Research on the Path of Financial Empowerment for Chain Leader Enterprises in Agricultural Industry Chain Development: An Empirical Case Study of Haid Group

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Abstract: Financial institutions encounter numerous challenges when providing services to the agricultural industry chain. As a result, current policies emphasize the promotion of the "chain leader enterprise" financial development model. However, there is a shortage of agricultural enterprises capable of integrating both financial and business aspects. Additionally, the limitations of these policies have created significant obstacles for "chain leader enterprises" in supporting the industry chain, making it difficult to provide comprehensive and efficient financial services. This paper uses Haid Group as a case study to examine the current state of financial support for the agricultural industry chain by chain leader enterprises, identify the challenges faced, and propose practical solutions to address these issues.

Keywords: Chain Leader Enterprises; Agricultural Industry Chain; Industry Chain Finance; Haid Group

1. Introduction

As China enters the "14th Five-Year Plan" period, the limitations of its traditional agricultural financial service model have become increasingly apparent in the face of the new economic normal. Small and medium-sized agricultural enterprises continue to struggle with financing difficulties, creating a pressing need for innovative solutions and breakthroughs. Consequently, agricultural industry chain finance should evolve beyond the simple integration of financial services and industrial development. It must transform into an interdisciplinary, symbiotic, and collaborative ecosystem that fosters the growth and sustainability of the agricultural sector. Such an ecosystem requires the effective integration of various critical elements, including policy guidance, capital investment, industrial development, and talent support. By promoting the seamless interaction between upstream and downstream stakeholders in the agricultural industry chain, this system can provide comprehensive services to all participants, ensuring mutual prosperity and long-term success. In doing so, it will contribute to achieving the broader goals of industrial revitalization and the establishment of a strong agricultural nation[1]. In this context, the role of chain leader enterprises becomes indispensable. These enterprises are key drivers in the development of the agricultural industry ecosystem[2].

2. Current Policies Emphasizing the Promotion of the "Chain Leader" Financial Development Model

Agricultural development has entered an era characterized by both capital and technology intensiveness. According to data released by the People's Bank of China on August 10, 2022, the balance of agricultural loans in the first half of the year reached 47.1 trillion yuan, marking a 13.1% year-on-year increase. This growth rate exceeded the previous year's by 2.2 percentage points, representing the highest level since 2018. This surge in agricultural loan demand reflects the increasing need for financial support within rural areas. In the *Work Plan for Financial Support in the High-Quality Development of Animal Husbandry* released by the Ministry of Agriculture and Rural Affairs in September 2022, the pivotal role of "leading enterprises" was repeatedly emphasized. The plan includes initiatives such as incorporating major poultry farming and feed production enterprises into a priority "list system", supporting large-scale farming enterprises in establishing breeding bases, extending industrial chains, providing guarantees for leading enterprises, and prioritizing them for loans. In December 2023, a joint guidance document issued by the People's Bank of China and four other departments, titled *Guidelines on Financial Support for Promoting Rural Revitalization and Accelerating the Construction of an Agricultural Power*, specifically encouraged core supply chain enterprises to enhance creditworthiness for upstream and downstream businesses through various means such as chain white lists, receivables confirmation, and the establishment of purchase and sales funds. These measures aim to improve financing accessibility for farmers and new agricultural operators within the supply chain.

According to a report by the authors, in 2023 alone, the central government of China issued 23 relevant policy documents, while local governments released 93. These documents primarily focus on industry chains, industrial clusters, and supply chain finance, reflecting the growing recognition of the feasibility of the "chain leader" financial model in addressing agricultural development challenges and the financing difficulties within the sector. A "chain leader" enterprise refers to an organization that leverages external resources and its own competitive advantages to gradually consolidate its role as the core player in the upstream and downstream of a particular industry. Typically, these enterprises possess strong system integration capabilities, high market share, a significant impact on the industrial chain, and leading annual production value or revenue. Additionally, they are typically endowed with a strong sense of social responsibility. These enterprises usually have powerful credit backing capabilities, enabling them to support the growth of small and medium-sized enterprises within the industry chain[3]. However, the financial support for agricultural industry chain development through "chain leader" enterprises is still in its early stages.

