

# ***Analysis of Investment Value in the Traditional Chinese Medicine Industry: A Case Study of Yiling Pharmaceutical Co., Ltd.***

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**Abstract:** Over the past five years, the Chinese pharmaceutical industry has experienced new opportunities and challenges with the implementation of a new round of medical reforms nationwide. Since the outbreak of the COVID-19 pandemic in 2019, the increasing awareness of health and the continuous demand for medical services have led to a sustained growth in demand for traditional Chinese medicine products and services in China. This study takes a comprehensive fundamental analysis approach, incorporating relevant knowledge from finance, to examine the financial indicators and development of Yiling Pharmaceutical Co., Ltd., a typical company in the pharmaceutical industry. Through financial statement analysis, the profitability of Yunnan Baiyao is assessed, along with the prediction of debt-paying ability during the evaluation process. Lastly, a fundamental analysis is conducted to summarize the strengths and weaknesses of Yiling Pharmaceutical Co., resulting in the conclusion of its investment value.

**Keywords:** medical industry, investment, analysis

## **1. Introduction**

From the perspective of demand, issues such as the aging population and changes in lifestyle have led to an increasing demand for traditional Chinese medicine in China. Additionally, the impact and control of the COVID-19 pandemic have highlighted the significant role of traditional Chinese medicine in combating the pandemic and improving immunity. The development of traditional Chinese medicine has shown positive momentum, giving rise to a group of exemplary enterprises with technological innovation. This paper focuses on the analysis of Yiling Pharmaceutical Co., considering four major financial indicators—profitability, debt-paying ability, growth capability, and operational capability—to evaluate investment risks. The analysis begins with an examination of operating income and net profit margin, analyzing the factors influencing net profit margin and gross profit margin, along with assessing the performance of the company's flagship product, Lianhua Qingwen. Subsequently, short-term and long-term debt-paying abilities are analyzed, considering that lower debt-to-asset ratio does not necessarily imply better performance; when the interest rate on debt is lower than the profit rate, debt financing can yield better returns. Finally, the growth capability and operational capability of Yiling Pharmaceutical Co. are evaluated, taking into account various

changes in indicator data, ultimately providing a reference for the investment forecast of this pharmaceutical enterprise and guiding the formulation of subsequent investment plans.

## 2. Literature Review of Pharmaceutical Companies

In light of the sustained growth of China's economy and the increasing standard of living, the demographic structure is aging, and urbanization is accelerating, leading to a greater demand for health security and medical services. The crucial impact of the COVID-19 pandemic in 2020 has led to increased investment and technological inputs in the medical industry at the national level, heralding new opportunities and challenges for the sector. With the expanding market demand, the expectations for pharmaceutical companies are on the rise, and the pharmaceutical industry has entered a golden period of rapid development, presenting significant prospects for future growth.

Zhang and Zhao conducted a comprehensive analysis and ranking of investment value based on financial data from 119 listed biopharmaceutical companies in 2018, employing factor analysis to extract common factors from variable groups and construct a comprehensive evaluation model for investment value, highlighting the significant influence of indicators such as profit growth capability, growth capacity, and debt-paying ability [1].

Yu used the Economic Value Added (EVA) method to empirically analyze the relative economic value added (REVA) of companies in the pharmaceutical and biotechnology industries listed on the A-share market from 2006 to 2010. The evaluation criteria for investment companies were based on whether the listed companies were worth investing in, which fundamentally depended on whether they were creating value or whether the value was increasing [2].

Wang conducted a comprehensive analysis using the DuPont analysis method to assess the profitability, safety, and growth of Yunnan Baiyao Company from various perspectives such as industry, macro-financial environment, etc., suggesting that Yunnan Baiyao has significant investment opportunities in the long term if it emphasizes the company's later development after the pandemic, improves the utilization rate of current assets, and reasonably controls the research and development and sales expenses of new products through scientific management [3].

Lin and Cui conducted an analysis of profitability, debt-paying ability, and development capability of Kangchen Pharmaceutical Co., Ltd., evaluating the stock's intrinsic value using the FCFF absolute valuation method and three relative valuation methods. The investment value of Kangchen Pharmaceutical Co., Ltd. was calculated, providing rational recommendations for the investment decisions of a broad range of investors [4].

Chen constructed an evaluation index system for investment value in the pharmaceutical business category of listed companies based on the principle of comparability and comprehensiveness using the principal component analysis method and factor analysis method. The analysis demonstrated that debt-paying ability, development capability, and profitability played a crucial role in the financial indicators [5].

Tang, Sun, and Fan employed a comprehensive analysis method of principal component analysis and logistic regression to construct a model, identifying the primary factors influencing investment value, emphasizing the need for investors to consider various aspects such as minority equity, year-on-year income, price-to-book ratio, price-to-sales ratio, undistributed earnings per share, inventory, number of shareholders, price-to-cash flow ratio, earnings per share, equity ratio, gross profit margin, and net profit margin, as well as the macroeconomic regulation of the country, industry development, economic policy trends, product market conditions, and company's financial status [6].

Cheng utilized fundamental analysis to assess the company's value, focusing on the macroeconomic situation, pharmaceutical industry analysis, and the company's financial status, suggesting that the operating development of the company was sound based on the analysis of financial indicators. Despite fluctuations in recent years, the overall debt-paying ability, operating

capability, profitability, and growth capability indicated a promising development outlook for the company, thus recommending long-term investment for investors [7].

Song conducted a comparative valuation analysis of the pharmaceutical sector in Jilin Province and the national pharmaceutical sector using the relative valuation method, analyzing the relative value of listed pharmaceutical companies in Jilin Province from aspects such as profitability, management capability, debt-paying ability, and development capability, and suggested that investors could cautiously participate based on comparisons of price-earnings ratio, book value, and sales revenue [8].

Jiang reconstructed the financial analysis indicator system based on three new indicators—core profit per share, accounts receivable per share, and operating cash growth rate—incorporating macro and micro perspectives. The study conducted an investment value analysis of eight listed companies engaged in pharmaceutical circulation business in the Chinese stock market, concluding that China National Pharmaceutical, Shanghai Pharmaceuticals, and East China Pharmaceuticals had relative investment value [9].

### **3. Economic Development Trends and the Pharmaceutical Industry Situation**

#### **3.1. National Economic Operation**

Since the implementation of the reform and opening-up policy, China's economic and social development has undergone 40 extraordinary years, achieving remarkable historic accomplishments and unprecedented transformative changes. Since the 18th National Congress of the Communist Party of China, the country has undergone new historic reforms in various aspects, making new historic achievements in reform, opening-up, and the construction of a distinctive Chinese modernization. Over the past decade, China's economic strength has leaped to new heights, with the total economic volume increasing from 53.9 trillion yuan to 114.4 trillion yuan, and its share in the global economy rising from 11.3% to over 18%. Per capita GDP has risen from \$6,300 to over \$12,000, and the overall living standards of the Chinese people have significantly improved, with 98.99 million rural poor lifted out of poverty. China's economy has stepped onto a new level of strength since the 18th National Congress of the Communist Party of China. During the transition to high-quality development, continual innovations and improvements in macroeconomic regulation have facilitated not only reasonable quantitative growth but also steady qualitative advancements in economic development.

