

Financial Performance Analysis under the Light Asset Operation Model of Tai Long Pharmaceutical Company

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Abstract: With the rapid development of the pharmaceutical industry and the increasingly fierce competition, the light asset operation model has become a key strategic choice for transforming pharmaceutical companies. This paper takes Tai Long Pharmaceutical as a case study to analyze its CXO light asset operation model and financial characteristics in depth. By employing factor analysis, a comprehensive assessment of its economic performance is conducted, and suggestions aimed at enhancing Tai Long Pharmaceutical's financial performance are proposed based on the analysis results, to help the company maintain a leading position in the fierce market competition.

Keywords: Light Asset Operation, Financial Performance, Factor Analysis.

1. Introduction

Amidst the prevailing wave of globalization and the rapid advancement of technology, the pharmaceutical industry, which is closely related to public health and life safety, is undergoing unprecedented changes. Pharmaceutical companies are facing a multitude of challenges, including the continuous increase in research and development costs, increasingly fierce market competition, and frequent changes in the policy environment. Since 2020, the number of pharmaceutical manufacturing enterprises has grown rapidly; however, the proportion of loss-making companies has also been rising year by year, leading to an intensified degree of industry differentiation. According to statistics, by the end of 2023, the number of pharmaceutical manufacturing enterprises reached 9,412, an increase of 598 compared to the previous year; at the same time, the number of loss-making enterprises stood at 2,325, an increase of 554 compared to the previous year. The transformation of pharmaceutical companies towards a light asset operation model has become a major trend under the current industry pressures. Tai Long Pharmaceutical has implemented a light asset operation model by constructing a full industry chain pharmaceutical research and development CXO service system, providing a full range of services from drug discovery, and development to production.

2. Case Study of Tai Long Pharmaceutical

2.1. Introduction to Tai Long Pharmaceutical

Henan Tai Long Pharmaceutical Co., Ltd. (hereinafter referred to as "Tai Long Pharmaceutical", stock code 600222), established in 1993, is a modern pharmaceutical enterprise integrating scientific research, cultivation, production, and sales. It went public on the Shanghai Stock Exchange in 1999, becoming the first listed company in the Henan pharmaceutical industry. The company's core business encompasses pharmaceutical manufacturing and pharmaceutical research and development services, covering four major areas: drug preparation, traditional Chinese medicine pieces, drug research and development services, and drug material distribution. The company boasts a rich product

portfolio, with a focus on heat-clearing and detoxifying traditional Chinese medicines, such as the Shuanghuanglian series, Shuangjinlian compound preparation, and heat-clearing and detoxifying oral liquid. After years of effort, the company has indirectly invested in and controlled a number of subsidiaries and branches, with business scope extending to various fields including pharmaceutical manufacturing, drug research and development, and capital operations.

2.2. Analysis of Tai Long Pharmaceutical's CXO Light Asset Operation Model Layout

The research and development of new drugs, characterized by high risk, long cycle, and high cost, often leads pharmaceutical companies to outsource non-core R&D and production to CXO companies. CXO covers the entire chain of drug research and development, production, and sales, with the main market divided into CRO (research and development outsourcing) and CMO/CDMO (production outsourcing). In terms of segments, preclinical CRO, clinical CRO, and laboratory are light asset operation models, while CMO and factory CMO/CDMO require a substantial initial investment and ongoing capital input for capacity expansion. Tai Long Pharmaceutical, however, has achieved a full-chain light asset operation model.

Tai Long Pharmaceutical began to implement the CRO strategy in 2014 by acquiring and cooperating to build a complete industry chain service system. The specific steps are as follows: In 2014, Tai Long Pharmaceutical acquired Tongjun Hall and Xin Lingxian, opening up the sales chain and expanding the CRO business; in 2015, Xin Lingxian's subsidiary, Deep Blue Sea, started the CRO business to provide clinical trials and related services; from 2016 to 2020, Tai Long Pharmaceutical cooperated with several well-known universities and technology companies to introduce high-end talents; in 2021, Xin Lingxian formed a CXO system and completed the equipment commissioning of small molecule CDMO. Xin Lingxian adhered to the light asset operation model and established an MAH company to utilize the existing production capacity and layout in the CDMO field. Deep Blue Sea participated in the establishment of a light asset operation model, Pan Rui Pharmaceutical, to carry out small molecule CDMO business; in 2022, the company accelerated the construction of diversified drug research and

development technology and research branches in various places; in 2023, Tai Long Pharmaceutical accelerated the creation of a full industry chain CXO service system through investment and cooperation, and increased independent project initiation to expand its product reserves and enhance the overall strength of the CXO system.

