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DEVELOPING A REGIONAL STOCK MARKET MECHANISM FOR FINANCING THE AGRO-INDUSTRIAL COMPLEX OF CHERKASY REGION

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Abstract

The paper develops an applied framework for using regional stock market instruments to finance the stabilization and development of the agro-industrial complex of Cherkasy region. The relevance of the research is determined by the investment-resource deficit faced by agricultural and processing enterprises, the need to modernize production technologies, and the limited ability of bank lending alone to support long-term restructuring projects. The study systematizes the organizational, institutional and financial elements required for a regional securities-based financing mechanism and adapts them to an integrated agro-industrial association model. The methodological basis includes system analysis, comparative institutional analysis, structural-logical modelling and financial analysis of project indicators. The empirical foundation is formed by the programme model for the development of the agro-industrial complex of Cherkasy region for 2021-2027 and the calculated indicators of an agro-industrial association operating across crop production, grain and oilseed processing, mixed feed production, livestock and meat processing. The results substantiate the need to combine a regional stock exchange segment, a depositary and clearing system, disclosure rules, investor-protection mechanisms and corporate governance standards. Financial analysis indicates that the integrated project can generate USD 85.94 million in gross sales, USD 14.03 million in net profit and an overall profitability level of 22.63% over the calculation period. The proposed approach supports the transition from fragmented enterprise financing to a systemic model of mobilizing private and institutional capital for regional agro-industrial development.

Keywords: regional stock market, securities, agro-industrial complex, investment financing, corporate bonds, Cherkasy region.

JEL Classification: G10; G18; O16; Q14; R58.

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РОЗВИТОК МЕХАНІЗМУ РЕГІОНАЛЬНОГО ФОНДОВОГО РИНКУ ДЛЯ ФІНАНСУВАННЯ АГРОПРОМИСЛОВОГО КОМПЛЕКСУ ЧЕРКАСЬКОЇ ОБЛАСТІ

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Анотація

У статті розроблено прикладний підхід до використання інструментів регіонального фондового ринку для фінансування стабілізації та розвитку агропромислового комплексу Черкаської області. Актуальність дослідження зумовлена дефіцитом інвестиційних ресурсів у сільськогосподарських і переробних підприємств, необхідністю модернізації виробничих технологій та обмеженою спроможністю банківського кредитування самостійно забезпечити довгострокові проєкти структурної перебудови. У дослідженні систематизовано організаційні, інституційні та фінансові елементи, необхідні для механізму залучення капіталу через цінні папери, і адаптовано їх до моделі інтегрованого агропромислового об'єднання. Методичну основу становлять системний аналіз, порівняльний інституційний аналіз, структурно-логічне моделювання та фінансовий аналіз показників проєкту. Емпіричною базою є модель програми розвитку АПК Черкаської області на 2021-2027 роки та розрахункові показники агропромислового об'єднання, що охоплює рослинництво, переробку зернових і олійних культур, виробництво комбікормів, тваринництво та переробку м'яса. Результати обґрунтовують необхідність поєднання регіонального біржового сегмента, депозитарно-клірингової системи, правил розкриття інформації, механізмів захисту інвесторів і стандартів корпоративного управління. Фінансовий аналіз засвідчує потенціал формування 85,94 млн дол. США валового обсягу продажу, 14,03 млн дол. США чистого прибутку та загальної рентабельності 22,63% за розрахунковий період. Запропонований підхід забезпечує перехід від фрагментарного фінансування підприємств до системної моделі мобілізації приватного й інституційного капіталу для регіонального агропромислового розвитку.

Ключові слова: регіональний фондовий ринок; цінні папери; агропромисловий комплекс; інвестиційне фінансування; корпоративні облігації; Черкаська область..

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Introduction

The development of regional economies in Ukraine requires financing mechanisms capable of connecting long-term investment needs with the savings and risk-bearing capacity of private and institutional investors. This problem is especially acute for agro-industrial regions, where production cycles are capital intensive, technological renewal is costly, and the economic effect of investment depends on the coordination of agriculture, processing, logistics and sales. For Cherkasy region, whose economic profile is strongly connected with agricultural production and food security, the stabilization and modernization of the agro-industrial complex require not only sectoral planning but also a reliable financial architecture through which investment resources can be mobilized and channeled into productive projects.

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The starting point of the research is the programme model for the stabilization and development of the agro-industrial complex of Cherkasy region for 2021-2027. The model defines the region as a center of agricultural production, processing capacity and food-security potential, but it also identifies the need for structural transformation. The proposed changes include rational placement of production, restructuring of processing industries, introduction of new technologies, development of market infrastructure, improvement of management mechanisms and attraction of investment resources. In this context, financing is not an auxiliary element of the regional programme; it is a necessary condition for transforming the programme from a strategic document into a set of implementable projects.