The most relevant policy documents on industry chain finance come from Chongqing and Guangdong. On September 14, 2023, the *Work Plan for the Comprehensive Promotion of Key Agricultural Industry Chain Financial Chain Leader System in Chongqing*[4] was released. This plan emphasizes the role of core enterprises in supporting the industry chain, with a focus on integrating them with platforms for receivables financing. It also aims to enhance the financing ability of agricultural entities along the chain by confirming receivables online and coordinating resources across the entire system, enabling cross-regional supply chain financing. On March 1, 2024, the *Regulations for the High-Quality Development of Manufacturing in Guangdong Province*, the first local regulation of its kind, proposed supporting the development of industry and supply chain financial models. It seeks to promote the circulation of credit resources within the industry and supply chains, supporting manufacturing enterprises' financial needs and fostering the creation of advanced manufacturing clusters and industry-specific competitive advantages[5].

3. Practical Application of "Chain Leader" Financial Support for Agricultural Industry Chain Development: A Case Study of Haid Group

According to the 2022 list of "Chain Leader" enterprises for key industrial chains in strategic industrial clusters of Guangdong Province (Second Batch), released by the Guangdong Provincial Department of Industry and Information Technology in 2023[6], Haid Group is identified as a "chain leader" for two key industrial chains under the modern agriculture and food industry cluster. These chains include the aquaculture industry chain and the modern seed industry chain. The financial strategies of "chain leader" enterprises, as the core force within the agricultural industry chain, not only impact their own steady development but also have a profound effect on the coordination and upgrading of the entire industry chain. This paper uses Haid Group as a case study to analyze the current situation of financial support for agricultural industry chain development led by chain leaders.

Haid Group began exploring the "chain leader"-driven industry chain financial model more than a decade ago. Initially, its financial division focused primarily on profit generation. By establishing cooperatives in regions such as Shandong, Hubei, Guangxi, and Fujian, which were majority-owned by Haid Group, the company actively guided investments and financial services related to rural revitalization. Over time, Haid Group established a factoring company in 2016, a microloan company in

2018, and a guarantee company in 2019. However, in 2021, the microloan business was retracted to Guangdong Province. In 2022, its planned private placement encountered setbacks due to poor communication between the China Securities Regulatory Commission and the Guangdong Provincial Financial Bureau. Faced with the severe nationwide environment for microloan businesses, the China Securities Regulatory Commission ultimately did not approve the private placement. Despite there being only three microloan companies in Guangdong Province, the Guangdong Provincial Financial Bureau wished to retain Haid Group's microloan business. However, since most of Haid Group's shareholders were investment firms unwilling to fully take over the microloan company, the proposal for a transfer was not approved. By the end of 2022, Haid Group decided to transform its financial division into an industrial finance center, shifting its focus to serve the headquarters and its physical operations.

Currently, Haid Group primarily offers financial services including guarantees and factoring, with its receivables now being managed centrally by the group's financial center. Haid Group maintains a close integration of its physical business and financial services, collaborating with major commercial banks to rigorously control risks. The company's main services are directed toward the downstream agricultural industry, continuously leveraging its industry chain advantages to explore and refine a "chain leader"-driven financial model that closely aligns with agricultural development. This ongoing effort supports rural prosperity and the "Hundred-Thousand-Ten Thousand Project" as part of Haid Group's contribution to rural revitalization.

4. Existing Issues in the Financial Support of Agricultural Industry Chain Development by "Chain Leaders"

4.1 Overcoming Inherent Obstacles for Financial Institutions Serving the Agricultural Industry Chain

According to the *Green Book of Rural Development* published by the Chinese Academy of Social Sciences, the new agricultural operators in China's aquaculture industry chain can be classified into five main types: self-managed family-owned aquaculture farms, cooperatively managed professional aquaculture cooperatives, labor-managed aquaculture companies, the "second generation of fishermen" (referring to the offspring of fishing families, typically post-80s and post-90s individuals who grew up in fishing households), and aquaculture industrialization consortiums[7]. The aquaculture industry chain is becoming increasingly extensive. According to statistics from the Ministry of Agriculture and Rural Affairs, by the end of October 2023, the total number of new agricultural operators in China had approached 6 million, with an estimated 1.2 million involved in aquaculture. As the number of these operators and the scale of production expand, the demand for capital inevitably increases. However, financial institutions face significant obstacles when servicing the agricultural industry chain.