Tai Long Pharmaceutical, relying on government park planning, has expanded its research and development platform capacity in Zhengzhou through investment and incubation, and co-built a research institute with Chongqing Yongchuan District. The company has collaborated with universities such as China Pharmaceutical University to establish laboratories and has co-built technical platforms with companies like Shimadzu and Thermo Fisher, forming a high-level technical team and joint laboratories, gathering top R&D talents, and mastering core technologies. Through these measures, the company has rapidly absorbed innovative technologies, introduced cutting-edge products, and developed new markets, making full use of external resources to implement a light asset model for rapid expansion.

2.3. Financial Characteristics of Tai Long Pharmaceutical's Light Asset Operation Modell

2.3.1. Low Proportion of Fixed Assets

The proportion of fixed assets is an important criterion for judging whether a company adopts a light asset operation model. Generally speaking, if the proportion of fixed assets to total assets is less than 30%, the enterprise is considered to be using a light asset operation model. As shown in Figure 1, the proportion of fixed assets of Tai Long Pharmaceutical shows a downward trend: in 2014, the proportion of fixed assets to total assets was 28.98%, it rapidly decreased to below 20% in 2018 and has stabilized at around 14% in the last four years. This trend indicates that Tai Long Pharmaceutical has gradually reduced the investment in factory buildings and equipment and other fixed assets during the transition to a light asset operation model, and has divested some low-value-added heavy assets, thereby making the overall enterprise assets lighter.

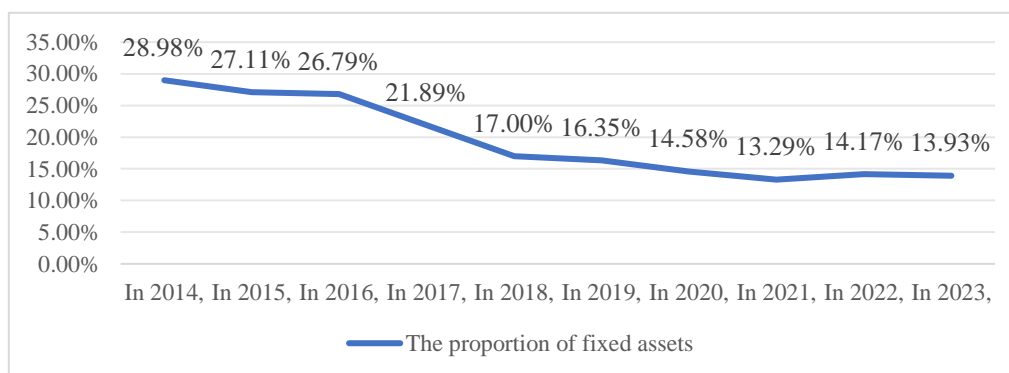


Figure 1. The proportion of fixed assets in the total assets of Tailong Pharmaceutical from 2014 to 2023

2.3.2. High Proportion of R&D Investment

Under the light asset operation model, companies tend to allocate more resources to high-value-added research and development and sales segments, reducing production costs and increasing R&D investment. By outsourcing and other means, they divest low-value-added segments. This allows companies to focus on research and development and technology transformation, achieving specialized development and strengthening internal core competitiveness. As shown in Table 1, Tai Long Pharmaceutical places great emphasis on pharmaceutical research and development services and highlights innovation-driven development. The company's R&D investment increased from 22.617 million yuan in 2014 to 132.753 million yuan in 2023, an increase of 110.136 million yuan, with a growth rate of 487%. The

proportion of R&D investment to operating income has also been rising year by year. To support the conduct of R&D activities, the company has increased its efforts to cultivate scientific research talents and has introduced a large number of high-end technical talents. In 2022, the number of R&D personnel increased by 359 compared to the previous year, a year-on-year growth of 76%. This was mainly due to the introduction of high-end technical talents by Xin Lingxian, a subsidiary of Tai Long Pharmaceutical, to strengthen the layout in the fields of high-end formulations and innovative drugs. At the same time, personnel were added to research institutes in Hangzhou, Chongqing, Zhengzhou, and other places to enhance pharmaceutical R&D service capabilities. It is evident that Tai Long Pharmaceutical's emphasis on R&D is increasingly strengthening.