Traditional sources of finance available to enterprises in transition economies are often insufficient for this purpose. Bank loans can provide working capital and short-term liquidity, but they are less suitable for large integrated projects when interest rates are high, collateral is limited and repayment schedules do not match the long investment horizon of agricultural restructuring. Foreign direct investment may support individual projects, but it is uncertain and depends on macroeconomic, legal and political conditions. Therefore, the development of a regional stock market mechanism is considered in this paper as a complementary channel for capital mobilization through the issue and circulation of securities, including shares, corporate bonds and collective investment instruments.

The conceptual premise of the study is that a securities market can contribute to regional development only when it is treated as a system rather than as a set of isolated transactions. A market capable of attracting investment into agro-industrial enterprises must contain issuers with transparent business models, investors with access to reliable information, intermediaries licensed to perform brokerage and advisory functions, a depositary and clearing infrastructure, and regulatory safeguards protecting property rights and the integrity of transactions. Without these elements, the issue of securities may remain formal and illiquid; with them, it can become a mechanism for linking regional production projects with broader capital flows.

The research problem is therefore located at the intersection of regional development policy, capital market institution-building and agro-industrial project finance. The thesis on which this paper is based examined the structure of the securities market, compared selected institutional features of the United States and Ukraine, proposed directions for developing a regional stock market environment, and assessed a model of agro-industrial association in Cherkasy region. This paper transforms those results into a journal-style research article and develops an integrated framework for securities-based financing of agro-industrial restructuring.

The contribution of the paper is threefold. First, it adapts general theories of financial market development to the practical needs of a regional agro-industrial programme. Second, it proposes a structured mechanism that connects legal reform, market infrastructure, issuer transparency, investor protection and project finance. Third, it interprets the financial calculations of an agro-industrial association as evidence that securities-based financing can be economically justified when capital is directed into integrated production chains rather than fragmented enterprise-level activities.

Literature review

The literature on financial development provides the theoretical foundation for analyzing the role of stock markets in regional investment mobilization. Early and contemporary studies emphasize that financial markets perform several functions that are directly relevant to regional development: they mobilize savings, allocate capital, facilitate risk diversification, monitor managers and provide liquidity for investors. Pagano (1993) and Greenwood and Smith (1997) demonstrate that financial markets can support growth by improving the allocation of resources and reducing transaction costs, while Beck and Levine (2004) provide panel evidence that both banks and stock markets contribute to economic growth. These findings are important for agro-industrial regions because they suggest that the absence of deep financial markets may constrain productive restructuring even when physical resources and entrepreneurial potential are available.

A second stream of literature focuses on the interaction between stock markets, corporate finance and firm

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growth. Demirguc-Kunt and Levine (1996) show that stock market development becomes increasingly important as economies mature and as firms require more diversified sources of long-term capital. Rajan and Zingales (1998) argue that industries dependent on external finance grow faster in countries with better-developed financial systems. This logic is relevant to agro-industrial restructuring because integrated processing, storage, logistics and livestock projects are externally finance-dependent: they require large initial investments before the economic benefit becomes visible in cash flows.

The corporate finance literature also explains why the design of securities matters. Myers and Majluf (1984) show that information asymmetry influences firms' financing choices and may create a preference order among internal funds, debt and equity. In a regional stock market context, this means that issuers cannot attract investors only by formally issuing securities; they must reduce information asymmetry through disclosure, credible financial reporting, project documentation and corporate governance. For agricultural and processing enterprises, the challenge is even greater because investors must understand production risks, seasonality, commodity-price exposure and the connection between raw-material supply and final-product markets.

Institutional theories of capital markets emphasise the role of law, investor protection and governance. La Porta et al. (1998) demonstrate that legal systems and protection of investors influence the development of financial markets. In practical terms, weak protection of minority shareholders, unclear rules for debt conversion, inadequate disclosure or unreliable registries reduce investor willingness to buy securities. This is consistent with the thesis argument that regional stock market development requires not only the creation of a trading platform, but also improvements in laws on joint-stock companies, securities taxation, debt restructuring, disclosure standards and the operation of professional market participants.

