

# ***Analysis of Financial Statements of Listed Biotechnology and Materials Enterprises from the Perspective of Enterprise Strategy***

## ***-- A Case Study of Huaxi Biology***

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**Abstract:** As the notion of “scientific skin care” gains widespread acceptance, customers are displaying a growing interest in product ingredients and their precise benefits. As a result, it has been seen that local firms that specialize in skin care have been on a substantial growth trajectory over the past few years, signaling the beginning of a successful time of expansion. When compared to all other domestic brands, Huaxi Bio demonstrates an exceptionally prominent presence. This paper focuses on Huaxi Bio as the subject of the case study. This study examines the financial performance of Huaxi Bio by consolidating its financial data from 2019 to 2022. It specifically focuses on the analysis of the brand building investment, identification of prerequisites for Huaxi Bio’s success, evaluation of the impact of diversification strategy implementation on its financial performance, and proposes development suggestions for similar enterprises.

**Keywords:** medical beauty industry, Huaxi Biology, financial statement analysis, diversification strategy

## **1. Introduction**

In 2018, Huaxi Bio entered the market of lipstick through a co-branding initiative with the Palace Museum. This strategic move transformed the company from an industry leader operating behind the scenes to a recognised player in the public eye. This success can be attributed to the emergence of the “appearance level economy,” where consumers place significant value on their physical appearance. Additionally, Huaxi Bio’s effective product strategy, which focuses on diversification, has allowed the company to cater to the unique and specific needs of various consumer groups. As a result, Huaxi Bio swiftly established a strong presence in the competitive skincare market [1]. This paper focuses on the financial analysis of Huaxi Biological for the period of 2019-2022. It examines a range of financial data and evaluates key financial indicators, including the asset-liability ratio, equity multiplier, and current ratio. The analysis is conducted from four perspectives: profitability, solvency, operating capacity, and development capacity. In both the biopharmaceutical companies of China and the emerging market of functional skin care, a notable dearth of influential private brands is observed.

This study focuses on Huaxi Biological as a case study to enhance the industrial chain and implement a diversification strategy. It involves an analysis of the company's financial performance and development capabilities, as well as an exploration of the feasibility of implementing the diversification strategy. The findings of this study can provide valuable insights for other similar enterprises aiming to establish their own brands and enhance their industrial chains.

## **2. Analysis of the Huaxi Biological**

### **2.1. Overview of the Huaxi Biological**

Huaxi Biological is a corporation engaged in the production of hyaluronic acid, which is also known as hyaluronic acid or HA. The primary objective of Huaxi Biological is to leverage core biotechnology to conduct research and development activities aimed at producing high-quality bioactive products and their associated end products. The ultimate aim is to contribute significantly to the enhancement of the health and beauty of the Chinese population. By providing Chinese individuals with reliable and effective products, the company aspires to instill confidence and establish itself as a reputable organisation esteemed by individuals worldwide. Huaxi Biological is dedicated to conducting research and development on active substances that offer advantages to human well-being and overall health. By employing two key methodologies, namely microbial fermentation and cross-linking technology, the company aims to establish an industrial chain system that encompasses the entire spectrum from fundamental raw materials to the design and production of medical terminal products, efficacious skincare items, and associated food industries. This approach is underpinned by state-of-the-art technology. The establishment of an industry and service chain has been observed, catering to many sectors such as pharmaceuticals, cosmetics, food manufacturing, medical institutions, and global end consumers [2].

### **2.2. Enterprise Diversification Strategy**

The layout of Huaxi Biological industry is highly commendable as it encompasses three key application fields, namely medicine, cosmetics, and food. It offers a wide range of raw material products, including sodium hyaluronate, catering to the needs of these industries. Additionally, Huaxi Biological industry caters to the C-end market by providing medical beauty, ophthalmology, orthopaedics, and food-related products. This diverse range of offerings includes medical terminal products, functional skin care products, and other emerging products. The entire industry chain should be expanded to include the upstream raw material supply end and the downstream product sales end [3].