Over the past five years, China's economic scale has significantly expanded, with continued optimization of the industrial structure, continuous stimulation of market vitality, gradual reduction of regional disparities, and significant enhancements in the quality and resilience of economic development. During this period, the Gross Domestic Product (GDP) has increased to 121 trillion yuan, with an average annual growth of 5.2% over the five years and nearly 7 trillion yuan added over ten years, averaging 6.2% annually. Fiscal revenue has increased to 20.4 trillion yuan, while grain production has remained stable at over 1.3 trillion catties (approximately 880 billion kilograms). The overall volume of the secondary industry continues to expand, with the Central Committee persistently promoting industrial transformation and upgrading, accelerating the development of productive service industries, and vigorously advancing service industries related to people's well-being. The tertiary industry maintains a prominent advantage in terms of the number of units, employees, total assets, and operating income, firmly establishing itself as the nation's leading economic sector.

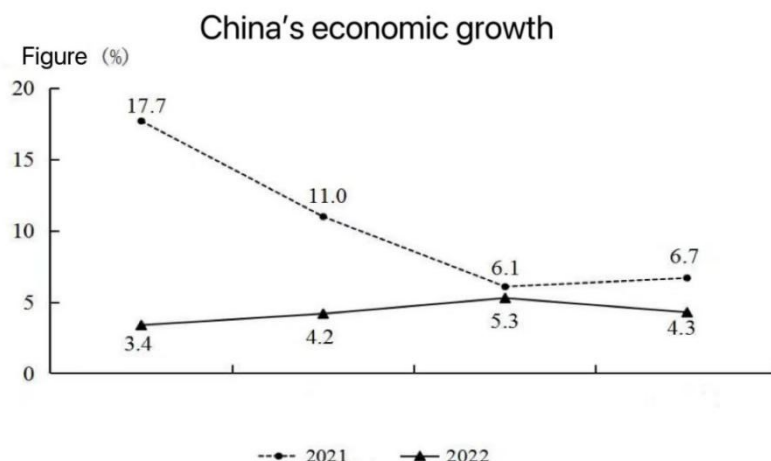


Figure 1: China's Economic Growth Over the Years

In 2020, faced with the challenging international environment and the arduous task of domestic reform and development, various regions and departments earnestly implemented the decisions and arrangements of the Central Committee and the State Council, adhering to the overall tone of seeking progress while ensuring stability. They efficiently coordinated pandemic prevention and control with economic and social development, ensuring overall price stability, continued improvement in people's lives, a further increase in the overall economic volume, and harmonious and stable social development. In this year, China's total economic volume surpassed 120 trillion yuan, with economic growth outpacing that of most major economies. The GDP, calculated at constant prices, grew by 3% compared to the previous year. Looking at the quarterly figures, the growth rates were 4.8%, 0.4%, 3.9%, and 2.9% in the first, second, third, and fourth quarters, respectively. On a per capita basis, China's GDP reached 85,698 yuan in 2022, showing a 3% real growth compared to the previous year.

In recent years, with the continuous increase in national income, improvement in people's living standards, and the accelerated aging population, the demand for healthcare services has continued to grow, leading to increased attention from the public and the government on the pharmaceutical industry, which now occupies an increasingly critical position in the national economy. The pharmaceutical industry has been referred to as an evergreen industry that will not decline, with a clear overall trend for future development. Factors such as expanding medical coverage and security, an aging population, urbanization, heightened health awareness, and the increasing prevalence of chronic diseases have contributed to the sustained growth in pharmaceutical demand. This has been reflected in the rapid increase in the number of various medical institutions, the continuous growth of healthcare professionals, and the ongoing improvements in the internal facilities of medical institutions.

### 3.2. Overall Trends in the Pharmaceutical Industry

The pharmaceutical industry is an essential component of China's national economy, closely related to public health, and is a vital sector for constructing a harmonious society. Data indicates that the size of China's pharmaceutical market has grown from 1.43 trillion yuan in 2017 to 1.79 trillion yuan in 2020, with a compound annual growth rate of 7.8%. It is projected that in 2021, the size of China's pharmaceutical market will reach 1.92 trillion yuan, with further expectations that the market will reach 2.23 trillion yuan in 2022. The pharmaceutical industry has maintained rapid growth and has become one of the fastest-growing sectors in the national economy.

Since the outbreak of the novel coronavirus epidemic, the medical and biopharmaceutical industry has been one of the short-term beneficiaries of the pandemic. The outbreak of the pandemic during the 2020 Spring Festival promoted short-term demand for online healthcare services in China, accelerating industry development and sparking a boom in the pharmaceutical industry. However, the pandemic's most significant impact on the pharmaceutical industry was the restrictions on movement, which subsequently affected pharmaceutical demand. In the post-pandemic era, a significant rebound in pharmaceutical demand is expected, with a substantial increase in outpatient and inpatient visits driving the growth of pharmaceutical demand. Specific pharmaceutical categories such as injectables, medical devices, and anti-tumor drugs that were severely affected earlier are expected to experience significant growth. On the other hand, the sales growth of epidemic-related traditional Chinese medicine, some long-term prescription chronic disease oral drugs, test reagent kits, and protective products is expected to decline, although the demand for these products is expected to remain strong for some time. Looking at the future development trends in the industry, China's pharmaceutical market capacity is expected to continue to grow at a rate of 14%-17%. With the improvement of pharmaceutical demand and the healthcare system, China is expected to become one of the regions with the fastest growth in global drug consumption.

With the continuous improvement of people's health awareness and deepening understanding of traditional Chinese medicine (TCM), the demand for TCM-related products and services in China has continued to grow in recent years. At the same time, with the support of national policies, the market size of the TCM industry in China has steadily increased. TCM is the general term for the medicine systems of all ethnic groups in China, including Han and ethnic minority medicine. It reflects the understanding of the Chinese people about life, health, and disease, and is a medical system with a long history, traditional theories, and unique technical methods. The concept of "preventing illness before it occurs," "preventing complications after illness," and "preventing recurrence after illness" in TCM has been widely recognized. Moreover, compared with other medical systems, TCM has unique advantages and characteristics. Under the background of promoting traditional culture, the cultural advantages of TCM, which have a long history and have been passed down through generations, will continue to promote the development of the industry. In 2020, the industry experienced a significant growth due to the impact of the pandemic. According to data, the market size of the TCM industry in China reached 285.4 billion yuan in 2020, a year-on-year increase of 74.1%. It is expected that the industry scale will reach 3,485.8 billion yuan in 2022.

As China's aging population continues to accelerate and the number of chronic disease patients increases, the market potential for TCM is enormous, especially with the continuous improvement of TCM medical insurance policies and the increasing proportion of TCM included in medical insurance. The sales of TCM products are expected to grow rapidly. Guangzhou Pharmaceutical Holdings Limited is the top enterprise in the TCM industry in China, and other enterprises in the top ten include China National Traditional Chinese Medicine Co., Ltd., CR Sanjiu Medical & Pharmaceutical Co., Ltd., Shandong Buchang Pharmaceuticals Co., Ltd., Yunnan Baiyao Group Co., Ltd., Yiling Pharmaceutical Co., Ltd., Beijing Tongrentang Co., Ltd., Jichuan Pharmaceutical Group Co., Ltd., Tasly Pharmaceutical Group Co., Ltd., and Zhejiang Conba Pharmaceutical Co., Ltd..

