

and resource costs associated with preparing and auditing financial statements. Second, digital formats ensure rapid access to information, supporting continuous monitoring of economic, environmental, and social performance indicators. Third, digital solutions reduce operational risks and strengthen internal controls, thereby enhancing the resilience and sustainability of business processes.

The adoption of digital tools is particularly important for fulfilling IFRS requirements. Standards such as IAS 1 “Presentation of Financial Statements,” IAS 10 “Events After the Reporting Period,” IFRS 7 “Financial Instruments: Disclosures,” and IFRS 13 “Fair Value Measurement” require structured and detailed disclosure of financial data. Digital systems facilitate compliance with these standards by ensuring the integrity and consistency of financial information, improving accuracy in classification, measurement, and presentation [1].

Furthermore, enterprise-wide automated accounting systems (ERP), cloud technologies, business intelligence (BI) analytics, and machine learning create additional opportunities for optimizing financial management. These technologies expand the analytical capabilities of enterprises, support risk management processes, and enhance decision-making, thereby contributing to sustainable development strategies. Digital transformation also aligns with corporate governance best practices by strengthening transparency, stakeholder communication, and accountability.

Digitalization has become an integral element in modernizing financial reporting and improving the resilience and sustainability of enterprises. The adoption of Inline XBRL and other digital technologies ensures compliance with IFRS requirements, increases the transparency of financial statements, and facilitates harmonized reporting practices across international markets. Digital tools enhance the efficiency of resource management, support sustainable development strategies, and strengthen investor confidence. The future of financial reporting in Ukraine depends on the active implementation of advanced European digital practices and the continued integration of international standards into national reporting systems. These transformations will support the country’s movement toward global economic integration and improve the stability and competitiveness of domestic enterprises.

References:

1. IFRS Foundation. International Financial Reporting Standards (IAS 1, IAS 10, IFRS 7, IFRS 13).
2. XBRL International. Inline XBRL Specification and Implementation Guidance.
3. European Securities and Markets Authority (ESMA). ESEF Reporting Manual.

Olha Shulha

Borys Grinchenko Kyiv Metropolitan University, Kyiv, Ukraine

ADAPTIVE MANAGEMENT MODELS OF ECONOMIC SECURITY OF THE AGRICULTURAL SECTOR IN THE CONTEXT OF ENSURING SUSTAINABLE DEVELOPMENT

Ensuring the economic security of the agricultural sector of Ukraine in modern conditions of military aggression requires a transition from classical, stable management models to adaptive situational models. These models must be able to respond promptly to nonlinear and highly probable risks caused by hostilities, destruction of infrastructure and logistical shocks [1]. In conditions of military conflicts, the main challenges are disruption of value chains, shortage of resources (fuel, seeds, fertilizers), loss of production assets and land pollution. An adaptive management model should provide for the prompt redistribution of resources, mobilization of reserve capacities and flexible change of sown areas in accordance with the security situation. In the period of post-war recovery, key management efforts should be aimed at creating investment security mechanisms, in particular, through the introduction of state guarantees and the

development of special programs to attract international financing for demining, infrastructure restoration and modernization of production facilities [2]. The effectiveness of such models is determined not only by economic indicators, but also by the speed of restoration of the production cycle and the stability of food supply. It is worth noting that the economic security of the agricultural sector in the modern scientific paradigm cannot be considered as an exclusively financial or production category. It is inseparable from environmental security, which acts as its fundamental resource basis. In the context of sustainable development, environmental security is a state of protection of the vital interests of society and production from threats associated with the degradation of natural resources (soil, water, air, biodiversity). Violations of ecological security, in particular, depletion of soil cover or shortage of water resources, are directly transformed into economic threats (reduced yield, increased cost of production and loss of competitiveness). Thus, ecological security is a critical long-term factor of economic sustainability, and its provision is not a regulatory burden, but a strategic investment in the fixed capital of the agricultural sector. The integration of ecological security and economic security of the agricultural sector forms a single system of resource and economic security necessary for sustainable development.

It should be noted that the modern agricultural sector operates in conditions of significant global and local challenges that directly threaten its resource and economic security. Climate change is a source of highly probable and high-amplitude risks, including aridization, frequent droughts and unpredictable weather events. These processes lead to significant economic losses due to a decrease in average yields and increased volatility of production [3]. The second critical challenge is soil degradation, which includes erosion, humus loss and secondary salinization. These processes reduce the amount of fertile land, which directly leads to a decrease in production potential and an increase in the need for chemical fertilizers, increasing the cost. Critical analysis shows that existing risk management models do not sufficiently take into account the synergistic effect of the combination of climatic and anthropogenic threats, which requires the development of integrated risk assessment systems. To ensure sustainable development, a transition to modeling of environmental and economic efficiency is necessary, which allows quantitatively measuring the economic benefits of implementing environmental protection measures. Traditional accounting methods record only the costs of environmental measures, but ignore long-term economic benefits. The use of the concept of costing environmental externalities is promising. For example, an increase in the humus content in the soil by 1% can be converted into a projected increase in yield and a decrease in the cost of nitrogen fertilizers. To model these relationships, it is advisable to use multivariate econometric models, where the independent variables are environmental indicators (humus level, erosion index), and the dependent variables are economic indicators (net profit, profitability). Such modeling substantiates that investments in soil conservation technologies are economically rational and strengthen resource security.