#### **2.2.1. Raw Material Products**

Utilising the biological fermentation technology platform and leveraging its industrialization advantages, the company has successfully formulated a range of bioactive products centred around hyaluronic acid. The advancement in raw materials serves as a primary catalyst and essential foundation for innovation in downstream consumer product development. The company serves as a strategic collaborator for both international and domestic pharmaceutical, cosmetics, and food enterprises. It leverages the outcomes of fundamental research in raw materials and applied basic research to offer customers a comprehensive array of goods and technical support. The company engages in project collaboration with leading industry clients, and consistently drives the advancement of downstream industries through innovative product creation of novel raw materials.

### 2.2.2. Medical Terminal Products

The company engages in autonomous research and development, as well as manufacturing, of medical terminal goods within the domain of hyaluronic acid biomedical materials. These products are primarily categorised into two areas: medical aesthetics and pharmaceutical applications [4].

Medical products encompass a range of items, such as ophthalmic adhesives, medical lubricants, various medical equipment products, as well as medications including bone and joint cavity injections. During the reporting period, the firm maintained its position as the only distributor of Swiss RegenLab in China, actively promoting and selling the “platelet-rich plasma Preparation Set” (PRP) goods in various medical fields such as orthopaedics, sports medicine, plastic surgery, and pain management within the domestic market.

The organisation strategically redefined the business positioning of various product series, categorising them as mature business, growth business, and seed business based on their unique characteristics and developmental stage. This approach aimed to achieve widespread organisational coverage and enhance brand awareness among consumers, particularly through the promotion of mature Runbaiyan small pellet products. The differentiation of advantage categories, such as micro crosslinked moistening infant needles, plays a crucial role in stimulating the expansion of skin medical products. By utilising a personalised blend of Runzhi series products, individuals can achieve a multi-layered anti-aging outcome. Simultaneously, the use of repair essence, spray dressing, skin repair patch, repair lotion, and other medical art after-repair products with moisturising and invigorating properties can effectively preserve the aesthetic appeal of postoperative skin.

### 2.2.3. Functional Skin Care Products and Functional Food

The company’s research and development (R&D) strategy encompasses six distinct platforms: synthetic biology R&D, microbial fermentation, application mechanism R&D, pilot conversion, cross-linking technology, and formula process R&D. These platforms are utilised to conduct comprehensive investigations into the impact of various bioactive substances, such as hyaluronic acid, GABA, and ecdoine, along with their crosslinked derivatives, on the human skin. The research aims to delve into the effects of different molecular weights of these substances on the skin. Based on this fundamental component, a range of efficacious skincare products has been formulated to address various skin concerns such as sensitivity, compromised skin barrier, face erythema, acne, and other dermatological issues. These products have been developed by employing a streamlined formulation approach, incorporating a high concentration of active ingredients, and targeting specific skin concerns to enhance their effectiveness. The business leverages its extensive technological expertise and accumulated experience in the biomedical sector to develop a range of compact “hyaluronic acid secondary disposal Essence” packaging. These packages are manufactured using an integrated process that combines blowing and potting, and are free from chemical anti-corrosion additives. The company has successfully introduced the third iteration of the hyaluronic acid secondary serum, following a series of product enhancements.

The company has demonstrated a longstanding dedication to utilising food-grade hyaluronic acid raw materials in domestic everyday food products. Furthermore, the company has successfully formulated various bioactive raw materials for functional beverages, dietary supplements, dairy products, and other related industries through the utilisation of the “basic research and applied basic research” platform [3]. In the year 2022, “No Way Corner” introduced a novel series of five goods known as the 2.0 “Night Hat Stay Up Late Essence Drink.” These products incorporate the use of “GABA+” as a key ingredient. The formula system integrates several active ingredients such as hyaluronic acid, bird’s nest acid, collagen peptide, lutein, probiotics, and other efficacious compounds to offer nocturnal health remedies.