In recent years, TCM has received high-level attention from the Chinese government. The "14th Five-Year Plan" and the draft outline of the 2035 Vision Goal propose to promote the inheritance and innovation of TCM, adhere to the combination of Chinese and Western medicine and complementary advantages, and vigorously develop the TCM industry. It can be foreseen that with the strong support of policies, TCM is showing a broader and brighter development prospects. The development of TCM has achieved phased results with the strong support of the government and the joint efforts of TCM enterprises. Moreover, a group of exemplary enterprises in scientific and technological innovation has emerged, among which Yiling Pharmaceutical Co., Ltd. is a leader. For 30 years, Yiling

Pharmaceutical Co., Ltd. has adhered to the development strategy of "market leader, technology-driven," and established a new mode of TCM development integrating "theory-clinical research-industry-teaching." It has always grasped the main theme of scientific and technological innovation, driven TCM research and development with theoretical innovation, and continuously revitalized the vitality of "Chinese medicine prescriptions," forming a brand competition advantage centered on products such as Tongxinluo Capsules, Ginseng and Longan Capsules, and Lianhua Qingwen Granules. Yiling Pharmaceutical Co., Ltd. has conducted evidence-based medicine research on products such as Lianhua Qingwen Capsules, Tongxinluo Capsules, Ginseng and Longan Capsules, Qili Qiangxin Capsules, Yangzheng Xiaoji Capsules, Jinlidai Granules, and Xiali Qi Capsules, which have been continuously launched on the market, and has obtained a large amount of clinical research evidence. The products cover major disease areas such as cardiovascular and cerebrovascular diseases, respiratory diseases, tumors, and diabetes.

Yiling Pharmaceutical Co., Ltd. focuses on the research and development of TCM varieties in the core treatment areas of cardiovascular and cerebrovascular diseases, respiratory diseases, mental illnesses, endocrine diseases, urinary system diseases, and digestive diseases. It has created an innovative TCM evidence chain integrating TCM theory, clinical trials, and human experience, and has implemented an integrated academic innovation and transformation mode of "theory + clinical practice + new drugs + experiments + evidence-based medicine." It has improved project management at different stages such as new drug screening, project approval, research and development, and post-market research, explored the applicable population and clinical application advantages and characteristics of products, objectively evaluated the therapeutic advantages and safety of products, and continuously promoted the research and development of new products, enriching the core technological connotation of products that have been launched on the market.

In 2022, Yiling Pharmaceutical Co., Ltd. achieved operating income of 12.533 billion yuan, a year-on-year increase of 23.88%; net profit attributable to the parent company was 2.362 billion yuan, a year-on-year increase of 75.75%; and net profit attributable to the parent company after deducting non-recurring gains and losses was 2.323 billion yuan, a year-on-year increase of 83.68%.



Figure 2: Performance in the past 5 years

Figure 2 illustrates the performance of Yingliang Pharmaceutical in the past five years, showing a steady growth trend in the company's revenue. This outstanding performance is a concentrated reflection of Yingliang Pharmaceutical's advantages in product development, research and development, and commercialization. The company has always taken technological innovation as the core competitiveness of its development, maintaining a growth trend in research and development investment. In particular, as the main business of patent innovative Chinese medicine research and development, production, and sales, Yingliang actively lays out the biological medicine and health industry, and constructs patented Chinese medicine. In 2023, the Yingliang Pharmaceutical team will



continue to promote the research and development and industrialization progress of new products, achieving the business goal in 2023.

## 4. Financial Index Analysis

### 4.1. Profitability

Corporate profitability is the result of multiple factors, including both internal and external factors. From the perspective of the company's operations, external factors affect the company's sales volume, product prices, raw material costs, etc., ultimately affecting the company's operating results. External factors include political, legal, tax, macroeconomic conditions, and other factors. The company's own product competitiveness, product life cycle, daily production and operation management, marketing organization decision-making, and investment project risk selection constitute internal factors that affect corporate profitability. The combination of internal and external factors determines the company's profitability.

(1) Net profit margin: The net profit margin refers to the percentage of net profit earned by operating activities to net sales or to invested capital. This percentage can comprehensively reflect the operating efficiency of a company or an industry. The net profit margin can be compared with the gross profit margin. The closer the two are, the lower the company's period expenses.

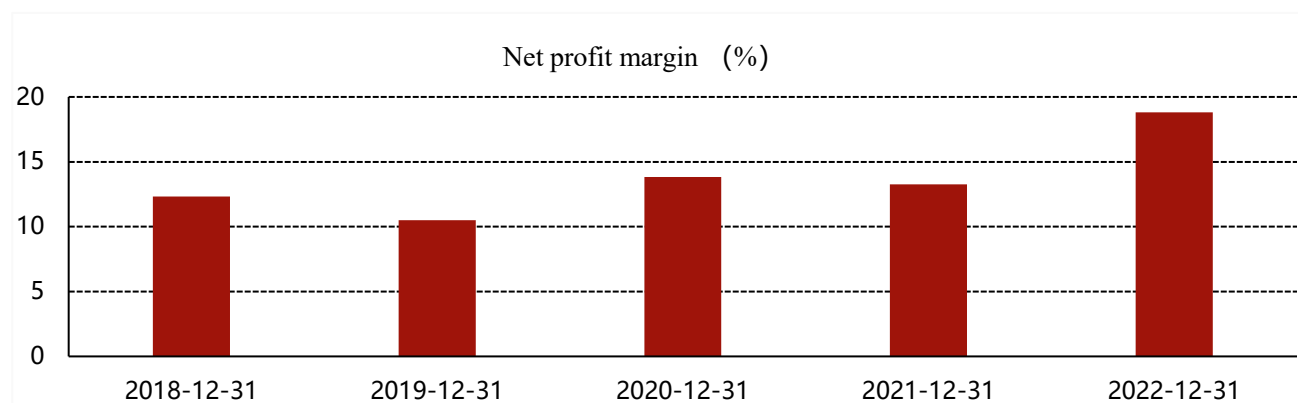


Figure 3: Net profit margin

Figure 3 Shows the net profit margin, which slightly decreased in 2019 but overall shows an upward trend, reaching 18.81% in 2022.

(2) Return on equity (ROE): Also known as shareholder equity return/ net asset return/equity return/profit rate of return on equity, ROE is the percentage of net profit to average shareholder equity. It is the percentage rate of the company's after-tax profit divided by net assets, reflecting the level of return on shareholder equity and measuring the efficiency of the company's use of its own capital. The higher the index value, the higher the return on investment. This index reflects the ability of own capital to obtain net income.