The specific issue of regional stock markets has attracted attention because local or regional exchanges can reduce the distance between capital supply and regional enterprise demand. Huggins (2013) discusses the potential contribution of regional stock market forms to economic development, while Zonon (2021) examines regional stock exchange development in the WAEMU countries and shows that a regional exchange can be linked to economic growth when institutional conditions and market access are improved. Although the geographical and institutional context differs from Ukraine, the idea is relevant: a regional market must not be understood simply as a smaller national market. It should be designed around the financing needs, issuer base and investor profile of the region.

For Ukraine, research on securities-market development highlights the difficulties of building a liquid and trusted capital market in a small open economy. Shkolnyk et al. (2021) show that Ukrainian stock exchange dynamics are strongly connected with external stock market trends and that domestic exchanges have limited independent depth. These findings support the need to strengthen domestic market infrastructure, issuer quality and investor participation. In the context of Cherkasy region, this means that a regional market mechanism should not duplicate national weaknesses. It should instead focus on transparent project-based securities, identifiable productive assets and clear links between invested funds and regional economic outcomes.

The policy literature on Ukraine's financial system increasingly emphasises capital market infrastructure, governance and institutional capacity. Recent OECD recommendations for Ukraine's recovery call for strengthening financial market institutions, improving the functioning of capital markets, developing growth equity opportunities and aligning regulatory frameworks with international standards. This policy direction is consistent with the thesis proposal to create a regional securities infrastructure connected with depositary, clearing, disclosure and regulatory mechanisms. The regional approach can be interpreted as a practical layer of national capital-market reform, focused on specific productive sectors and regional investment projects.

Agricultural finance literature also supports the search for long-term financing tools beyond conventional credit. Agriculture often relies heavily on bank loans, supplier credit and state support, but modernization of production chains requires patient capital and risk-sharing instruments. Studies on stock market development and agricultural growth show that the relationship is not automatic; capital markets support agriculture only when securities financing is connected with productive investment, technological renewal

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and value-added growth. This is particularly important for the proposed Cherkasy model, where financing is directed not only into crop production but also into flour milling, pasta production, oilseed processing, feed production, livestock and meat processing.

The literature on value chains and agro-industrial integration provides an additional analytical lens. Integrated agro-industrial associations can reduce transaction costs, stabilise raw-material supply, increase utilisation of processing capacity and capture more value added within the region. However, they also require stronger governance because the association combines different activities with different payback periods and risk profiles. Securities-based financing can be appropriate for such associations if the structure of issued instruments matches the structure of project risks: equity can absorb long-term uncertainty, bonds can finance predictable cash-flow components, and collective investment vehicles can diversify exposure across several productive activities.

The reviewed literature therefore confirms the central assumption of this paper: the effectiveness of a regional stock market mechanism depends on the interaction of financial, institutional and productive components. A regional exchange or securities issue alone cannot ensure development. Conversely, an agro-industrial programme without a financing mechanism may remain underfunded. The research gap addressed in this paper is the lack of an integrated model that connects a regional securities market with the financial and operational logic of a concrete agro-industrial development programme.

The thesis materials fill this gap by combining institutional analysis of the stock market with a financial model of an agro-industrial association. The present paper reformulates these materials into an integrated research framework and updates the theoretical discussion with contemporary capital-market and agricultural finance literature. The result is a model that can be used for policy discussion, regional investment planning and further empirical validation.

Aims and Objectives

The aim of the paper is to substantiate a regional stock market mechanism for financing the development of the agro-industrial complex of Cherkasy region and to evaluate its role in supporting an integrated agro-industrial association model. The objectives are: to systematize the investment problem of the regional agro-industrial complex; to identify the institutional components of a regional securities market; to compare the functions of key market participants and infrastructure elements; to develop a structural model linking securities financing with agro-industrial projects; and to interpret the financial indicators of the proposed agro-industrial association from the perspective of investment attractiveness and regional development.

Methods

The research uses a mixed conceptual and applied methodology. The conceptual part is based on theoretical generalization of financial market development literature, corporate finance theory and studies of regional stock markets. This stage makes it possible to define the functions that a stock market should perform in regional development: mobilization of savings, transformation of savings into investment, provision of liquidity, risk allocation, information disclosure and corporate governance monitoring.

The institutional part of the study applies comparative analysis. The thesis materials compare selected elements of the securities markets in Ukraine and the United States, including definitions of investors and issuers, the role of brokers and dealers, registrars, clearing agencies, depositaries, custodians, investment advisers, state regulation and self-regulatory organizations. The purpose of the comparison is not to mechanically transfer the US model to Ukraine, but to identify the institutional gaps that must be closed for regional securities financing to become credible.

