

The Impact of Hedging Business on Corporate Operations: A Case Study of Arawana

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Abstract. Against the backdrop of a complex and volatile global economic environment with frequent fluctuations in commodity prices, the operations of listed companies face significant challenges. Hedging, as a novel risk management tool, has gradually garnered widespread attention. This paper takes Yihai Kerry Arawana Holdings Co., Ltd. (Arawana) as a case study, aiming to explore the impact of hedging activities on the operational performance of listed companies. By analyzing Arawana's historical hedging operations and comparing them with industry peers, the study examines the influence of hedging on corporate performance from both financial and ESG dimensions. The findings indicate that hedging activities positively affect the company in terms of asset-liability management, profit stability, and cash flow, while also presenting potential risks. Finally, it is suggested that hedging business should only be used as a financial tool to assist the company's operation, and it is necessary to flexibly use and adjust hedging positions, strictly follow the principle of risk hedging, optimize internal mechanisms, and avoid excessive financialization of the entity. This paper provides a solid theoretical foundation and practical guidance with operational value for listed companies to reasonably engage in hedging activities.

Keywords: Hedging business, operating performance, listed company, Arawana.

1. Introduction

As the uncertainty of the global macro environment increases, the risks of fluctuations in commodity prices, exchange rates and interest rates faced by listed companies have risen exponentially. To achieve stable operations, the risk management function of hedging is receiving increasing attention from physical listed companies. As of April 2025, the number of physical listed companies participating in hedging business has significantly increased. Based on the announcements of listed companies and Wind data statistics by the Risk Aversion Network, the participation rate has been continuously rising. The number of firms participated in hedging business increased by 150 compared with the same period last year, with a growth rate of approximately 19%. The domestic oil and fat industry is currently characterized by increasing imbalance between supply and demand, significant fluctuations in raw material prices, and intensified homogeneous competition. The operating income of most domestic listed oil and fat companies has declined, and profits have been greatly compressed. At this time, hedging has become the key for companies to manage operational risks and form competitive advantages [1]. Hedging refers to the practice where a company establishes positions in the futures market that are opposite to those in the spot market. To offset the impact of changes in spot market prices on profits and achieve mutual offsetting of gains and losses, it can help companies lock in raw material costs or product sales prices, avoid losses caused by price fluctuations, and thereby stabilize the company's operating performance [2].

Regarding corporate hedging, scholars both domestically and internationally have conducted extensive research on the application of financial derivatives. For instance, Shao Zhaoru (2024) delved into the strategic use of financial derivatives and gold as tools to hedge market volatility [3]. While Tania Salerno (2017) studied how agricultural commodity traders can increase profits amid market fluctuations [4]. Hedging case analyses predominantly focus on industries such as non-ferrous metals and petroleum, with relatively few studies dedicated to agricultural futures sectors [5][6][7].

This paper aims to explore the theoretical framework linking hedging activities with corporate performance. Through analyzing the case of Arawana, it enriches theories regarding hedging

mechanisms and their impact pathways in corporate operations, advancing academic research while helping listed companies better understand hedging effectiveness and provide robust evidence for optimizing hedging strategies.

2. Overview of Arawana and Its Hedging Business

2.1. Company Overview

Arawana primarily engages in the production of kitchen food products, feed ingredients, and oil technology products, covering the entire industrial chain from deep processing of agricultural crops, extraction, refining, filling to technological applications. After more than 30 years of development, it has become a leading company in China's grain and oil food industry. Among its products, the "Arawana" packaged cooking oil brand has emerged as the most influential brand in China's grain and oil sector, occupying a significant position in the domestic market and earning consumer trust as a well-known brand. It is also exported to numerous countries and regions overseas.

2.2. Arawana's Hedging Business

2.2.1. Strategies and Results of Hedging Operations

In 2020, Arawana incurred a fair value change loss of 1.556 billion yuan due to misjudgment of raw material price trends and insufficient hedge accounting treatment, exacerbating its current losses. Subsequently, the company began emphasizing risk prevention and control, improving its commodity futures hedging business system, and stipulating that the maximum margin occupied shall not exceed 30% of the company's most recent net assets.