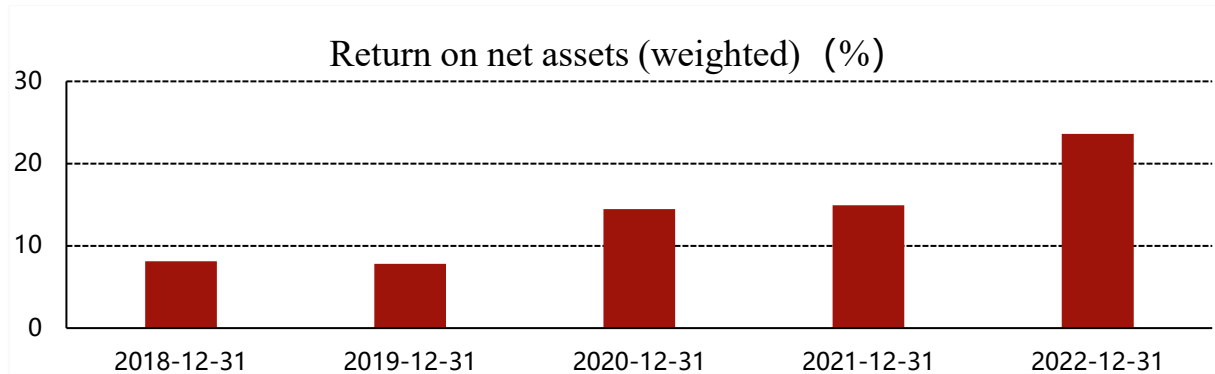


Figure 4: ROE

Figure 4 Shows the trend of ROE, which initially decreased and then continued to rise after 2019.

(3) Return on Total Assets: Return on Total Assets (ROTA) is calculated as the ratio of Earnings Before Interest and Taxes (EBIT) to the average total assets, expressed as a percentage. The level of ROTA directly reflects a company's competitive strength and development capabilities and serves as a crucial basis for determining whether the company should engage in debt financing. Analyzing ROTA alongside Return on Equity (ROE) ( $\text{Net Profit} / \text{Shareholders' Equity} \times 100\%$ ), the disparity between the two can be used to illustrate the level of risk associated with the company's operations. The significance of analyzing ROTA can be summarized as follows: (1) It embodies the relationship between asset utilization efficiency and the effectiveness of fund utilization. (2) It facilitates an analysis of the stability and sustainability of enterprise profitability, aiding in the determination of the risks faced by the enterprise. (3) It reflects the level of comprehensive operational and managerial proficiency within the enterprise.

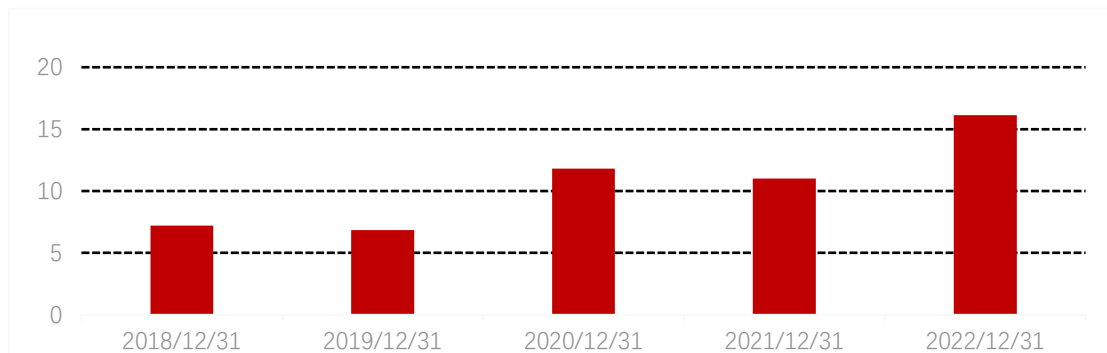


Figure 5: Return on Total Assets

Figure 5 Illustrates the trend of Return on Total Assets. It shows a slight decrease between 2019 and 2021, reaching its peak in 2022.

Table 1: Analysis of profitability

Year	2018	2019	2020	2021	2022
Return on net assets	8.14	7.83	14.48	14.94	23.62
Gross Profit Margin (%)	66.13	63.84	64.49	63.62	63.77
Net interest rate (%)	12.32	10.35	13.83	13.26	18.81
Operating Income	4,815 million	5,825 million	8,782 million	1,012 million	12,530 million
Basic EPS	0.5	0.51	0.7295	0.8044	1.4137



Table 1: (continued).

Net Profit	593.0 million	603.0 million	1,215.0 million	1,342.0 million	2,357.0 million
Return on total assets (weighted) (%)	7.21	6.84	11.82	11	16.12

Table 1 presents data from the past five years, indicating that the net profit, or the company's post-tax profits, has consistently increased year by year, with a significant surge in 2020. However, Ling Pharmaceutical's net profit growth in 2019 was relatively sluggish, with a net profit margin of 10.35% and a net profit of 603 million, representing the lowest growth rate over the past five years. One of the reasons for this slow growth was the significant increase in operating costs compared to operating income in 2019, indicating a decline in the company's business profitability. Another reason was the sharp increase in period expenses, leading to a decrease in operating and net profits. This decline in net profit growth requires attention from both the company and investors. It was reported that in 2019, faced with the challenges posed by the pandemic and a continuously changing internal and external business environment, the company adapted proactively, actively seeking new policies and opportunities for development. Furthermore, Ling Pharmaceutical maintains a relatively high gross profit margin of 64.84%. However, the net profit margin of 10.35% is significantly lower, indicating that the company faces higher operating expenses. This discrepancy suggests a limited profit margin for Ling Pharmaceutical's products and insufficient management of operating expenses.

In 2020, during the domestic COVID-19 period, Ling Pharmaceutical continued to increase its investment in research and development, promoting a close integration between research and production. The company's research and development investment reached 737 million, representing a 43.09% year-on-year growth, with research and development expenditure consistently accounting for over 8% of operating income. The number of research and development personnel also increased by 26.89% to 1996 people in 2020. Ling Pharmaceutical's research and development efforts led to the approval of Lianhua Qingwen for the treatment of COVID-19, making it the world's first drug for the disease. This development caused Ling Pharmaceutical's stock price to surge, with a significant increase in overall revenue, reaching 8.782 billion, a 50.76% year-on-year increase.

However, in 2021, due to factors such as the limited sales of Lianhua Qingwen for the treatment of colds and fever at the retail end, the market share of Lianhua Qingwen declined. This resulted in a decrease in both the gross profit margin and net profit margin by 0.87% and 0.57%, respectively, compared to 2020. Although there was a slight increase in total operating income, it implies that the contribution of operating income to net profit was not particularly significant.

In 2022, amid the fluctuations caused by the pandemic, Ling Pharmaceutical's dominant respiratory product, Lianhua Qingwen, experienced robust sales, capturing a market share of 10.20%. As the pandemic control policies adjusted, the demand for Lianhua Qingwen surged, leading to a persistent supply shortage. The strong sales of Lianhua Qingwen in the fourth quarter significantly boosted Ling Pharmaceutical's performance, resulting in a total operating income of 12.53 billion and reaching the highest net profit margin in nearly five years.

