistics integrity in commodity markets based on the determining the essence and characteristics of the category "logistics integrity" through the decomposition of levels of its formation: (1) logistics systems with the identification of characteristics of their integrity (interconnectedness, interdependence, emergence, separation); (2) market chains

adapted to the basic parameters of commodity markets (commodity and geographical boundaries, market entry conditions, demand elasticity, etc.); (3) adjacent links in distribution and sales of goods based on the integration of logistics and marketing components in market commodity flows;

- the theoretical foundations for forming the institutional basis for regulating commodity market flows in stages, which includes: (1) a comprehensive approach covering technological, economic and organizational levels of inter-link relations at the description stage; (2) the use of generalized standards of commodity flow that take into account the specifics of logistics processes in commodity markets; (3) an adaptive approach to institutional support for regulating commodity flow in unstable market conditions, which involves forming universal logistics chains based on providing multiple service variants;

- institutional support for the formation of reproductive logistics in Ukraine's grain and bakery products markets by developing scientific and applied recommendations for improving the institutional environment of the bread and baked goods production link in terms of reducing unregulated commodity flow, equitable income distribution between processing and trading links, and implementing institutional-economic measures to stimulate the export of value-added processed grain products to achieve reproductive, social and tax effects in the logistics system of the market;

- scientific and applied positions for forming and regulating efficient logistics chains in the fruit and berry market based on the development of cooperative chains, including multifunctional cooperatives and a logistics center (in the form of a wholesale agricultural product market), which ensures the establishment of equitable interaction between small producers and wholesale buyers, forming a complete commodity flow chain for individual product producers.

Have been further developed:

- the conceptual and categorical apparatus of the research, including the categories "commodity market logistics", "commodity market logistics chain", "efficiency of logistics chain functioning in commodity markets" and "logistics market development", which, unlike existing definitions, reflect the reproductive approach as the methodological basis of the research and are aimed at optimizing the overall market added value;

- the theoretical substantiation of the organizational-economic mechanism for forming reproductive logistics in Ukraine's dairy market, aimed at ensuring equal conditions for the movement of dairy products between small, medium and large market participants, based on the priority state support for developing multifunctional dairy cooperatives with a completed reproductive cycle of product flow;

- theoretical positions on logistics regulation of commodity markets, based on the definition of system regulators at different levels, principles of regulating market commodity flows (level competence, targeting, synchronization, efficiency, ecological sustainability) and establishing interdependence between the effectiveness of regulatory impacts and the orientation of economic interests of

regulators, proving the necessity of implementation of mechanisms for aligning the interests of different regulators;

- the theoretical substantiation of the transformation of the "7R" logistics concept towards defining different types of logistics services, later divided into "active" and "passive" services, providing the scientific basis for implementation of the "7R" concept into the theory of logistics marketing.

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