Table 1. R & D investment and R & D personnel of Tailong Pharmaceutical in 2014-2023 Unit: ten thousand yuan

fiscal year	R&D expenditure	R&D expenditure as a percentage of operating revenue (%)	R&D personnel	The proportion of R&D personnel in the total number of employees (%)
2014	2261.7	1.80	172	10.47
2015	1630.7	1.60	197	15.00
2016	3956.0	4.15	222	15.00
2017	4355.3	3.73	233	13.91
2018	4121.1	3.45	431	23.72
2019	5955.7	4.54	490	22.60
2020	6380.4	4.50	339	17.31
2021	5692.0	3.55	473	21.41
2022	12,472.6	6.36	832	31.30
2023	13,275.3	6.41	772	32.81

2.3.3. High Proportion of Current Liabilities

Light asset operation models often place a high emphasis on capital turnover efficiency, supporting the continuous operation and expansion of the company by accelerating the recovery of funds. Such enterprises tend to meet their capital needs through short-term financing, leading to a high proportion of current liabilities in total liabilities. As shown in Figure 2, from 2014 to 2023, the proportion of current liabilities of Tai Long Pharmaceutical experienced significant fluctuations, with an overall upward trend, maintaining above 80% in the last four years. A noticeable decline in the proportion of current liabilities between 2015 and 2016 was

mainly due to the company's active adjustment of its financing structure, controlling financial risks, converting some short-term borrowings into long-term borrowings, and optimizing the debt structure. The significant decrease in 2019 was due to the company's efforts to accelerate business expansion, strengthen technology research and development, and market promotion, which required substantial funding support, leading to an increase in the proportion of current liabilities. In summary, Tai Long Pharmaceutical mainly relies on current liabilities, among which the proportion of non-interest-bearing liabilities in current liabilities is relatively high, resulting in relatively lower pressure to repay interest.

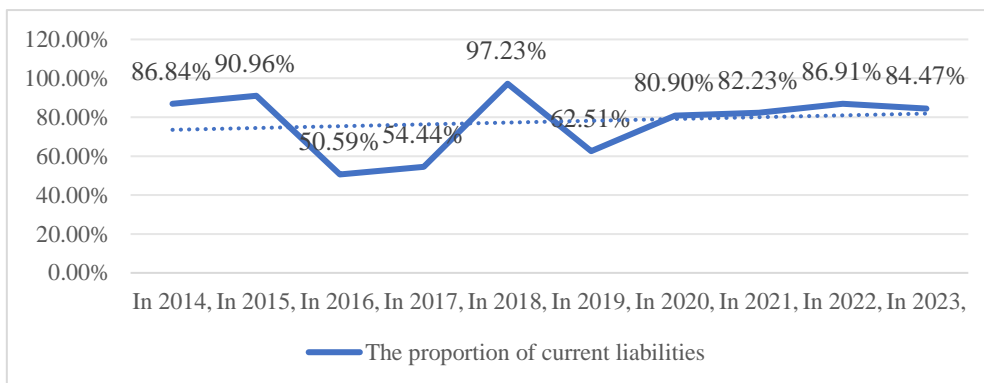


Figure 2. Proportion of current assets of Tailong Pharmaceutical from 2014 to 2023

3. Financial Performance Analysis under the Light Asset Operation Model of Tai Long Pharmaceutical

3.1. Data Sources and Indicator Selection

To systematically evaluate the effectiveness of Tai Long Pharmaceutical's implementation of a light asset operation model, this paper selects financial data of Tai Long Pharmaceutical from 2014 to 2023 and uses factor analysis to analyze the company's financial performance during this period. The data for this article is sourced from Eastmoney Choice.

Starting from four dimensions—profitability, growth capability, debt-paying ability, and operational capability—the paper selects eight indicators to construct a financial performance evaluation system. These indicators are based on the "Enterprise Comprehensive Performance Evaluation Implementation Guidelines" and relevant literature, adhering to the principles of objectivity, comparability, systematicity, scientificity, and operability. The chosen indicators include return on equity (X1), return on total assets (X2), operating profit growth rate (X3), net profit attributable to shareholders of the parent company growth rate (X4), debt to asset ratio (X5), equity multiplier (X6), fixed asset turnover rate (X7), and current asset turnover rate (X8).