The structural-logical modelling method is used to design the integrated financing mechanism. The model links the external regional context, the investment needs of the agro-industrial complex, the proposed stock market instruments, the regional market infrastructure, governance safeguards and expected development outcomes. This method is appropriate because the research object is a system of interdependent elements rather than a single financial indicator.

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The applied part of the research is based on financial analysis of the agro-industrial association model presented in the thesis. The model covers a 60-month calculation period and several interrelated activities: growing grains and oilseeds, flour production, pasta production, oilseed processing, mixed feed production, pig production and meat processing. The analysis focuses on sales, direct costs, gross profit, operating costs, depreciation, interest, profit before tax, income tax, net profit, accumulated cash balances and profitability indicators.

The financial indicators are interpreted cautiously. They do not represent audited business results; rather, they are project calculations intended to evaluate the feasibility of a proposed mechanism. Therefore, the paper does not treat them as a forecast of guaranteed outcomes. Instead, they are used to demonstrate how an integrated agro-industrial project can be evaluated before securities are issued and how disclosure of such indicators can support investor decision-making.

Results

The results of the study are presented in two interconnected dimensions. The first dimension concerns the institutional design of a regional stock market mechanism capable of attracting investment into agro-industrial projects. The second dimension concerns the economic logic of the agro-industrial association that would use this mechanism to finance production and processing activities. The combination of these dimensions reflects the central argument of the paper: capital-market instruments become development tools only when they are embedded in a transparent institutional environment and directed into economically coherent projects.

The analysis of the regional development model shows that Cherkasy region has a strong agro-industrial profile but faces a deficit of investment resources needed for restructuring and technological renewal. The programme model includes rational placement of production, restructuring of processing industries, restoration and modernisation of facilities, development of new technologies, improvement of land use, and creation of an entrepreneurial environment. These tasks require long-term capital, while many agricultural enterprises have limited internal funds. The securities market is therefore proposed as a mechanism for attracting external resources without relying exclusively on bank loans.

A key result of the institutional analysis is the identification of a regional market architecture. The mechanism should include issuers, investors, intermediaries, a regional exchange or organised trading segment, a depositary and clearing system, registrars or account-keeping institutions, investment advisers, auditors, insurers and public authorities. Each element performs a distinct function. Issuers create investment instruments; investors provide capital; intermediaries organise placement and trading; the depositary system secures ownership rights; disclosure rules reduce information asymmetry; and regulators protect market integrity.

The comparative institutional analysis indicates that Ukraine's securities market requires stronger mechanisms of issuer transparency, investor protection and professional intermediation. The thesis emphasises the need for improvements in laws on taxation of securities transactions, joint-stock companies, conversion of debt into equity, circulation of securities and regulation of professional participants. These recommendations remain relevant because a regional market cannot attract investors if they expect excessive taxation, weak protection of rights, unreliable registries or limited possibilities for liquidity.

The proposed regional stock market mechanism should therefore be built not only as a trading venue but as an investment-support system. It should include a regional investment and consulting centre responsible for preparing project documentation, business plans and feasibility studies; an information system containing data on enterprises and regional projects; an authorised financial institution or bank for settlement services; and a transparent procedure for securities placement. Such a structure creates a bridge between strategic regional planning and the requirements of investors.

The second result concerns the proposed agro-industrial association. The association is designed as an integrated production-processing system that connects crop production with deep processing and final

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product sales. Its logic is based on the principle that selling raw agricultural products generates less value added than processing them into flour, pasta, oil, feed and meat products. Integration also allows internal movement of resources: grain can be processed into flour or feed, oilseeds can be processed into oil and meal, and feed can support livestock production.

The project model includes two main production directions. The first direction is the production and processing of grains and oilseeds. It includes the cultivation of grain crops and oilseeds, flour milling, pasta production and oilseed processing. The second direction is livestock and meat processing, including mixed feed production, pig production and final meat products. This structure allows the association to diversify revenue sources and reduce dependence on a single commodity market.

The calculated production targets demonstrate the scale of the model: 60,000 tonnes of grain crops, 33,000 tonnes of oilseeds, 200 tonnes per day of grain processing, 110 tonnes per day of oilseed processing, 13,874 tonnes of mixed feed, 1.5 tonnes per hour of pasta production, 36,000 heads of livestock per year and 3,300 tonnes per year of meat processing. These values indicate that the association is not a small isolated enterprise but a regional production system requiring coordinated investment and professional governance.

The financial calculations show that the integrated model can generate significant value when compared with fragmented activities. Crop production on 3,000 hectares provides an NPV of USD 701,068. Grain processing adds USD 811,331, pasta production adds USD 539,454, oilseed processing adds USD 2,188,682, mixed feed production adds USD 235,724, and meat production adds USD 2,761,010. The accumulated NPV of the integrated processing and livestock chain reaches USD 6,536,201. These figures support the argument that the most important effect is not only in primary agricultural production but in the integration of production and processing.