## 4.2. Debt-paying Ability

(1) Short-term Solvency Analysis: This analysis primarily includes the Current Ratio, Quick Ratio, and Cash Ratio. The Current Ratio is computed as the ratio of current assets to current liabilities. This indicator reflects the company's ability to convert current assets into cash within a short period to repay its current liabilities. A higher Current Ratio signifies a stronger capability to realize assets, thus indicating stronger short-term solvency. On the contrary, a lower ratio suggests weaker solvency.

Historically, a Current Ratio above 2 was deemed reasonable, indicating that half of the current assets could be liquidated to ensure the repayment of current liabilities. However, with changes in business operations and the financial environment, this ratio is trending downwards. While a higher Current Ratio ensures the rights of creditors, excessively high ratios may imply a surplus of current assets, potentially indicating inventory backlogs or an excessive proportion of accounts receivable, which can impact the company's efficiency in fund utilization and profitability. Therefore, companies should strive to maintain the Current Ratio at a reasonable level that ensures timely debt repayment without resulting in idle monetary funds.

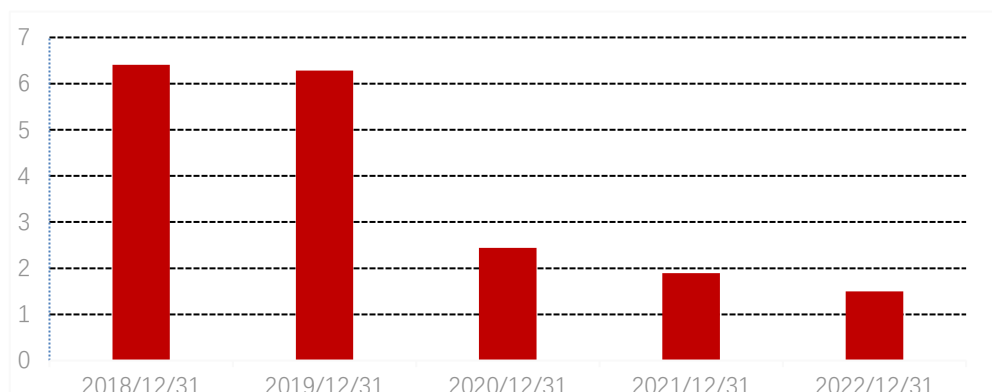


Figure 6: Liquidity ratio

Figure 6 Illustrates the trend of the Current Ratio, indicating a sharp decline after 2019 followed by a slight decrease.

The Quick Ratio is determined by the ratio of quick assets to current liabilities. Compared to the Current Ratio, the Quick Ratio provides a more precise measure of a company's ability to repay short-term liabilities. Typically, a Quick Ratio of 1 is considered appropriate. A Quick Ratio below 1 suggests potential issues with short-term solvency, whereas a Quick Ratio exceeding 1 indicates that the company might be missing out on some profit opportunities due to holding too many quick assets. Therefore, the Quick Ratio should neither be excessively high nor excessively low.

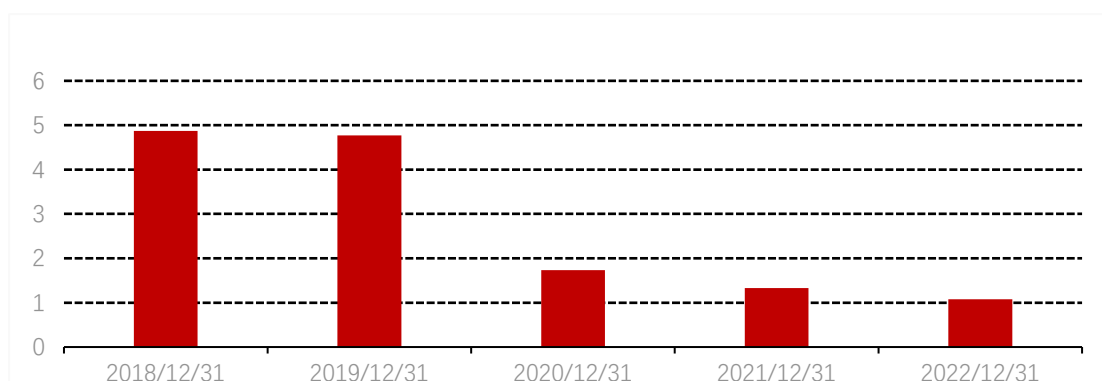


Figure 7: Quick ratio

Figure 7 Shows the overall trend of the Quick Ratio, indicating a significant decrease from 2019 to 2020, followed by a gradual slight decline.

The Cash Ratio is calculated as the ratio of (cash + marketable securities) to current liabilities, representing how much cash assets can serve as a guarantee for each unit of current liabilities. While this indicator reflects the company's direct payment ability, under normal circumstances, companies do not need to possess sufficient monetary funds and marketable securities to repay all current

liabilities. Excess cash holdings would imply underutilization of funds raised through current liabilities, resulting in a wastage of capital.

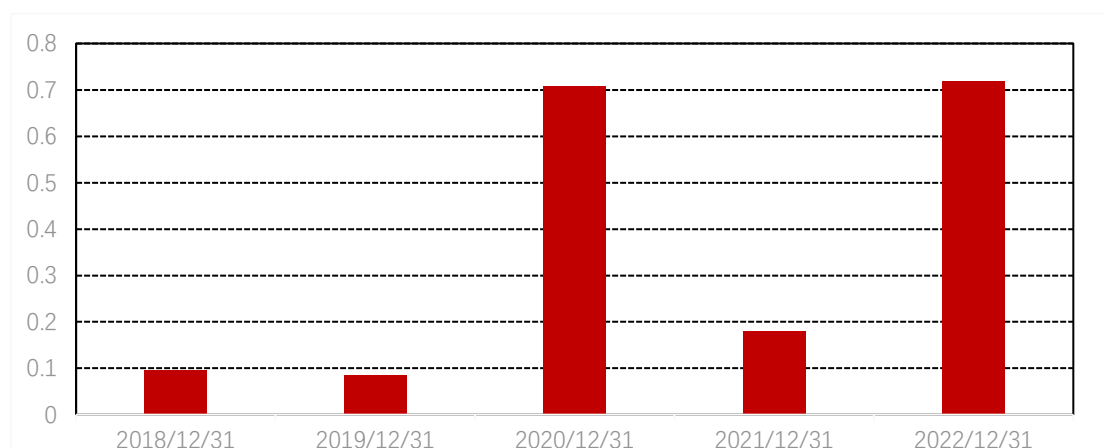


Figure 8: Cash Ratio

Figure 8 Demonstrates the trend of the Cash Ratio, exhibiting a significant initial increase followed by a sharp decline and subsequent recovery.

#### (2) Long-term Solvency Analysis:

The Debt-to-Asset Ratio is computed as the ratio of total liabilities to total assets. This metric illustrates the proportion of total liabilities in the company's total assets, indicating the extent to which the assets provided by creditors constitute the company's overall assets. It also reflects the risk level of creditors providing credit to the company and signifies the company's capability to operate through debt financing. A lower Debt-to-Asset Ratio ensures a more secure ability to repay debts. However, when the ratio exceeds 0.5, creditors' interests might lose protection. Given the substantial differences in the liquidity of different assets, the appropriate Debt-to-Asset Ratio varies depending on the types of assets owned by the company.