Table 2. Financial performance evaluation indicators of Tilong Pharmaceutical

Evaluation content	name of index	symbolic representation
profitability	Return on equity	X1
	Return on total assets	X2
Growth ability	Operating profit growth rate	X3
	Net profit attributable to shareholders of the parent company growth rate	X4
debt paying ability	Debt to asset ratio	X5
	Equity multiplier	X6
operation capacity	Fixed asset turnover rate	X7
	Current asset turnover rate	X8

3.2. Factor Analysis

3.2.1. Sample Data Processing

Before conducting factor analysis, the collected data were standardized using IBM SPSS Statistics 27.0 software. The Z-score standardization method was employed to eliminate differences in dimensions, and descriptive statistics and correlation analysis were performed on the raw data.

From the correlation matrix in Table 3, it can be seen that the correlation between Return on Equity (X1) and the growth rate of net profit attributable to shareholders of the parent company (X4) reaches 0.989, and the correlation between Fixed Asset Turnover Rate (X6) and Equity Multiplier (X7) reaches 0.933, indicating that there is a strong positive correlation between the various indicators.

Table 3. Correlation matrix

		Return on equity	Return on total assets	Operating profit growth rate	Net profit attributable to shareholders of the parent company growth rate	Current asset turnover rate	Fixed asset turnover rate	Equity multiplier	Debt to asset ratio
rel ati vit y	Return on equity	1	0.96	0.868	0.959	0.174	0.031	-0.067	-0.071
	Return on total assets	0.96	1	0.818	0.908	0.106	-0.139	-0.194	-0.189
	Operating profit growth rate	0.868	0.818	1	0.936	0.101	-0.049	-0.21	-0.217
	Net profit attributable to shareholders of the parent company growth rate	0.959	0.908	0.936	1	0.098	-0.049	-0.194	-0.205
	Current asset turnover rate	0.174	0.106	0.101	0.098	1	0.714	0.555	0.551
	Fixed asset turnover rate	0.031	-0.139	-0.049	-0.049	0.714	1	0.933	0.921
	Equity multiplier	-0.067	-0.194	-0.21	-0.194	0.555	0.933	1	0.998
	Debt to asset ratio	-0.071	-0.189	-0.217	-0.205	0.551	0.921	0.998	1

Data source: Calculate and draw by using IBM SPSS Statistics 27.0 software (the same as below)

3.2.2. Applicability Test

When employing factor analysis for dimensionality reduction, it is essential to ensure the authenticity and validity of the data, and that the selected indicators possess a certain degree of linear relationship, making them suitable for factor analysis. Therefore, KMO and Bartlett's test of sphericity is conducted on the standardized data to measure the dispersion of the data and the extent of correlation among variables. According to Kaiser's criterion for risk assessment, a KMO value greater than 0.5 and a significance level below 0.05 indicate that the data set is appropriate for factor analysis. The test results for the sample data are shown in Table 4, with a KMO value of 0.657, which is greater than 0.5, and the significance in Bartlett's test of sphericity is 0, which is less than 0.05. This indicates that the selected sample data meets the criteria for factor analysis.

Table 4. KMO and Bartlett tests

Number of KMO sampling suitability		0.657
Bartlett sphericity test	Approximate chi-square	101.541
	free degree	28.000
	conspicuousness	0.000

3.2.3. Common Factor Extraction and Total Variance Explained

Using the principal component analysis method, common factors are extracted. From the total variance explained table in Table 5, it can be seen that the initial eigenvalues for Component 1 and Component 2 are 3.952 and 3.217, respectively, both of which are greater than 1. The cumulative variance contribution rate is 89.609%, which exceeds 80%, indicating a high level of explanation. This suggests that the two factors can reflect 89.609% of the overall information and possess certain representativeness. Observing the scree plot (Figure 3), it is noted that the eigenvalues for Component 1 and Component 2 are relatively high. At Component 3, the eigenvalue drops rapidly to between 0 and 1, and the curve becomes flat at this point. This confirms that selecting Component 1 and Component 2 as common factors is appropriate.