In 2021, the company disclosed details of its hedging activities in the annual report for the first time. Commodity fair value hedging instruments incurred a fair value loss of 3.154 billion yuan. The portion of gains and losses that did not fully meet hedge accounting requirements was recorded as non-recurring gains and losses, amplifying the volatility in the income statement. This resulted in a 49.96% year-on-year decline in non-GAAP net profit, accounting for 73.3% of net profit attributable to the parent company. This prompted the company to reassess its hedging strategy.

In 2022, the company's hedging business turned losses into profits, with initial results from hedging strategy optimization. The hedging business achieved a profit of 11.8 billion yuan, while increasing hedging investment amounts. As shown in Figure 1, the investment amount accounted for 97.41% of net assets, covering three major risk areas: commodities, foreign exchange, and interest rates. Option tools were introduced to reduce directional risks, and the company began establishing composite strategies combining spot, futures and options. Meanwhile, hedging ratios were adjusted according to the pace of raw material procurement.

In 2023, both the scale and efficiency of hedging improved, with business profits reaching 11.4 billion yuan. The investment amount in derivatives increased to 67.34 billion yuan, covering over 80% of raw material procurement. By adopting cross-market arbitrage strategies, arbitrage gains were still achieved despite narrowing crushing margins, with exchange rate arbitrage contributing approximately 1.5 billion yuan in non-recurring gains and losses. However, the company's accounts receivable increased to 8.889 billion yuan, accounting for 148% of net profit attributable to the parent company, leading to increased repayment pressure on downstream distributors, persistently low capacity utilization, and hedging profits failing to fully offset operational efficiency issues.

In 2024, the annual hedging profit reached 12.3 billion yuan, setting a historical record. The company avoided inventory impairment losses of approximately 8 billion yuan through the soybean oil inter-market arbitrage strategy and achieved a profit of 12.8 billion yuan from the soybean-palm oil cross-product arbitrage strategy. Despite a 5% year-on-year decline in revenue in 2024, the net profit stood at 2.5 billion yuan, with hedging contributing 70% to the net profit. The gross margin remained stable at 5.2% (industry average only 2.8%), forming a robust corporate operating model.

In summary, as shown in Figure 1, although Arowana initially incurred certain losses in its hedging operations, through continuous improvement and optimization of hedging market strategies, hedge accounting treatments, and disclosure management systems, the cumulative hedging gains over the past three years have reached as high as 35.5 billion yuan, establishing it as a global benchmark for hedging in the grain and oil industry.

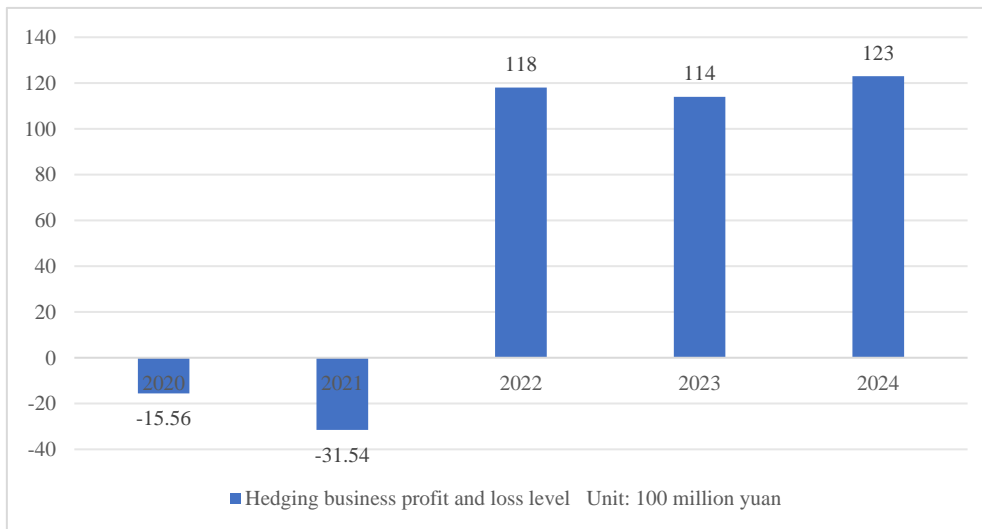


Fig. 1 Yearly Profit and Loss levels of Arowana’s Hedging Business
(Data source: Company annual report)