The aggregate project calculations further support this conclusion. Over the calculation period, gross sales amount to USD 85,944,146. Net sales after sales losses and taxes amount to USD 85,768,298. Total direct costs amount to USD 55,414,752, producing gross profit of USD 30,353,414. After operating, administrative, depreciation, interest and other costs, profit before tax reaches USD 20,039,093. Income tax is calculated at USD 6,011,692, and net profit reaches USD 14,027,337. The overall profitability level is 22.63%.

Cash-flow and balance indicators provide additional evidence of financial viability. The cash-flow model shows that by the end of the calculation period the cash balance reaches approximately USD 9.36 million, while the balance model shows total assets of USD 15.28 million and total equity of USD 14.94 million. These results suggest that the project can accumulate internal financial capacity after the investment phase, which is important for debt servicing, reinvestment and dividend policy.

To systematise these findings, Table 1 presents indicators that connect the regional development context, institutional securities-market requirements, agro-industrial project design and financial results. The table is not intended as a statistical database; it is an analytical synthesis of the indicators and mechanisms extracted from the thesis model and reformulated for the purposes of this paper.

***Table 1* – System of indicators for the regional stock market mechanism and agro-industrial association model**

No.	Indicator / component	Value or specification	Period / level	Analytical interpretation	Source
1. Regional development context					
1	Programme horizon	2021-2027	Regional strategy	Defines the time frame for stabilisation and development of the agro-industrial complex.	Thesis model
2	Regional land and population context	20.9 thousand sq. km; 1.491 million people	Baseline description	Shows the scale of the region and its capacity to support agro-industrial development.	Thesis model
3	Production decline problem	Agricultural gross output decreased by	Pre-programme period	Justifies the need for structural changes and new financing channels.	Thesis model

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No.	Indicator / component	Value or specification	Period / level	Analytical interpretation	Source
		55% over the analysed decade			
4	Strategic production goal: grain	2.9 million tonnes	Programme target	Represents the expected recovery potential of crop production.	Thesis model
5	Strategic production goal: sugar beet	4.6 million tonnes	Programme target	Indicates the role of crop specialisation and processing industries.	Thesis model
6	Strategic production goal: milk	496 thousand tonnes	Programme target	Shows the relevance of livestock and dairy-chain development.	Thesis model
2. Financing and market mechanism					
7	Core financing problem	Deficit of internal investment resources	Enterprise level	Creates demand for external capital and securities-based financing.	Author's synthesis
8	Proposed capital mobilisation channel	Issue and circulation of securities	Regional market	Offers an alternative and complement to bank loans and direct investment.	Author's synthesis
9	Priority instruments	Shares, corporate bonds, collective investment instruments	Issuer level	Allows financing to be matched with different risks and maturities.	Author's synthesis
10	Required institutional element	Regional investment and consulting centre	Infrastructure level	Supports project preparation, business plans, feasibility studies and investor communication.	Thesis model
11	Required trading element	Regional exchange or organised stock-market segment	Infrastructure level	Creates visibility, placement capacity and potential secondary liquidity.	Thesis model
12	Required ownership element	Depositary and clearing system	Infrastructure level	Secures ownership rights and reduces settlement risks.	Thesis model
13	Governance requirement	Issuer disclosure, audited reporting, shareholder protection	Regulatory level	Reduces information asymmetry and increases investor confidence.	Author's synthesis
3. Agro-industrial association design					
14	Integrated production logic	Production - processing - sale - reproduction of raw material	Project level	Creates a closed value chain and retains value added in the region.	Thesis model
15	Grain production target	60,000 tonnes	Project target	Provides the raw-material base for processing activities.	Thesis calculations
16	Oilseed production target	33,000 tonnes	Project target	Supports oilseed processing and feed-related outputs.	Thesis calculations
17	Grain processing capacity	200 tonnes per day	Project target	Creates value added through flour and related production.	Thesis calculations
18	Oilseed processing capacity	110 tonnes per day	Project target	Generates one of the strongest NPV contributions in the model.	Thesis calculations
19	Mixed feed production	13,874 tonnes	Project target	Links crop processing with livestock production.	Thesis calculations
20	Livestock production	36,000 heads per year	Project target	Provides raw material for meat processing and supports chain integration.	Thesis calculations
21	Meat processing capacity	3,300 tonnes per year	Project target	Transforms livestock output into final products with higher value added.	Thesis calculations
4. Financial results					
22	Calculation period	60 months	Financial model	Defines the period over which project feasibility is evaluated.	Thesis calculations
23	Discount rate	16%	Financial model	Used to evaluate discounted project indicators.	Thesis calculations
24	Accumulated NPV of integrated activities	USD 6,536,201	Project level	Shows the economic advantage of combining production and processing.	Thesis calculations
25	Gross sales	USD 85,944,146	Calculation period	Indicates the revenue scale of the integrated agro-industrial association.	Thesis calculations
26	Total direct costs	USD 55,414,752	Calculation period	Shows the production-cost base of the project.	Thesis calculations
27	Gross profit	USD 30,353,414	Calculation period	Reflects value created before fixed, financial and tax costs.	Thesis calculations
28	Profit before tax	USD 20,039,093	Calculation period	Measures financial result after operating and financial costs.	Thesis calculations
29	Net profit	USD 14,027,337	Calculation period	Indicates final projected profitability for owners/investors.	Thesis calculations
30	Overall profitability	22.63%	Calculation period	Supports the investment attractiveness of the integrated model under the given assumptions.	Thesis calculations