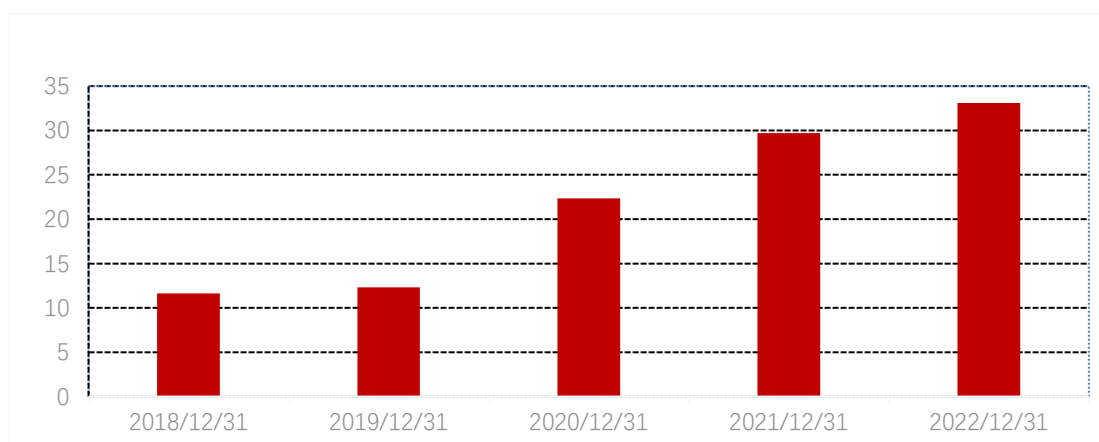


Figure 9: Debt-to-Asset Ratio

Figure 9: Displays the gradual increase in the Debt-to-Asset Ratio, reaching its peak in 2022.

The Equity Ratio is calculated as the ratio of total liabilities to owner's equity, indicating the amount of debt borrowed for each unit of shareholder equity. Generally, this ratio evaluates whether shareholders hold an excessive or adequate amount of equity and reflects the company's level of debt-financed operations. In general, the higher this indicator, the weaker the debt-paying ability. However, this is not an absolute measure and depends on the specific circumstances.

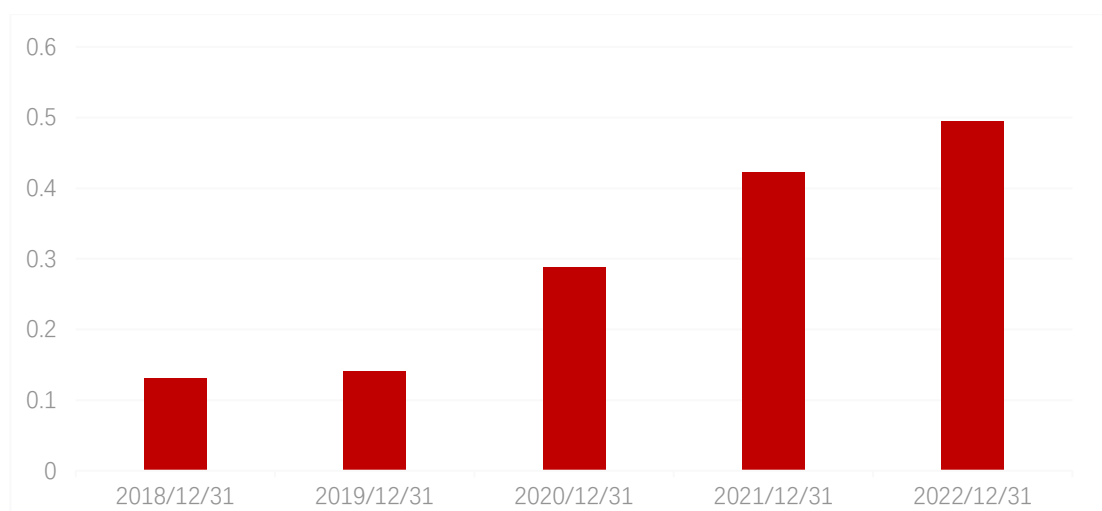


Figure 10: Equity Ratio

Figure 10 Demonstrates the gradual increase in the Equity Ratio, achieving a doubling growth in 2019.

The interest coverage ratio is calculated as the sum of net profit and interest expenses divided by interest expenses. This ratio is used to evaluate a company's ability to repay its debt interest. The interest coverage ratio reflects the number of times the current period's earnings cover the debt interest payments, indicating the risk level of the debt policy. If a company can make interest payments on time, it can sustain long-term liabilities and borrowing new debt becomes easier. Typically, an interest coverage ratio greater than 5 is considered the standard, with a higher ratio indicating more secure interest payments.

Table2: Repayment analysis

Year	2018	2019	2020	2021	2022
Current ratio	1.496	1.892	2.438	6.285	6.406
Quick ratio	1.079	1.327	1.733	4.77	4.868
Cash flow ratio	0.719	0.179	0.708	0.085	0.095
Gearing ratio (%)	33.1	29.7	22.35	12.31	11.61

Analyzing the table 2 provided, we can observe that during the period 2018-2022, the current ratios were 6.406, 6.285, 2.438, 1.829, and 1.496 for each respective year. Ling Pharmaceuticals had relatively low current ratios in 2021 and 2022, indicating weaker short-term debt-paying ability. The proportion of inventory in current assets plays a significant role in liquidity, directly influencing a company's current ratio. The current ratio is an important financial indicator used for analyzing a company's financial health. When the current ratio is greater than 2, it signifies the company's strong ability to meet short-term obligations, demonstrating sufficient current assets to fulfill its short-term debt and ensuring the normal operation of the company. Additionally, it reflects the company's capability in fund management and the degree of control over operational risks.

Ling Pharmaceuticals' quick ratios for the years 2018-2022 were 4.868, 4.770, 1.733, 1.327, and 1.079, respectively, indicating relatively high values. However, there has been a significant decrease in the past two years. Nevertheless, Ling Pharmaceuticals still possesses strong short-term debt-paying ability, which may result in missing out on some profit opportunities. Ling Pharmaceuticals' debt-to-asset ratio has consistently remained below 0.5, which indicates strong debt repayment ability.

and ensures the safety of lenders' loans. On the other hand, it also suggests that the company has limited borrowing capacity for its operations. Therefore, it is not necessarily better for a company to have a lower debt ratio. When the interest rate on borrowing is lower than the profit margin, borrowing for operations can yield better returns.