Firstly, agricultural loans suffer from low efficiency. Due to the small scale of individual agricultural loans and the high operational costs of financial institutions, borrowers often lack sufficient collateral or pledges, which makes it difficult for them to meet the loan conditions set by traditional financial institutions, such as commercial banks. As a result, agricultural loans become the "long tail" customers in the financial sector[8]. Despite the expansion of agricultural loans in recent years, the efficiency of these loans has not improved, and reforms to the financial system have not led to significant improvements in agricultural loan efficiency. Secondly, agricultural loans generate low returns. Regulatory bodies assess traditional financial institutions, such as commercial banks, based on the amount of agricultural loans they issue, yet studies indicate that these loans tend to drag down the financial performance of rural financial institutions. Due to both internal and external factors, rural finance remains in a state of supply-demand imbalance, and the credit demands of new agricultural operators are difficult to meet. Thirdly, agricultural loans carry high risks. Some financial institutions are attempting to develop financial models for the agricultural industry chain, leveraging financial technology to optimize product design and improve service efficiency, while strengthening partnerships with core enterprises to provide online financing services for their clients within the agricultural industry chain. Notable examples include Agricultural Bank of China, China Construction Bank, Bank of Communications, and Shanghai Bank[9]. However, research conducted by the authors of this paper on Haid Group revealed a fatal flaw in these models led by financial institutions: even with strong industry research capabilities, these institutions lack the specific expertise in agricultural industry development. For instance, freshwater aquaculture and marine aquaculture differ significantly, and managing the scattered, small-scale, short-term financial needs within various links of the chain remains a huge market risk with information asymmetry. As a result, high costs, low returns, and difficulties in loan recovery persist, leaving financial services still largely superficial.

4.2 Lack of Integrated Capabilities between the Financial and Business Sides of "Chain Leader" Agricultural Enterprises

As core enterprises deeply involved in organizing agricultural supply chains, “chain leader” enterprises are able to leverage information technology, digitization, and platformization to effectively manage the flow of goods, logistics, and information across the upstream and downstream sectors. By establishing supply chain financial systems, they can more easily explore a model for integrating production and finance[9]. However, the current financial models for “chain leader” enterprises in China lack the organic integration of both financial and business capabilities.

Firstly, agricultural “chain leader” enterprises that have achieved digital transformation remain in the minority. With the enhancement of digitalization, the dimensions and accuracy of data accumulation continue to improve, which provides a solid data and technological foundation for developing financial systems in the aquaculture industry chain. However, the high costs of such digital infrastructure are typically only affordable to large, leading enterprises. For example, in the digitalized konjac planting base in Fougang Shuitou Town, Qingyuan City, Guangdong Province, which covers 60 acres, a total of 4.683 million yuan was invested in digitalization, with a cost of 78,050 yuan per acre. The excessive investment costs have resulted in a low adoption rate[10]. Secondly, there is a lack of a sufficient number of agricultural “chain leader” enterprises with strong capabilities in financial product design, business innovation, and risk management. The development of industry chain finance requires a reintegration and reshaping of corporate strategic resources, as well as a deep understanding of industry-finance collaboration from the management. It also necessitates a talent pool that combines expertise in both finance and industry[11]. For instance, employees at Haid Group not only need to understand feed production and the specific requirements of fish farming but also need to be familiar with the capital demands and cash flow of their customers and suppliers, in order to provide comprehensive service solutions. Lastly, there is a lack of strong willingness among “chain leader” enterprises to organically integrate with other enterprises along the chain. Industry chain finance is essentially a tightly interdependent, mutually reinforcing, and penetrating relationship—a shared destiny among the key players in the agricultural industry chain. This close relationship allows core entities to use their own credit to enhance trust among others, thereby achieving mutual prosperity and co-existence. However, at present, outside of those enterprises operating in perfectly competitive markets, most leading enterprises in other types of markets exhibit a low level of willingness to participate.

4.3 One-Sided Existing Policies Causing Significant Challenges for “Chain Leader” Enterprises in Serving the Industry Chain

Firstly, the formulation of policies tends to be one-sided. Current industrial chain financial policies often prioritize specific aspects or segments of the supply chain, overlooking the system-wide nature of the industry. For instance, some policies excessively focus on supporting upstream raw material suppliers, while neglecting the needs of downstream distributors and end consumers. Similarly, there is often an overemphasis on the financing needs of large enterprises, with little attention given to the financial struggles faced by small and medium-sized businesses. This fragmented approach to policy-making hinders “chain leader” enterprises from obtaining the comprehensive, holistic support necessary to serve the entire industry chain effectively, ultimately stifling the healthy development of the entire ecosystem. Secondly, the execution of these policies often falls short of expectations. The one-sided nature of policy design translates into ineffective implementation. In some cases, issues such as information asymmetry and excessive regulatory demands on financial institutions create obstacles that prevent the policies from achieving their intended goals.