2.2.2. Comparison of hedging operations among peer companies

As shown in Figure 2, over the past two years, the hedging businesses of Arowana, Daodaoquan, and Jingliang Holdings have remained outstanding, achieving sustained profitability and consistently ranking among the top ten listed companies in terms of hedging profits. Although Daodaoquan's 2024 revenue and net profit attributable to the parent company both declined, its hedging business generated a profit of 540 million yuan, a year-on-year increase of 93%. This was primarily reflected in the non-recurring gains and losses in the financial report—"84.3% (approximately 46.08 million yuan) was related to hedging activities," contributing 26% to the current net profit attributable to the parent company. Meanwhile, Jingliang Holdings reported 2024 revenue and net profit attributable to the parent company of 11.435 billion yuan and 26 million yuan, respectively, representing year-on-year decreases of 4% and 74.5%, while its hedging business achieved a profit of 67 million yuan.

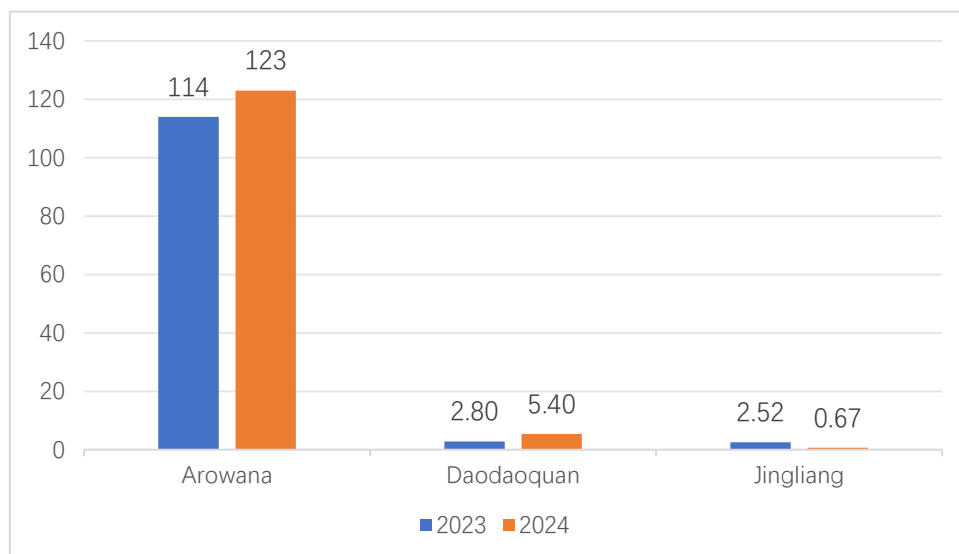


Fig. 2 Profit Comparison of hedging business in 2023-2024 Unit: billion yuan
(Data source: Company annual report)

Hedging operations combines futures and spot transactions, utilizing methods such as futures hedging and basis point pricing to manage production costs and sales prices, refine operations, and support stable company profits, i.e., the stability of gross profit margins. As shown in Figure 3, the gross profit margins of the three companies have remained generally stable or slightly rebounded over the past three years. In terms of the profitability of hedging operations, Arowana has been more robust compared to the other two companies.