Source: compiled by the author based on the thesis model and financial calculations

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The system of indicators confirms that the regional stock market mechanism must solve two problems simultaneously. First, it must make agro-industrial projects investable by converting strategic development priorities into securities with clear rights, obligations, risks and expected returns. Second, it must make the market trustworthy by ensuring transparent information, reliable registration of ownership, organised trading and protection of investors. If either problem remains unresolved, the mechanism will be incomplete: investors may avoid the securities, or enterprises may fail to receive stable long-term capital.

The proposed model can be described as a sequence of transformation stages. At the first stage, regional authorities and project initiators identify priority agro-industrial projects and prepare feasibility documentation. At the second stage, the agro-industrial association or its project companies are structured as issuers capable of raising capital through shares, bonds or hybrid instruments. At the third stage, securities are registered, disclosed and placed through professional intermediaries. At the fourth stage, funds are directed into production assets, processing facilities and working capital. At the fifth stage, project performance is monitored and disclosed to investors.

This sequence demonstrates why a regional investment and consulting centre is important. Many agricultural enterprises do not have sufficient expertise to prepare investment-grade documentation, prospectuses, financial models or corporate governance structures. A specialised centre can standardise project preparation, support valuation, coordinate audits, organise communication with investors and improve the quality of disclosure. Such a centre would reduce transaction costs and make securities issuance more accessible to medium-sized regional enterprises.

The regional exchange or organised trading segment would perform a complementary function. Its purpose would not be speculative trading in a narrow sense, but the creation of liquidity and visibility for regional securities. Even limited secondary market liquidity can make securities more attractive because investors know that they are not locked indefinitely into a project. At the same time, the exchange should be connected with national infrastructure and regulatory standards to avoid fragmentation and to maintain investor confidence.

A depositary and clearing system is another critical element. Investors will not buy securities if ownership records are unreliable or if settlement risk is high. Therefore, the regional mechanism should rely on a secure account-based ownership system, clear rules for transfer of rights, settlement discipline and protection against unauthorised changes in ownership records. These requirements are particularly important for collective investment and for attracting institutional investors.

The model also requires a differentiated approach to financial instruments. Equity may be suitable for long-term participation in the agro-industrial association because it allows investors to share both risks and upside. Corporate bonds may be appropriate for financing equipment, processing lines or working-capital needs where cash flows are predictable. Convertible instruments may support debt restructuring or staged investor entry. Municipal or regional development bonds may be considered for infrastructure components, although they require careful regulation and debt-sustainability assessment.

Investor protection is central to the mechanism. The thesis proposes stronger disclosure, improved regulation of joint-stock companies, better protection of shareholder rights and clearer rules for securities taxation and debt conversion. These proposals can be interpreted as conditions for reducing the risk premium demanded by investors. When investors trust governance and disclosure, they may accept lower required returns; when they expect opacity and weak enforcement, the cost of capital increases or capital is not provided at all.

The integrated agro-industrial association creates a productive basis for securities issuance. Its advantage lies in the closed-cycle model “production - processing - sale - reproduction of raw material”. This model reduces dependence on intermediaries, allows the region to retain a larger share of value added and improves the stability of raw-material supply for processing enterprises. From an investor perspective, the model is attractive because cash flows are diversified across several connected activities.