Moreover, by focusing too narrowly on specific sectors or links, policies lead to uneven resource allocation, meaning that some enterprises—those truly in need—fail to receive the support they require[12]. As a result, “chain leader” enterprises face numerous challenges in serving their industry chains, including difficulties in securing financing, high associated costs, and heightened risks. Finally, there is an excessive reliance on traditional financing methods. With economic growth and market shifts, the financial needs of enterprises in the supply chain have grown increasingly diverse. Yet current policies often fail to address these varied needs effectively. Many policies remain focused on traditional financing avenues such as bank loans and bond issuance, largely overlooking the importance of newer financial instruments like supply chain finance and equity financing. Additionally, the diverse financial needs across different enterprises within the chain—where large companies prioritize risk management and capital operations, while small and medium-sized enterprises focus on financing costs and efficiency—are often ignored. This mismatch between policy and market demand prevents “chain leader” enterprises from providing the comprehensive and efficient financial services required to support the industry chain as a whole.

5. Policy Recommendations for Implementing “Chain Leader” Model to Support the Development of Agricultural Industry Chains

As discussed, the one-sided nature of current industrial chain financial policies has created significant challenges for “chain leader” enterprises in supporting the agricultural industry chain. To promote the healthy development of the agricultural industry chain, there is a need for a joint effort between the government, financial institutions, and enterprises to formulate more comprehensive, systematic financial policies for the agricultural industry chain. These efforts should focus on strengthening policy execution and regulatory effectiveness, as well as driving innovation in financial services to better match market demands.

5.1 Financial Institutions and Chain Leader Enterprises Collaborating to Serve the Agricultural Industry Chain

Rural revitalization and agricultural industrialization are closely intertwined. Financial institutions should partner with “chain leader” enterprises to build an interconnected, comprehensive industry chain that spans both upstream and downstream. This would enable a shift from simple sales cooperation to a model that integrates and shares various elements, promoting synergy, division of labor, and scale operations between farmers and modern agriculture, thereby enhancing the value chain of the industry. In a “chain leader”-driven industrial chain financial model, banks transition from being the main driver to serving as funding providers, with the “chain leader” enterprises taking responsibility for the core operations. As industry experts and the central point of information flow, “chain leader” enterprises are better equipped to assess specific financing projects. Banks, leveraging their capital strength, can support these core enterprises by providing financial assistance to the upstream and downstream small and medium-sized enterprises. The financial needs of cooperative economic models are often cyclical, revolving around operational turnover and business expansion. Rural financial institutions must develop strategies to cover the entire industry chain, establishing financial connections, acting as credit intermediaries, and fostering “enterprise + farmer” financing models based on the industry chain. This would maximize the role of financial services within the industry chain.

Through cooperation with “chain leader” enterprises, financial institutions can transfer their own challenges in gathering information, screening borrowers, and post-loan monitoring to these enterprises. As core clients, “chain leader” enterprises rely on other businesses in the industry chain for mutual prosperity. When banks and “chain leaders” cooperate effectively, with aligned interests and comparative advantages, they can supervise the normal operations of cooperatives and ensure farmers repay their loans on time. In such a financing model, the benefits to formal financial institutions are evident. Thus, by working together to strengthen the construction of the entire agricultural industry chain, financial institutions and "chain leader" enterprises can significantly improve farmers' access to credit.

5.2 "Chain Leader" Enterprises Should Focus on the Industry Chain, Strengthening the Integration of Their Financial and Business Capabilities

First, the establishment of a strategic framework for the development of industrial chain finance is essential. "Chain leader" enterprises should prioritize the formulation of a development strategy for industrial chain finance, recognizing it as a crucial direction for medium- to long-term business growth. At the headquarters level, a coordination team for industrial chain finance can be formed, with a designated lead department to oversee the effective implementation of the strategy. Second, data integration and business development should be pursued. Integrating data from upstream and downstream enterprises within the industry chain, including information flow, logistics, and cash flow, would create a comprehensive "three-in-one" database for industrial chain finance. Clear data access permissions and a shared data list should be established, ensuring that relevant financial units within the system are able to utilize the data efficiently. Third, an online operational platform for industrial chain finance can be developed. This platform, which focuses initially on the procurement chain of enterprise materials, would facilitate the seamless integration of material procurement with financial services in an entirely online process. Adhering to the principles of "overall planning, unified construction, centralized operation and maintenance, and resource sharing", the platform's stability and efficiency would be maintained. Fourth, obtaining relevant financial licenses and collaborating with financial institutions would help ensure the legal and compliant execution of business activities. Leveraging the position of core enterprises within the industrial chain, customized and standardized financial service products can be designed to provide integrated solutions for all enterprises within the chain. Drawing inspiration from models such as the "Feed Loan" program by Bank of Communications, comprehensive financial services, including receivables factoring, leasing factoring, and working capital loans, can be offered. Fifth, a robust risk management and control system is necessary. A risk management mechanism can be established, implementing appropriate asset portfolios to strike a balance between risk and reward. A differentiated financial service model can be created for various business clients. The group's headquarters would periodically assess, monitor, and take preventive measures to manage risks within industrial chain finance, ensuring the stability of the financial services. Sixth, the cultivation and recruitment of multidisciplinary talent are critical. Efforts to train and recruit professionals who possess both traditional financial expertise and knowledge of internet technologies should be intensified. Encouraging team innovation would provide the necessary talent to support the development of industrial chain finance. Through the implementation of these measures, "chain leader" enterprises would be able to solidify their position within the industry chain, develop industrial chain finance, and enhance the organic integration of their financial and business capabilities, ultimately increasing their competitiveness and influence within the chain.