Table 5. Total variance interpretation

ingredient	Initial eigenvalue			The sum of the load squares was extracted			The sum of the rotating load squares		
	amount to	variance percentage (%)	accumulative (%)	amount to	variance percentage (%)	accumulative (%)	amount to	variance percentage (%)	accumulative (%)
1	3.952	49.395	49.395	3.952	49.395	49.395	3.795	47.434	47.434
2	3.217	40.215	89.609	3.217	40.215	89.609	3.374	42.176	89.609
3	0.514	6.424	96.033						
4	0.234	2.919	98.952						
5	0.061	0.768	99.72						
6	0.012	0.156	99.876						
7	0.009	0.113	99.989						
8	0.001	0.011	100						

Extraction method: principal component analysis method

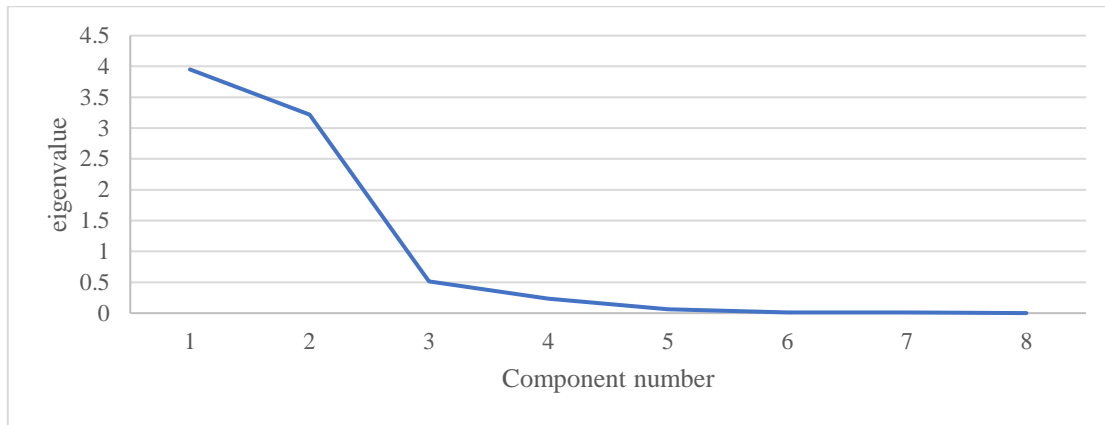


Figure 3. Scree plot

3.2.4. Factor Rotation and Naming of Common Factors

Factor rotation is performed to enhance the interpretability of the factors. Through rotation, the factor loadings can be made clearer, and by examining the factor loading matrix, it is possible to determine which variables are highly related to which factors. In this paper, principal component analysis is used to extract common factors, and the Kaiser normalization maximum variance method is adopted for factor rotation. The two extracted factors are denoted as F1 and F2.

From Table 6, it can be seen that Component 1 has larger factor loadings on four variables: Return on Equity (X1), Return on Total Assets (X2), Operating Profit Growth Rate (X3), and Net Profit Attributable to Shareholders of the Parent Company Growth Rate (X4), with loadings of 0.981, 0.952, 0.937, and 0.983, respectively. Return on Equity and Return on Total Assets reflect the company's profitability, while the Operating Profit Growth Rate and Net Profit Attributable to Shareholders of the Parent Company Growth Rate reflect the company's growth capabilities. Therefore, Component 1 is named F1, Profitability and Growth Capability Factor. Component 2 has larger factor loadings on four variables: Debt to Asset Ratio (X5), Equity Multiplier (X6), Fixed Asset Turnover Rate (X7), and Current Asset Turnover Rate (X8), with loadings of 0.953, 0.957, 0.979, and 0.759, respectively. Debt Asset Ratio and Equity Multiplier reflect the company's debt-paying ability, while Fixed Asset Turnover Rate and Current Asset Turnover Rate reflect the company's operational capability. Thus, Component 2 is named F2, Debt-Paying and Operational Capability Factor.

Table 6. Composition matrix after the rotation

	ingredient	
	F1	F2
Return on equity	0.981	0.064
Return on total assets	0.952	-0.073
Operating profit growth rate	0.937	-0.063
Net profit attributable to shareholders of the parent company growth rate	0.983	-0.052
Debt to asset ratio	-0.159	0.953
Equity multiplier	-0.154	0.957
Fixed asset turnover rate	-0.022	0.979
Current asset turnover rate	0.180	0.759

Extraction method: principal component analysis method
 Rotation method: Caesar normal maximum variance

method

The rotation has converged after 3 iterations.