The digital transformation of the agricultural sector is a key tool for increasing both economic and environmental security. Precision farming technologies, based on the use of GIS technologies, sensors and Big Data, allow optimizing the application of seeds, fertilizers and plant protection products in accordance with the real needs of specific areas of the field, contributing to increased technological security through better monitoring of crop conditions and risk forecasting. However, a critical point is the need to develop standards for the protection of agricultural data and ensure equal access of small farms to these expensive technologies. The digital transformation of the agricultural sector is also fundamentally changing the mechanisms for managing the economic security of the agricultural sector. Despite the obvious economic benefits, which are manifested in increasing the efficiency of resource use and reducing production costs, digitalization generates new types of threats that require separate scientific understanding. In this regard, the key direction of the research is to determine technological security indicators that would assess the level of dependence of the sector on imported software and equipment, as well as the degree of protection of production and financial data from cyber risks. It is necessary to develop models that would assess the optimal ratio between economic efficiency achieved through digitalization and potential losses from technological failures or external cyber interference. At the same time, achieving the goals of

resource and environmental security requires a reorientation of financial policy. It is necessary to create mechanisms to stimulate «green» lending, where banks and financial institutions provide priority and preferential financing to those agricultural enterprises that implement environmentally friendly and soil-saving technologies. State support should be shifted from subsidizing production volumes to supporting organic production and measures to restore soil fertility. A transparent system of certification and verification of environmental indicators needs to be developed, which will allow financial institutions to objectively assess environmental risks and provide preferences. This will provide the necessary financial basis for the long-term sustainability of the agricultural sector.

References:

1. Sysolina N., Savelenko H., Sysolina I. Ekonomichna bezpeka ahropidpryyemstv v umovakh viyny: mozhlyvosti ta zahrozy [Economic security of agricultural enterprises in wartime: opportunities and threats]. *Ekonomika ta suspilstvo*. 2024. №65. DOI: <https://doi.org/10.32782/2524-0072/2024-65-19>
2. Tkachuk V. I., Yareмова M. I. Ekonomichna bezpeka silskohospodarskykh pidpryyemstv [Economic security of agricultural enterprises]. *Efektivna ekonomika*. 2019. №6. Retrieved from: http://www.economy.nayka.com.ua/pdf/6_2019/14.pdf
3. Utenkova K. Mekhanizm ekonomichnoyi bezpeky ahrarnoho sektora [Mechanism of economic security of the agricultural sector]. Retrieved from: file:///D:/Users/User/Desktop/%D0%BC%D0%BE%D0%BD%D0%BE%D0%B3%D1%80%D0%B0%D1%84/NFEPSEV_2021_Utenkova_K-Economic_security_mechanism_104-114.pdf
4. Shamanska O. I. Systema otsinky efektyvnosti upravlinnya resursnym potentsialom pidpryyemstv APK [System for assessing the effectiveness of managing the resource potential of agricultural enterprises]. *Efektivna ekonomika*. 2016. №2. Retrieved from: <http://www.economy.nayka.com.ua/?op=1&z=4776>

Vladyslava Shevchuk, Mark Andrushchenko
National Transport University, Kyiv, Ukraine

PROSPECTS FOR TRADE AND ECONOMIC COOPERATION BETWEEN UKRAINE AND MEXICO IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT GOALS

Amid global economic turbulence, disruptions in supply chains, and the growing role of regional alliances, the need arises to adapt Ukraine's foreign economic activity. The prospects for cooperation between Ukraine and Mexico, although not particularly significant at first glance, gain importance as an element of foreign trade diversification, reducing dependence on traditional markets while strengthening Ukraine's position in the global arena. Economic relations between Ukraine and Mexico in recent years have demonstrated moderate but steady growth, confirming the intention of both countries to expand their foreign economic directions. For the analysis of the dynamics of bilateral trade relations, the years 2018, 2021, and 2024 were selected.

According to UN Comtrade, Trading Economics, and OEC, the total volume of Ukraine's exports to Mexico amounted to approximately USD 174 million in 2018, USD 196 million in 2021, and about USD 49 million in 2024. The structure of exports confirms that it is predominantly of a resource-technological nature. In 2018, the main export items were ferrous metals (USD 50.1 million, 29% of total exports), agricultural products (USD 60.4 million, 35%), chemical fertilizers (USD 27.2 million, 16%), and machinery products (USD 19.2 million, 11%) [1]. In 2021, although exports increased, the structure remained similar: metallurgy accounted for USD 83.5 million (43%), agricultural products for USD 33.1 million (17%), machinery and equipment for USD 14.6 million (7%), and chemical products for USD 35 million (18%) [1]. In 2024, according to estimates by Trading Economics and OEC, export volumes sharply declined to USD 49 million, with 69.6%