However, integration also increases managerial complexity. The association must coordinate land use, crop production, equipment utilisation, processing capacity, storage, logistics, sales, accounting and

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reinvestment. Therefore, securities financing must be accompanied by professional management, internal control and transparent reporting. The model should not be reduced to the creation of a large enterprise; it should be understood as a governed network of productive assets and financial obligations.

The financial results indicate that the project's value is created mainly through deep processing. Primary crop production provides the foundation, but the largest NPV contribution is generated by oilseed processing and meat products. This pattern supports the regional development argument that capital should not be directed only into expanding raw output. It should support technological chains that transform regional agricultural resources into higher-value products.

The proposed model therefore integrates financial and real-sector development. Securities provide a mechanism for mobilising capital; the regional market infrastructure provides trust and liquidity; the agro-industrial association provides productive use of funds; and the financial model provides evidence for investment decision-making. Figure 1 illustrates this integrated mechanism.

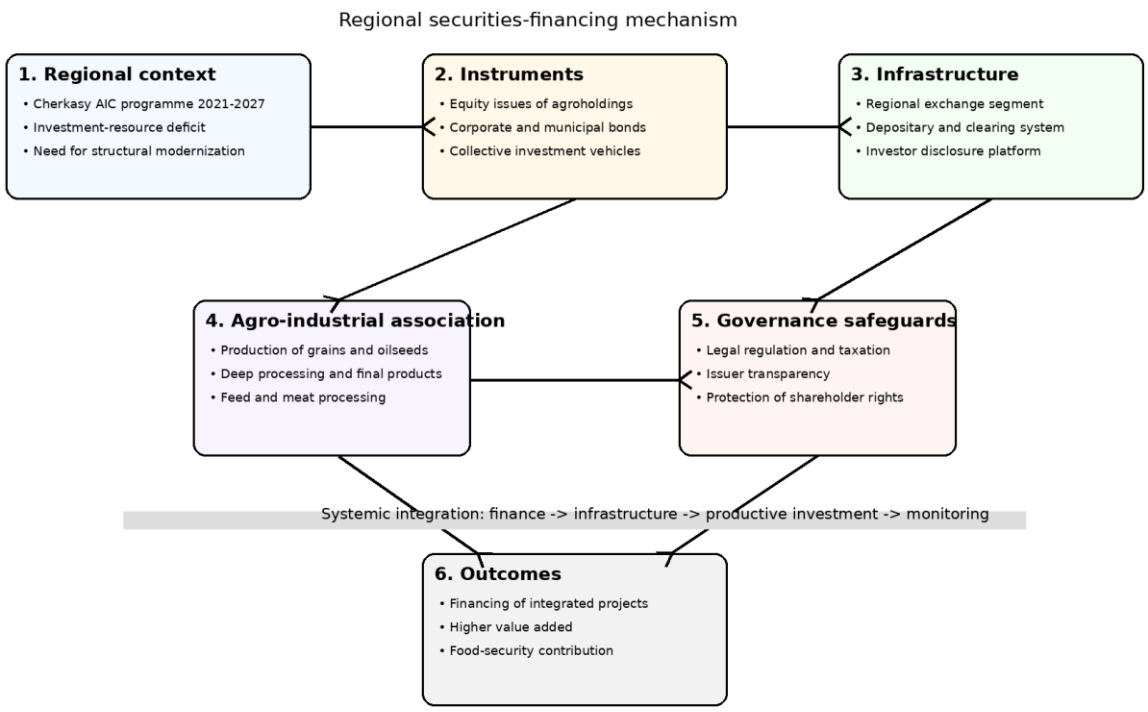

Figure 1. Integrated mechanism for financing agro-industrial development through a regional stock market

Source: author's development.

Discussion

The results obtained in this study allow the role of a regional stock market to be reconsidered. In a narrow interpretation, the stock market is a place where securities are traded. In a development-oriented interpretation, it is a mechanism for transforming savings into productive investment, disciplining issuers through disclosure and governance, and creating a channel through which regional projects become visible to investors. For Cherkasy region, the second interpretation is more appropriate because the central challenge is not trading activity itself but the financing of agro-industrial modernisation.

The thesis-based model shows that the stock market should be connected with a concrete project pipeline. A regional exchange without investable issues would not generate meaningful development outcomes. Conversely, agro-industrial projects without a market mechanism would remain dependent on internal funds, bank loans or ad hoc investors. The proposed framework solves this problem by linking the issue of securities with a structured agro-industrial association and with financial calculations that can be disclosed

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to investors.