3.2.5. Calculation of Factor Scores and Ranking

Using IBM SPSS 27.0 software to perform factor analysis on the financial data of Tai Long Pharmaceutical, the factor scores coefficient matrix as shown in Table 7 is obtained. Based on Table 7, the scoring functions for F1 (Profitability and Growth Capability Factor) and F2 (Debt-Paying and Operational Capability Factor) can be calculated. The specific formulas are as follows:

$$F1=262X1+0.251X2+0.247X3+0.260X4-0.020X5-0.018X6+0.017X7+0.066X8$$

$$F2=0.042X1+0.001X2+0.00X3+0.008X4+0.281X5+0.282X6+0.292X7+0.231X8$$

Table 7. The component score coefficient matrix

	ingredient	
	F1	F2
Return on equity	0.262	0.042
Return on total assets	0.251	0.001
Operating profit growth rate	0.247	0.003
Net profit attributable to shareholders of the parent company growth rate	0.260	0.008
Debt to asset ratio	-0.020	0.281
Equity multiplier	-0.018	0.282
Fixed asset turnover rate	0.017	0.292
Current asset turnover rate	0.066	0.231

Extraction method: principal component analysis method
 Rotation method: Caesar normal maximum variance method

Component score.

Based on the calculated F1 and F2 factor scores and factor scores, the comprehensive score function F of Tailong Pharmaceutical can be calculated, which is calculated as follows:

$$F=(47.434F1+47.434F2)/89.609$$

According to this model, the factor scores and ranking of each financial index of Tailong Pharmaceutical from 2014 to 2023 can be calculated, as shown in Table 8.

Table 8. The financial performance score ranking of Tailong Pharmaceutical from 2014 to 2023

a particular year	F1	ranking	F2	ranking	F	ranking
2014	0.78	1	-0.16	6	0.34	5
2015	0.02	8	-1.36	9	-0.63	9
2016	0.37	5	-1.40	10	-0.46	8
2017	0.40	4	-0.78	8	-0.16	7
2018	-2.37	10	-0.40	7	-1.44	10
2019	0.75	2	0.20	5	0.49	2
2020	0.31	6	0.65	3	0.47	3
2021	0.18	7	0.56	4	0.36	4
2022	-1.14	9	1.26	2	-0.01	6
2023	0.70	3	1.43	1	1.05	1

4. Evaluation and Analysis of Financial Performance under the Light Asset Operation Model of Tai Long Pharmaceutical

4.1. F-value Analysis

As shown in Table 8, the F-values for Tai Long Pharmaceutical from 2014 to 2018 are relatively low, and for the years 2015 to 2018, the F-values are negative, indicating poor operating conditions and financial health that should not be overlooked. From 2019 to 2023, the F-values are higher, with only the year 2022 showing an F-value of -0.01. The overall upward trend suggests that after adjusting the operation model, the financial performance has improved, demonstrating that the implementation of the light asset operation model has effectively enhanced the financial performance of Tai Long Pharmaceutical and has had a positive impact.

4.2. Profitability and Growth Capability Factor Analysis

Starting from 2014, the profitability and growth capability factor scores of Tai Long Pharmaceutical generally show a trend of initial decline followed by an upward trend, with volatility. A significant drop occurred in 2018, reaching the lowest point. According to Tai Long Pharmaceutical's financial annual report (as shown in Figure 4), the net profit

margin was too low, reaching -9.66% in 2018. The complete suspension of operations at its subsidiary Heluo Tai Long and the provision for a large number of impairment losses in 2018 were the main reasons for the sharp decline in the net profit margin that year. This one-time loss had a negative impact on the financial performance for that period. In the following years, as Tai Long Pharmaceutical vigorously promoted the transformation to a light asset model, the company relied more on external resources and technology to drive development, rather than through internal investment and expansion of production facilities. This strategic shift led Tai Long Pharmaceutical to increase R&D investment and sales expenses. However, the progress in R&D services was not smooth, leading to increased costs in the short term and a pessimistic outlook for profitability. At the same time, since 2018, the national policy of centralized drug procurement and drug bidding price limits has affected the profitability of the pharmaceutical industry, with the return on equity in the industry continuously declining, and Tai Long Pharmaceutical's return on equity was also affected.