### 3. Financial Statement Analysis

#### 3.1. Profitability

Profitability is a term that pertains to the capacity of a business to generate profits, encompassing both capital gains and appreciation. It is often measured by the quantity and magnitude of a company's earnings within a specific timeframe [5]. To assess the profitability of Huaxi Biological, the author has chosen several key indicators for study. These indicators include the operating profit rate, gross profit rate of sales, return on equity, and cash surplus protection multiple. These metrics are utilised to gauge the financial department's pursuit of profitability objectives within the company. According to Figure 1, it is evident that Huaxi Biological's operating profit margin has declined from 40% to approximately 20% over the course of the past four years. Despite experiencing yearly increases, the growth rate has progressively diminished each year. Conversely, the gross profit margin of sales has consistently fluctuated within a narrow range of approximately 80%. This margin is generally high and exhibits a stable trend. In a similar vein, it is noteworthy that Huaxi Biological's return on equity had a notable decline from 24.59% to 15.75% throughout the period of 2019-2022. However, it is important to highlight that despite this negative trend, the company's return on equity remains superior than the industry average as determined by the overall method. The analysis reveals that Huaxi Biology exhibits a higher level of market competitiveness, robust profitability, and significant growth potential within the industry as a whole.

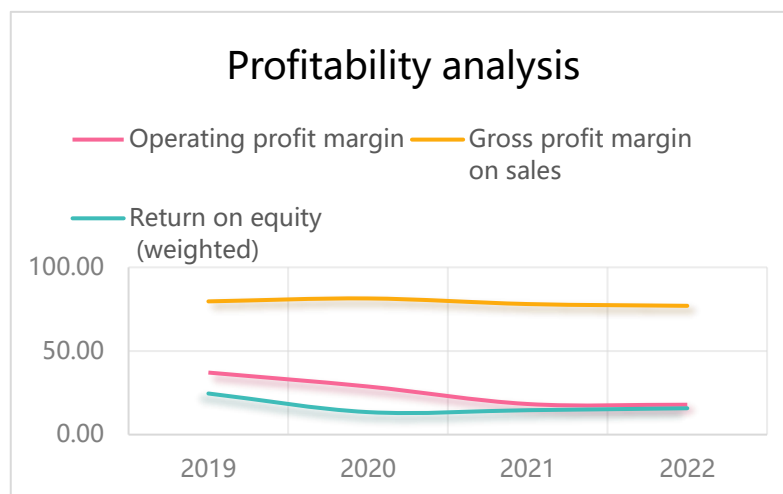


Figure 1: Profitability Analysis (source: East Wealth Choice data).

#### 3.2. Solvency

By doing an examination of solvency, one can delve into the firm's capacity and vulnerability in terms of sustaining ongoing operations. This analysis becomes valuable in forecasting the future income of the enterprise. To assess the short-term solvency of Huaxi Biology, the current ratio, quick ratio, and cash flow ratio have been chosen for analysis. The analysis of Figure 2 reveals that Huaxi Biological's current ratio and quick ratio have exhibited a consistent pattern of change over the previous four years. Notably, there was a significant fall observed from 2019 to 2020, followed by a subsequent decrease rate reduction starting from 2021 [6]. On one hand, the emergence of the novel coronavirus pandemic has had a significant influence. On the other hand, certain businesses have also ventured into the realm of functional skin care products, thereby causing a dispersion of consumer preferences. The cash flow ratio exhibited a further decline subsequent to a marginal upturn in 2020, decreasing from its peak of 1.28% in 2020 to 0.39%. Despite seeing a notable fall, Huaxi Biology's

current ratio and quick ratio are higher than the industry average, indicating that the company's short-term solvency has weakened but remains robust.

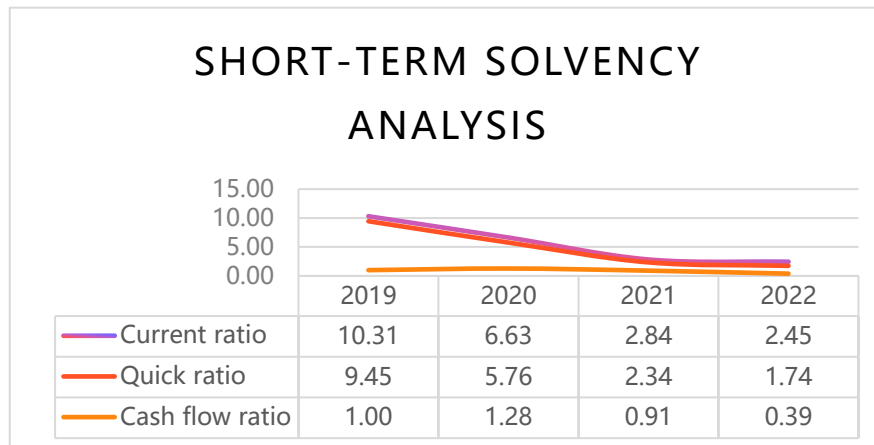


Figure 2: Short-term solvency analysis (source: East Wealth Choice data).