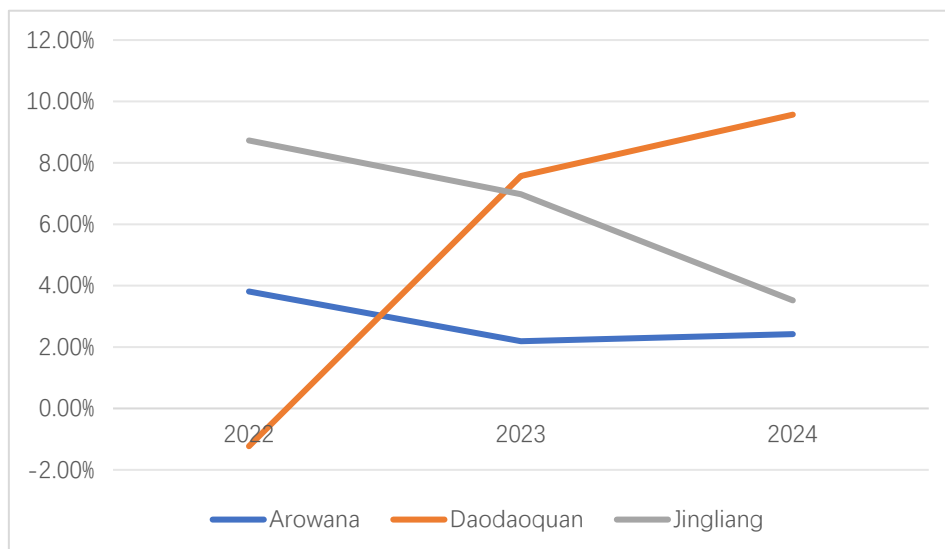


Fig. 3 Profitability of Oil and Fat Business in 2022-2024 (Data source: Company annual report)

Hedging operations may pose potential risks to corporate operations. Daodaoquan, as a leading rapeseed oil production company, misjudged the unilateral upward trend of raw material prices in 2020 and established a large number of short hedging positions in futures. Due to loss of control in position management and absence of stop-loss mechanisms, the company repeatedly added margin deposits during execution, ultimately raising the limit to 197 million yuan, which accounts for 10% of its net assets. This resulted in losses amounting to 270 million yuan, directly turning operating profits from positive to negative. After the earnings report was released, the stock price hit the daily limit down for two consecutive days, drawing widespread attention and reactions from market investors [8].

3. The Impact of Hedging Activities on the Operating Performance of Arowana

3.1. Financial Performance

3.1.1. Debt-to-asset ratio

The impact of Arowana's hedging activities on its asset-liability ratio is relatively complex. On one hand, hedging can mitigate price fluctuation risks, stabilize profits, accumulate retained earnings, and increase owner's equity, thereby reducing the asset-liability ratio. By locking in raw material costs and product sales prices, operational risks are reduced. When the hedging effect is favorable, the negative impact of procurement assets and sales assets on the company's net income is minimized. The higher the hedging efficiency, the closer the hedging gains and losses approach zero, making the company's operations more stable [9]. This can enhance the confidence of investors and creditors, lower financing costs, reduce debt increases caused by high-interest liabilities, and thus positively influence the asset-liability ratio. On the other hand, if the margin requirements for hedging activities are excessively high, it may lead to liquidity risks. To maintain operations, the company may need to increase short-term borrowings and other liabilities, resulting in a higher asset-liability ratio. Similarly, if hedging operations are mismanaged or extreme market conditions arise, severe losses may occur, reducing company profits and owner's equity. To cover these losses, additional liabilities may be required, further increasing the asset-liability ratio.

3.1.2. Net profit contribution rate

The hedging activities of Arowana have a significant impact on the company's net profit attributable to the parent company. As shown in Figure 4, from 2020 to 2022, the profit contribution rate of Arowana's hedging activities was negative, leading to losses that reduced the company's net profit attributable to the parent company. In 2023, this contribution rate increased to 53%, and in 2024, it rose to 71%. This is due to the continuous profitability of hedging activities, which have become a crucial support for the company's profits. Although both revenue and net profit attributable to the parent company declined in 2024 compared to the previous year, the hedging profits have enhanced overall profitability. If the hedging gains are excluded, the spot operations would likely have incurred a loss, indicating that hedging activities have provided a certain level of support for the company's net profit attributable to the parent company.