As shown in Figure 4, the growth rate of Tai Long Pharmaceutical's operating income suddenly declined in 2018, due to the substantial losses incurred that year. Despite this, the company still achieved positive growth in operating income. In the following years, Tai Long Pharmaceutical increased R&D investment and production costs, but the overall trend still showed an upward trend in operating income.

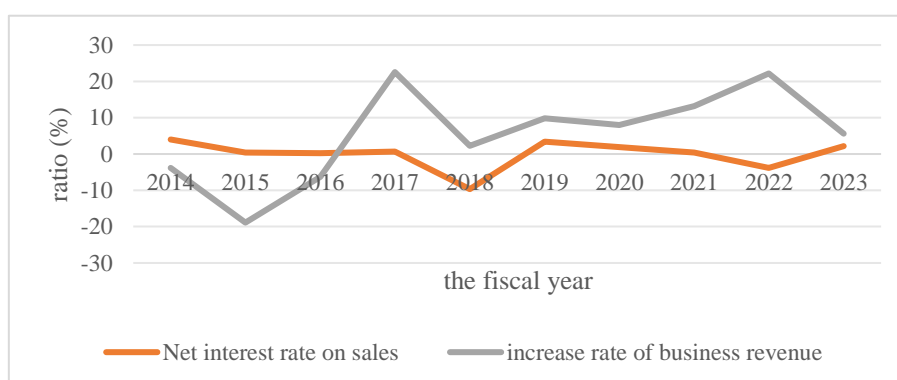


Figure 4. Net sales interest rate and operating revenue growth rate of Tailong Pharmaceutical from 2014-2023

4.3. Analysis of Debt-Paying and Operational Capability Factor

As shown in Table 9, from 2014 to 2023, Tai Long Pharmaceutical's debt-to-asset ratio and equity multiplier experienced a slight increase, primarily due to changes in the company's operational model and its subsidiaries' focus on traditional Chinese medicine R&D and expansion of sales

networks, which required substantial debt funding to keep pace with the current industry development. The company's short-term liabilities mainly consist of accounts payable and short-term loans, which typically have lower interest rates or no interest, helping to alleviate the company's financial pressure, and it is expected that Tai Long Pharmaceutical will enhance its debt-paying ability in the future. Figure 5 indicates that the company's total asset turnover ratio is

relatively low, affecting the liquidity of funds and having a negative impact on the company's operational capability. In 2018, at the initial stage of the light asset operation model, the company took a series of measures, including adjusting product portfolios and pricing strategies, and made

adjustments to the operational strategies of its newly controlled subsidiaries, which led to operational disruptions and significant losses. In 2019, Tai Long Pharmaceutical gradually promoted the CXO layout, increasing capital investment and affecting the total asset turnover ratio.

Table 9. Asset-liability ratio and equity multiplier of Tailong Pharmaceutical from 2014 to 2023

a particular year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
asset-liability ratio (%)	48.24	43.20	43.42	46.29	50.93	52.11	54.84	53.02	55.17	54.61
equity multiplier	1.93	1.76	1.77	1.86	2.04	2.09	2.21	2.13	2.23	2.20