Furthermore, an examination of Huaxi Biological's long-term debt repayment capacity from 2019 to 2022 is conducted using metrics such as the asset-liability ratio, equity multiplier, and cash flow to total debt ratio (as seen in figure 3). The data presented in Figure 3 illustrates a significant growth in Huaxi Biological's asset-liability ratio from 8.49% in 2019 to over 20% in 2022. Additionally, the equity multiplier exhibited a consistent upward trend during this period. Alongside the economic contraction triggered by the COVID-19 pandemic, Huaxi Biological has experienced a decline in profitability. Consequently, even in the absence of any alteration in the company's debt level, this situation will result in an elevation of the asset-liability ratio. The financial leverage of Huaxi Biological appears to be comparatively higher in comparison to the previous year, suggesting a greater reliance on borrowed capital for the company's operations. Simultaneously, this is also associated with the company's endeavours to consistently broaden its commercial scope, innovate novel goods, and enhance its diversification strategy, necessitating additional financial resources and expenditures to accomplish Huaxi Biology's objective of achieving comprehensive growth and advancement.

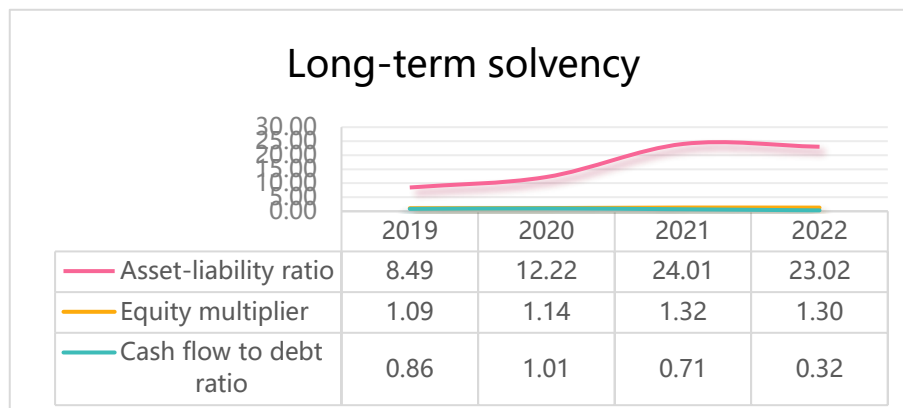


Figure 3: Long-term solvency analysis (Data source: East Wealth Choice data).

### 3.3. Operational Capacity

This study focuses on the analysis of Huaxi Biological's operating capability by examining three key indexes: total assets turnover, accounts receivable turnover, and inventory turnover. By examining the data presented in Figure 4, it is evident that Huaxi Biological experienced an upward trend in its total asset turnover rate, rising from 0.54 times to 0.79 times between the years 2019 and 2022. Additionally, the inventory turnover rate exhibited fluctuations within the range of 1 to 1.8 times, indicating a rather stable pattern. The accounts receivable turnover has experienced a twofold increase over a period of four years. It is evident that Huaxi Biological exhibits commendable sales proficiency, notable asset investment efficiency, and a high turnover rate of inventory, hence demonstrating robust product inventory liquidity and boosted enterprise realisation capability. The substantial increase in accounts receivable turnover signifies that the organisation exhibits a swift rate of collection, little losses from uncollectible debts, expedited asset circulation, robust financial stability, and commendable operational efficacy.