Compared with bank lending, securities financing can provide several advantages. It can diversify sources of capital, distribute risk among a broader investor base, extend financing maturities and create instruments tailored to different cash-flow profiles. Equity can support long-term restructuring, while bonds can finance predictable investment components. At the same time, securities financing is not a universal substitute for banking. Banks remain important for settlements, credit lines and underwriting support. The most realistic model is therefore complementary: banks, exchanges, depositaries and investment intermediaries operate within one regional financing ecosystem.

The comparison with developed market institutions suggests that the main barrier is not only the absence of capital but also the absence of trust. Investors require enforceable rights, reliable information and predictable taxation. The thesis proposals on taxation, joint-stock company governance, securities registration, debt conversion and disclosure address exactly these barriers. From a policy perspective, this means that regional capital mobilization depends on national legal reforms as well as regional institutional capacity.

The model is also consistent with contemporary recommendations for Ukraine's capital market recovery. Strengthening market infrastructure, improving regulatory capacity, supporting growth equity and aligning corporate governance with international standards can all increase the feasibility of securities-based financing. A regional agro-industrial mechanism can serve as a practical application of these broader reforms. It translates national capital-market development into a sectoral and territorial investment tool.

The agro-industrial association model has significant development potential because it increases value added within the region. The financial calculations show that deep processing and final-product manufacturing contribute more to project value than raw production alone. This result has important policy implications: regional agricultural policy should support integrated chains, not only primary production. Stock market instruments can support this shift by financing processing facilities, storage, logistics and sales infrastructure.

Nevertheless, the proposed approach involves risks. Agricultural production is exposed to weather, price fluctuations, input-cost volatility and biological risks. Processing activities are exposed to demand uncertainty, energy costs and competition. Securities markets are exposed to liquidity risk and investor sentiment. Therefore, the mechanism should include risk mitigation tools such as insurance, conservative leverage, reserve funds, staged financing, independent audits and regular reporting. The purpose is not to eliminate risk but to make it measurable and acceptable to investors.

The paper has limitations. The financial indicators are based on a project model rather than actual post-implementation data. The analysis does not conduct sensitivity testing for changes in prices, yields, interest rates or exchange rates. The institutional recommendations are conceptual and require legal, regulatory and organizational elaboration before practical implementation. Future research should therefore test the model under alternative scenarios, quantify risk sensitivity and compare different securities structures for financing agro-industrial projects.

Despite these limitations, the study demonstrates that a regional stock market mechanism can be a meaningful tool for agro-industrial development if it is designed as an integrated system. The decisive factor is the interaction between financial instruments, market infrastructure, governance safeguards and productive investment. This interaction distinguishes a development-oriented stock market from a purely formal or speculative market.

Conclusions

The study establishes that the development of the agro-industrial complex of Cherkasy region requires a financing mechanism capable of mobilising long-term investment resources and directing them into integrated production and processing projects. The regional stock market can perform this function when it is organised as a system combining securities issuance, investor protection, disclosure, depositary and clearing infrastructure, professional intermediation and project-based investment planning.

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The paper shows that the investment problem of the regional agro-industrial complex cannot be solved only through bank lending or isolated enterprise initiatives. The restructuring of production, modernisation of processing industries, introduction of new technologies and creation of agro-industrial associations require capital with different maturities and risk profiles. Shares, corporate bonds, convertible instruments and collective investment vehicles can provide such flexibility if they are supported by an adequate institutional environment.

The scientific novelty of the study lies in the development of an integrated framework that connects regional stock market institution-building with the financial model of an agro-industrial association. The framework demonstrates how legal reforms, market infrastructure, issuer transparency and investor safeguards can be linked with concrete production chains in crop production, grain and oilseed processing, feed production, livestock and meat processing.

The applied financial analysis indicates that the integrated agro-industrial association model can generate substantial economic results. The calculated indicators include USD 85.94 million in gross sales, USD 30.35 million in gross profit, USD 14.03 million in net profit and overall profitability of 22.63% over the calculation period. The activity-level analysis confirms that the largest additional value is created by deep processing and final-product manufacturing, which supports the argument for integrated regional agro-industrial development.

The practical significance of the results is that they can be used to design regional investment programmes, prepare securities-based financing schemes and develop institutional support for agro-industrial enterprises. The proposed mechanism can help transform regional strategies into investable projects by linking business plans, feasibility studies, securities issuance and monitoring of financial results.

Further research should focus on scenario modelling, sensitivity analysis, legal design of securities instruments, assessment of investor demand and comparison of alternative organisational forms for agro-industrial associations. Quantitative validation under different macroeconomic, price and yield assumptions would strengthen the evidence base and support practical implementation.

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ADDITIONAL INFORMATION

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