### 4.3. Growth Capability

The analysis of a company's growth capability aims to illustrate its long-term expansion and future production and operational strength. The main indicators used to evaluate a company's growth capability include:

Table 3: Growth ability analysis

Growth Capacity Indicators	2018	2019	2020	2021	2022
Gross Revenue (billion yuan)	4.815	5.825	8.782	10.12	12.53
Gross Profit (billion yuan)	3.184	3.719	5.664	6.436	7.992
Attributable Net Profit (billion yuan)	0.5992	0.6065	1.219	1.344	2.362
Deducted Net Profit (billion yuan)	0.5691	0.5558	1.165	1.265	2.323

(1) The growth rate of main business refers to the ratio of the difference between the current main business revenue and the previous main business revenue to the previous main business revenue. Companies with growth potential usually have prominent main business operations and relatively single business operations. Therefore, using the indicator of main business revenue growth rate can effectively assess a company's growth potential. A high growth rate of main business revenue indicates a large market demand for the company's products and strong business expansion capability. If a company can maintain a main business revenue growth rate of over 30% for several consecutive years, it can generally be considered as having growth potential.

(2) The growth rate of main profit refers to the ratio of the difference between the current main business profit and the previous main profit to the previous main business profit. Generally, companies with stable growth in main profit and an increasing proportion of main profit to total profit are in a growth phase. Some companies may have a significant increase in total profit during the year, but the main business profit does not correspondingly increase or even decreases significantly. Investing in such companies requires caution as they may have low-quality performance. This situation may indicate significant risks and problems such as high asset management expenses.

(3) The growth rate of net profit refers to the ratio of the difference between the current year's net profit and the previous year's net profit to the previous year's net profit. Net profit is the ultimate result of a company's operational performance. The growth of net profit is a fundamental characteristic of a company's growth potential. A large increase in net profit indicates outstanding operational performance and strong market competitiveness. Conversely, a small or even negative growth rate of net profit suggests a lack of growth potential.

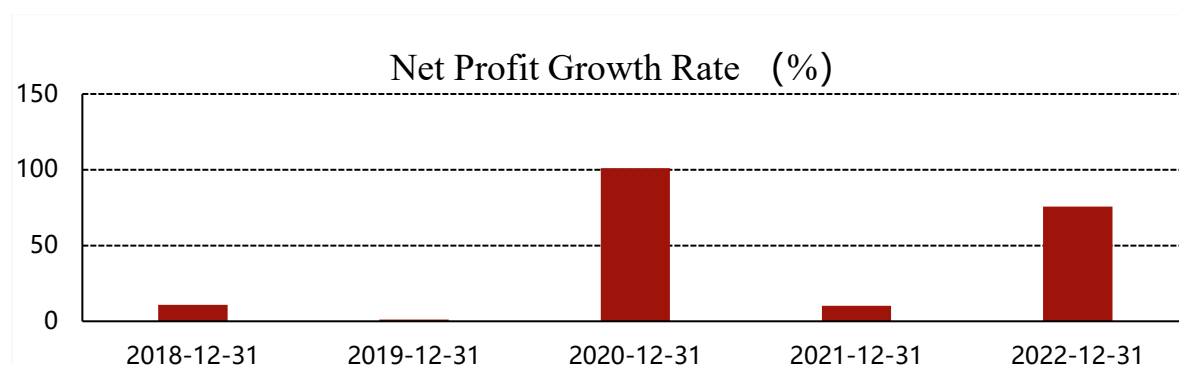


Figure 11: Net Profit Growth Rate

Attributable net profit ratio had a higher proportion in both 2020 and 2022, showing a trend of initial increase, followed by a sharp decrease, and then another increase (See figure 11).

The main reason for the growth in main business is the significant increase in sales revenue of the leading products compared to the same period last year.

In the case of Ling Pharmaceutical, in the two major areas of respiratory system products and cardiovascular products, the market share continues to lead. For instance, in 2022, Ling Pharmaceutical achieved a revenue of 6.872 billion yuan from respiratory system products, with a year-on-year growth of 67.29%, accounting for 54.83% of the total revenue. The 2022 annual report shows that the company's market share of Lianhua Qingwen products is 10.20%, securing the first place in the market.

Lianhua Qingwen continues to occupy an absolute advantage in the cold and respiratory market. From the perspective of medical terminals, in the first half of 2022, Lianhua Qingwen capsules ranked first in sales of over-the-counter cold medicines in public medical markets. From the perspective of retail terminals, in 2022, Lianhua Qingwen capsules ranked first in sales of cold medicines/antipyretic drugs, with its market share increasing from 2.44% in 2017 to 10.20%.

In the field of cardiovascular products, Tongxinluo capsules, Cansong Yangxin capsules, and Qili Qiangxin capsules are the leading products of Ling Pharmaceutical in the cardiovascular and cerebrovascular disease field, covering the most common indications such as ischemic cardiovascular and cerebrovascular diseases, arrhythmias, and heart failure.

Relevant data shows that the concentration of the cardiovascular over-the-counter market has been increasing, with continuous improvement in market share. The three innovative patented Chinese medicines developed and produced by Ling Pharmaceutical, namely Tongxinluo capsules, Cansong Yangxin capsules, and Qili Qiangxin capsules, have achieved a compound growth rate of 10.0% in the past five years. Their market share has continuously increased from 5.79% in 2017 to 6.40% in 2022. Industry insiders pointed out that these three major innovative patented Chinese medicines are expected to achieve high growth in the future, considering the low base.

#### 4.4. Operational Capacity

Indicators reflecting a company's operational capacity include total asset turnover, current asset turnover, inventory turnover, and accounts receivable turnover. The "quick ratio" is an indicator reflecting a company's debt-paying ability, while the "capital accumulation rate" is an indicator reflecting a company's development capability.

Operational capacity mainly refers to the efficiency and effectiveness of a company's operational assets. The efficiency of operational assets mainly refers to the turnover rate or turnover speed of the assets. The effectiveness of operational assets usually refers to the ratio between a company's output and the amount of assets used.



(1) Total asset turnover: The formula for calculating the total asset turnover is sales revenue divided by average total assets. Total asset turnover is an important indicator for comprehensively evaluating the operational quality and utilization efficiency of a company's total assets. It reflects the sales revenue created by a company's unit assets and demonstrates the speed of the circulation of all assets from input to output over a certain period.

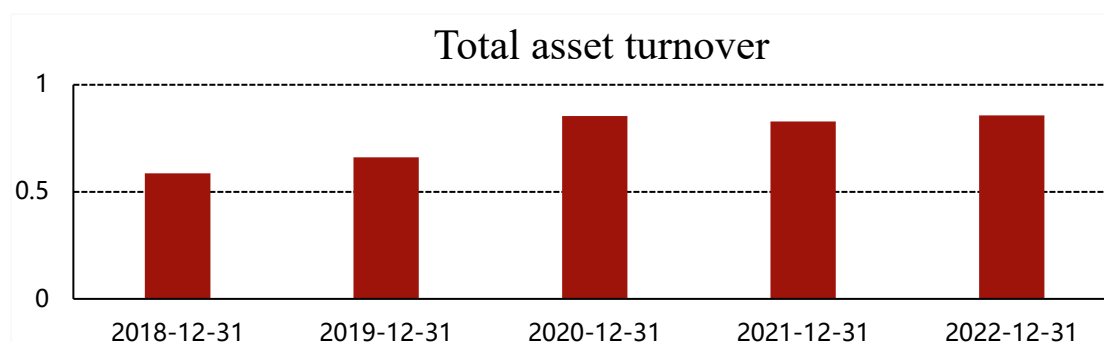


Figure 12: Total asset turnover

The asset turnover ratio has consistently remained above 0.5, fluctuating over the past five years(See figure 12)