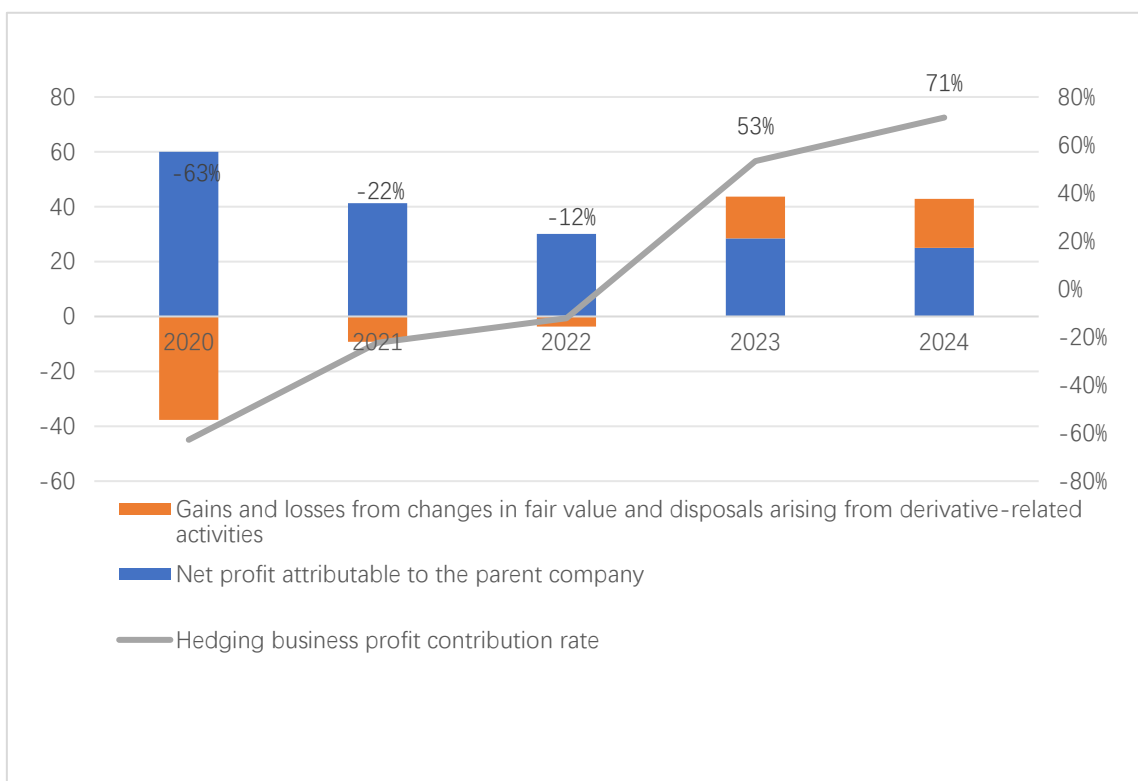


Fig. 4 Profit Contribution Rate of Arowana's Hedging Business
(Data source: Company annual report)

3.1.3. Gross margin and future cash flow

Conducting hedging operations can lock in raw material costs and product sales prices, facilitate competitive pricing or contract terms, reduce the impact of price fluctuations on profits, and enhance the stability of the company's gross margin and future cash flows. The company procures raw materials at low costs. By selling products at higher prices, it enhances the company's gross profit margin and net profit margin, increases operating income, and reduces operating expenses and financial expenses, such as inventory costs, transportation fees, interest expenses, and exchange gains and losses [10]. Additionally, hedging enables the company to more accurately forecast future cash inflows and outflows, allowing for better allocation of funds. In raw material procurement, hedging prevents increased capital expenditures due to rising prices, ensuring stable cash outflows. In product sales, stable pricing guarantees consistent cash inflows [11]. This allows the company to manage inventory based on precise cost forecasts, avoiding both excessive storage that wastes capital and the risk of raw material shortages caused by market price volatility [12]. Moreover, profits from hedging operations provide additional cash inflows, enhancing liquidity and risk resilience. Financially stable companies are better positioned to engage in hedging, further reinforcing their operational stability [12].