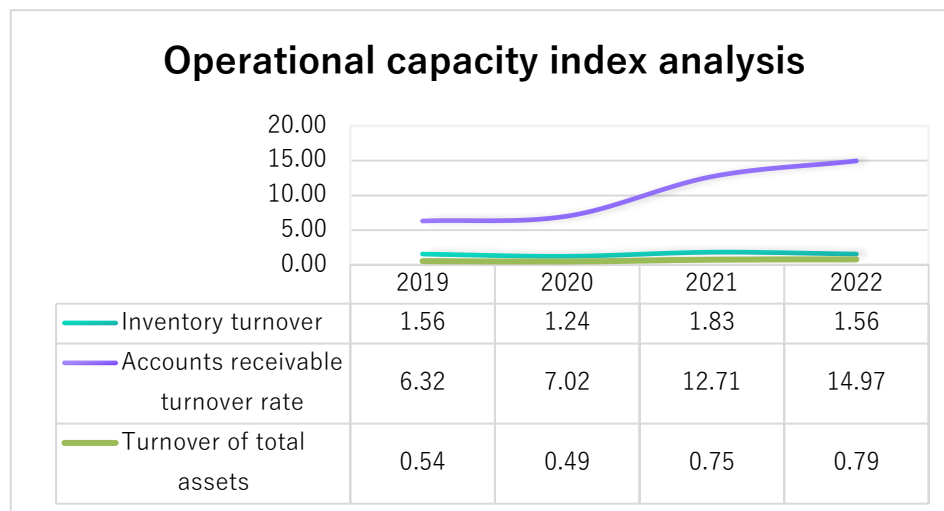


Figure 4: Operational capacity index analysis (source: East Wealth Choice data).

### 3.4. Capacity Development

The concept of development ability pertains to the inherent capacity of an enterprise to augment its size and capabilities. Initially, through a comparative analysis of historical data pertaining to the year-on-year growth of diverse indicators over the past four years, it becomes evident that Huaxi Biological has consistently experienced positive year-on-year growth in its operating income. Notably, the year-on-year growth rate of operating income in 2020 stands out as the highest among the observed years. As of 2022, the operational income continues to see growth, albeit at a significantly reduced magnitude compared to previous periods. The operating profit's year-on-year growth rate is projected to exhibit a declining trend initially, followed by an upward trajectory. It is anticipated to reduce to 8% in the year 2020, thereafter rebounding in the subsequent two years. The return on equity exhibits a consistent upward trend, transitioning from negative values to positive values. Hence, it is evident that Huaxi Biology is currently experiencing a phase of expansion, with a favourable development trend observed over the previous four years [7]. Although the revenue growth rate exhibits significant fluctuations, it consistently maintains a positive trajectory.

This study examines the diversification strategy implemented by Huaxi Bio and conducts a comparative analysis of the revenue data across several product lines of the company. It is evident that within the product portfolio of Huaxi Bio, functional skin care products hold the largest share and



exhibit the most rapid growth rate. Prior to 2021, the revenue growth of raw material end products displayed a declining trajectory, consistently lagging behind the revenue growth of medical end products. However, post-2021, the proportion and revenue growth of raw material end products surpassed that of medical end products. The primary source of Huaxi Biological's main business income is evidently functional skin care products, which possess notable competitive advantages and promising development prospects. However, it is worth noting that the revenue growth rates of these products exhibit significant fluctuations and instability, necessitating the attention of enterprise managers.

#### 4. Conclusion

Comprehensive financial performance study suggests that diversifying the industrial chain from raw materials to terminals can be a useful model for comparable companies. Huaxi Biology worries about joining the extremely competitive health food and beverage business, which operates separately from the medical and beauty injection industry. The early two years saw significant income and debt payback and profitability, but the next two years saw financial leverage rise and revenue growth slow. After investigating Huaxi Biological's financial performance, the following recommendations are made for its future financial management: improve internal operational capabilities, asset utilisation, inventory management, rational inventory system, inventory accumulation, and capital occupation. Enterprises must maintain their R&D spending to maintain a steady income stream. Technology and R&D-driven product innovation are essential to sustainable financial performance. To increase profitability, optimise product interest rate structure and control sales expenses [8]. Since this study only examines Huaxi Biology, it may add specificities and limit its capacity to reflect the industry's overall position.

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