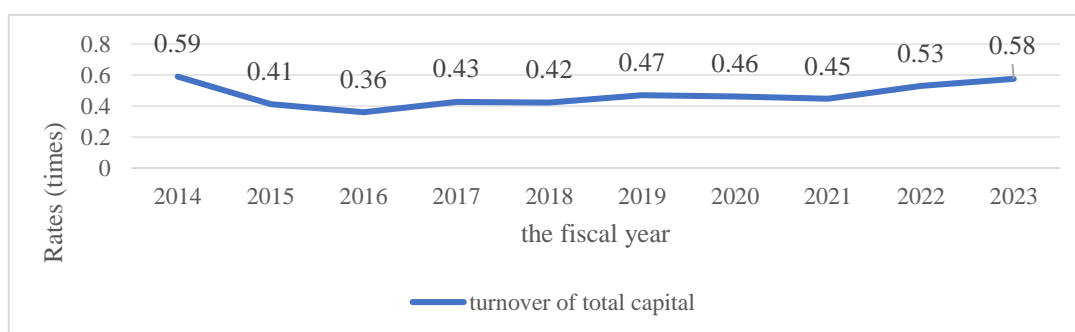


Figure 5. Total asset turnover ratio of Tailong Pharmaceutical from 2014 to 2023

5. Suggestions and Countermeasures

5.1. Strengthen Brand Building to Enhance Core Competitiveness

In the study of Tai Long Pharmaceutical's profitability and growth capabilities, it was found that the company's return on equity and return on total assets fluctuate significantly and are below the industry average, posing challenges in cost control and indicating a need to improve profitability. The growth rate of operating income shows a positive upward trend, indicating progress in market expansion and product sales, thus enhancing growth capabilities. However, indicators such as profit growth rate are negatively affected to some extent. Tai Long Pharmaceutical should focus on strengthening brand building to increase brand value and, consequently, improve profitability. A company with strong brand influence can not only attract new customers but also maintain and increase sales through customer loyalty, forming a virtuous cycle between brand strength and sales growth. Tai Long Pharmaceutical should seize the opportunities of internet development and digital transformation to expand online sales channels, such as adopting O2O and B2C models, to explore new markets and increase profits. The company can also spread its corporate culture and enhance its visibility by participating in public welfare activities and adopting brand strategies appropriate for the industry to shape a model corporate image. By integrating corporate culture and its essence into brand promotion, the company can highlight its unique features. At the same time, a diversified research and development strategy should be adopted, which includes not only independent research and development but also cooperative research and development, the introduction of advanced technologies, and other methods to rapidly enhance its R&D capabilities. Reducing reliance on a single product line and offering a variety of products to meet a broader range of consumer needs will continuously improve core competitiveness and, thereby, strengthen profitability.

5.2. Optimize Operational Capability and Enhance Liquidity Level

In the study of Tai Long Pharmaceutical's operational capability, it was found that the company's fixed asset turnover rate and current asset turnover rate have been continuously improving, exceeding the industry average in the past two years, and are generally in a medium position in the industry. Due to the growth of the global pharmaceutical market and the increase in generic drug companies, Tai Long Pharmaceutical's subsidiary, Xin Lingxian, has turned to the field of high-end complex preparations and improved new drugs and a large amount of investment has led to a low total asset turnover rate, affecting operational efficiency. Therefore, Tai Long Pharmaceutical needs to plan resources reasonably and focus on R&D and sales links with CXO business as the center to implement lean production, reduce costs, and increase profits. Mergers and acquisitions and other cooperative activities should be planned according to strategic goals, pay attention to the efficiency of fund use, and avoid excessive debt or waste. The company should strengthen internal management and optimize business processes to improve operational efficiency and benefits through effective resource allocation and process arrangements. At the same time, it is necessary to maintain sensitivity to market and industry dynamics and adjust corporate strategies in a timely manner to adapt to the constantly changing market environment.

5.3. Expand Financing Channels and Optimize Debt Structure

The study on Tai Long Pharmaceutical's debt-paying ability reveals that the company's debt-to-asset ratio is significantly higher than the industry average and has shown an upward trend, reaching 54.61% in 2023. The company faces considerable debt repayment pressure. Under a light asset operation model, enterprises typically rely on a higher proportion of current liabilities to maintain daily operations. However, an excessively high debt ratio may put pressure on

the company's financial condition. Tai Long Pharmaceutical's debt structure indicates that bank loans account for a large proportion and the financing channels are relatively singular. To reduce financial risks, the company could consider expanding its financing channels, such as introducing equity financing, asset securitization (e.g., REITs), and employee stock ownership plans. The company should also increase internal financing by improving retained earnings to reduce the need for external financing. In addition, Tai Long Pharmaceutical needs to optimize its debt structure by balancing the ratio of short-term and long-term debt. The company could alleviate short-term debt repayment pressure and enhance liquidity and financial stability by extending debt repayment terms, reducing debt interest rates, or restructuring debt.

6. Conclusion

This study provides an in-depth analysis of the light asset operation model adopted by Tai Long Pharmaceutical. By employing factor analysis, an assessment model was constructed to evaluate the company's financial performance from 2014 to 2023. The results indicate that Tai Long Pharmaceutical's financial performance has shown an overall upward trend, with significant enhancements in growth capability and operational efficiency. However, profitability and debt-paying ability remain relatively weak, suggesting that the company needs to further strengthen brand building to consolidate and enhance its core competitiveness. It is also necessary to optimize operational efficiency, improve capital

liquidity, expand funding sources, and amend the debt structure.

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