3.2. ESG Performance of Arowana

As of 2024, Arowana has maintained an MSCI ESG rating of A for two consecutive years, reaching the highest level in China's grain and oil industry. It has also received the highest AAA rating in the China Securities ESG evaluation and an A rating from Wind. In the S&P Global 2024 Corporate Sustainability Assessment (CSA), Arowana currently ranks among the top 4% in the global food industry. The hedging business has had a profound impact on Arowana's environmental, social, and corporate governance aspects.

3.2.1. Environmental dimension

The hedging business helps Arowana stabilize its production cost structure, invest more resources in environmental protection projects, actively respond to the national dual carbon goals, and reduce energy consumption and carbon emission density. The profits from hedging support the company's green technology R&D, implement energy-saving and emission reduction projects, reduce greenhouse gas emissions, and promote the construction of green factories. Arowana actively uses green electricity, develops sustainable packaging, optimizes warehousing and logistics, promotes the transformation of carriers, and builds a low-carbon supply chain management system [13]. It also promotes the procurement of sustainable raw materials, and the financial stability of the hedging business enables Arowana to prioritize the purchase of sustainable palm oil and soybeans. All of its palm oil processing companies have received RSPO (Roundtable on Sustainable Palm Oil) certification.

3.2.2. The social dimension

The hedging business helps Arowana comprehensively improve its supply chain, stabilize raw material costs, and avoid the risk of supply disruptions due to price fluctuations. By locking in procurement costs through hedging, the company ensures a steady supply of feed ingredients and kitchen food for downstream customers. This helps maintain long-term relationships with suppliers and boosts farmers' income. The company directly supports its social responsibility projects, with charitable donations from the foundation used for educational assistance, orphan care, and support for the disabled. Through technical support and training, the company promotes the development of rural food processing industries and encourages the return of skilled workers [13]. Hedging business locks in sales prices in advance, mitigates downward pressure on prices, protects consumer interests, enhances consumer trust, and aligns with product liability standards in the social dimension.

3.2.3. Governance dimension

Arowana effectively hedges against raw material price fluctuations through hedging operations, enhancing the company's financial stability. In 2024, the company's hedging strategy covered three major areas: commodities, foreign exchange, and interest rates, with hedging operations generating a profit of 12.3 billion yuan, accounting for 70% of the annual reported profits, demonstrating its risk management capabilities. The MSCI ESG rating highlights the company's strengths in corporate governance and food safety, noting that hedging operations help the company mitigate various risks and optimize its governance structure. The revised "Commodity Futures and Derivatives Business Management System" in 2024 incorporates hedging operations into a more flexible derivatives framework, with clear divisions of responsibilities and regular reviews of hedging compliance to ensure effective implementation of risk control measures. This improves decision-making efficiency and transparency, aligning with corporate governance requirements.

4. Conclusion

This article uses Arowana as a case study to explore the impact of hedging activities on a company's operational performance. By implementing scientific and rational strategies, the company successfully mitigates the risks associated with fluctuations in commodity prices, stabilizes and improves its financial performance. Additionally, these measures help reduce resource waste and environmental pollution, enhance social responsibility, boost overall image and brand value, optimize corporate governance, and promote sustainable development.

This article provides a deeper understanding of the role of hedging in corporate operations and offers valuable insights for other listed companies. While hedging can help companies mitigate risks and improve operational performance, it also carries the risk of significant losses. It is important to maintain an objective perspective on the pros and cons of hedging, recognizing that it serves as a supplementary tool rather than the primary business activity. Over-financialization of the entity should be avoided. For listed companies heavily reliant on commodities, it is essential to establish professional market research teams, strictly adhere to risk hedging principles, optimize internal controls and stop-loss mechanisms, dynamically adjust positions to match spot demand, and use flexible hedging tools to align hedging outcomes with long-term strategic goals, thereby enhancing the company's overall competitiveness [14].

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