5.3 Optimizing Government Incentive and Regulatory Policies for "Chain Leader" Enterprises

5.3.1 Optimizing government incentive policies for "chain leader" enterprises

Firstly, enterprises deepening bank-guarantee cooperation to reduce financing costs: One effective strategy is to encourage the creation of a whitelist for agricultural industry chains under the "loan on guarantee" and "guarantee on loan" models. This list should streamline business processes for agricultural enterprises, accelerating the loan approval process and reducing the need for counter-guarantees. By offering preferential interest rates and guarantee fees, financing costs for "chain leader" enterprises can be lowered, motivating them to actively engage in the agricultural industry chain finance system. Secondly, expanding precision policy tools: Structural monetary policy tools, such as re-loans for agricultural and small businesses, as well as inclusive loans for micro and small enterprises, should be leveraged to guide financial institutions to increase credit flow to “chain leader” enterprises. The creation of a “green channel” for agricultural industry chains under the re-discount policy would allow priority processing of bills issued or held by “chain leader” enterprises, further reducing their financing costs. Thirdly: advancing information sharing across the industry chain: Strengthening information sharing between chain-leading banks, co-operating banks, and government financing guarantee agencies is crucial. Ensuring timely access to relevant financial service information for "chain leader" enterprises will improve financing efficiency. Exploring innovative cooperation models with insurance, securities, and futures institutions will provide a diversified range of financial services for these enterprises. Fourthly, increasing innovation in financial services: Active promotion of financing models such as collateralized agricultural facilities and live livestock, as well as expanding the use of land operating rights for mortgage loans, will open new financing avenues for “chain leader” enterprises. Additionally, innovations such as collective asset equity pledge loans should be introduced to meet the diversified financial needs of these enterprises.

5.3.2 Adjusting and optimizing regulatory policies

Firstly, clarifying regulatory goals: The regulatory framework should aim to maintain financial stability, protect consumer rights, and foster the healthy development of industrial chain finance. Streamlining approval processes, reducing unnecessary administrative steps, and enhancing approval efficiency will lower the administrative burden for “chain leader” enterprises. Secondly, setting reasonable compliance standards: While ensuring market stability, regulatory standards should be set at reasonable levels, avoiding overly stringent compliance requirements that may place excessive pressure on "chain leader" enterprises. Thirdly, enhancing communication among regulatory bodies: A cross-departmental communication and cooperation mechanism should be established to ensure consistency in the formulation and execution of regulatory policies. Additionally, regular communication with “chain leader” enterprises is essential to understand their needs and challenges, allowing timely adjustments to policies as necessary. Fourthly, establishing a tolerance mechanism for innovation and development: in promoting innovation, a certain degree of tolerance for mistakes during the innovation process should be allowed, provided that risks are manageable.

6. Conclusions

This paper, through a case study of Haid Group, explores the current state and challenges faced by “chain leader” enterprises in providing financial support for the development of agricultural industry chains. The study reveals that although current policies strongly promote the “chain leader” financial development model, financial institutions still encounter numerous obstacles in serving the agricultural industry chain, such as low efficiency in agricultural loans, low returns, and high risks. Moreover, “chain leader” agricultural enterprises with the ability to integrate both the financial and business aspects are scarce, and existing policies tend to be one-sided, resulting in significant difficulties for "chain leader" enterprises when serving the industry chain. To foster the healthy development of agricultural industry chains, this paper proposes three key strategies: first, financial institutions and “chain leader” enterprises should collaborate to serve the agricultural industry chain; second, “chain leader” enterprises should strengthen their ability to integrate financial and business operations; and third, government incentive and regulatory policies for “chain leader” enterprises should be optimized. In conclusion, through the concerted efforts of financial institutions, “chain leader” enterprises, and the government, constructing a cross-industry, symbiotic agricultural industry ecosystem will contribute to the realization of industrial revitalization and the grand goal of building a strong agricultural nation.

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