(2) The inventory turnover ratio is a comprehensive indicator used to measure and evaluate the management status of various stages, such as purchasing inventory, production input, and sales recovery. It is the ratio obtained by dividing the cost of goods sold by the average inventory, or the number of inventory turnovers. The inventory turnover ratio, expressed in days, is an important indicator for analyzing operational capabilities and widely used in decision-making. The inventory turnover ratio not only measures the efficiency of inventory operations in various stages of production and management but also evaluates the company's performance, reflecting its effectiveness. The quality of the inventory turnover ratio reflects the level of inventory management and affects the company's short-term debt-paying ability, making it an important aspect of overall management. Generally, a faster inventory turnover rate leads to lower inventory levels, stronger liquidity, and quicker conversion of inventory into cash or accounts receivable. Therefore, improving the inventory turnover rate can enhance a company's cash conversion ability.

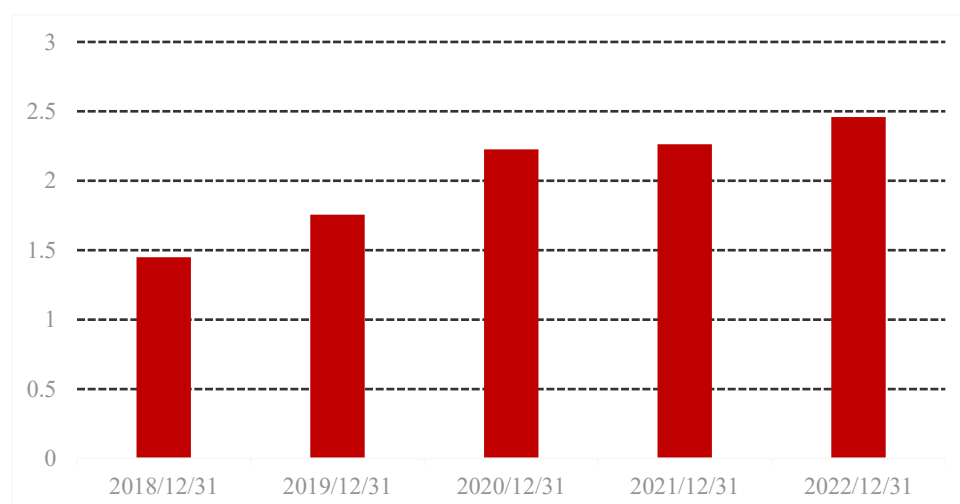


Figure 13: Inventory turnover ratio

From 2018 to 2022, the inventory turnover ratio gradually increased (See figure 13).

(3) The accounts receivable turnover ratio, also known as the number of times accounts receivable are turned over, is an indicator that reflects the speed of accounts receivable turnover. It is calculated by dividing the net sales revenue by the average accounts receivable balance.

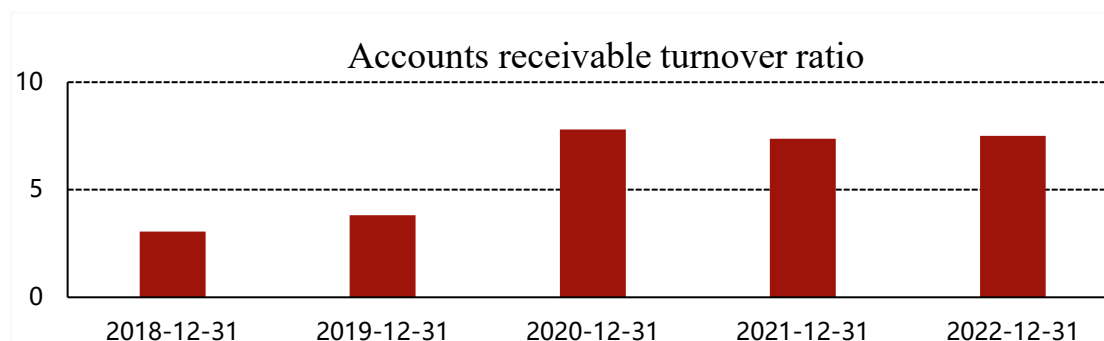


Figure 14: Accounts receivable turnover ratio

In 2019, the accounts receivable turnover ratio doubled and subsequently experienced minor fluctuations (See figure 14).

Table 4: Operational capacity analysis

Year	2018/12/31	2019/12/31	2020/12/31	2021/12/31	2022/12/31
Total assets turnover (times)	0.857	0.829	0.854	0.661	0.586
Accounts receivable turnover (times)	7.51	7.375	7.807	3.815	3.054

The data shows that since 2018, Ying Pharmaceutical's inventory-to-current asset ratio and inventory-to-total asset ratio have been declining, with a greater decrease in the former. This indicates that during this period, Ying Pharmaceutical's asset structure became more robust, with a higher proportion of liquid assets. However, in 2020, the inventory-to-current asset ratio showed an upward trend, indicating the need to further investigate the inventory structure. In 2020, the company's inventory increased by approximately 290 million yuan, a significant growth. Our analysis revealed that the net increase of 256 million yuan in goods sold and 7.89 million yuan in consumable biological assets were important factors contributing to the inventory growth.

Consumable biological assets refer to biological assets held for sale or expected to be harvested as agricultural produce, including growing crops, vegetables, timber, and livestock held for sale. Consumable biological assets are initially measured at cost. The cost of self-cultivated, constructed, bred, or raised consumable biological assets includes necessary expenses directly attributable to the assets before harvesting/selling or storing, including borrowing costs that meet the capitalization criteria. Subsequent expenses, such as management and feeding costs incurred after harvesting and storage, are recognized in the current period's profit or loss.

In the past, Ying Pharmaceutical did not have consumable biological assets in its inventory. The increase in consumable biological assets suggests that Ying Pharmaceutical may be expanding its agricultural business.

## 5. Conclusion

This study explores the investment value assessment of a pharmaceutical listed company. It analyzes data from the past five years, taking into account the macro perspective, strategic development, competitive advantages in the traditional Chinese medicine industry, and the company's own

development status. The analysis focuses on four key financial indicators: profitability, solvency, growth ability, and operational capability. Ultimately, it is concluded that Ying Pharmaceutical possesses competitive strength and innovative products that meet consumer demand, particularly in the traditional Chinese medicine market, where it holds a certain degree of market monopoly power. With the development of an aging society and increased attention to health issues, the pharmaceutical industry is experiencing rapid growth. Ying Pharmaceutical has clear strategic planning and a positive development momentum, leaving ample room for growth. The company should continue to adhere to its "Fourteenth Five-Year Plan" and the 2035 vision, promote the inheritance and innovation of traditional Chinese medicine, and uphold the strategic approach of combining Chinese and Western medicine, complementing each other's advantages. By creating a comprehensive product system, expanding market share, and enhancing innovation and core competitiveness, Ying Pharmaceutical can further advance in the market.

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