

# Evaluation of Financial Performance of Asset-Light Operation Mode: A Case Study

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## Abstract

The pharmaceutical industry is a core industry related to the national economy and people's livelihood, and has a very large development potential. The rapid development of China's national economy and the increasing improvement of people's living standards, in the face of the ever-changing external environment, how to grasp the opportunity to seize the trend of the times to meet greater challenges, is a problem that all pharmaceutical companies need to think about. Asset-light operation mode emphasizes research and development as the guide, attaches importance to product innovation, brand building, market development, marketing system construction, fully integrates internal and external resources, improves the efficiency of the use of resources, so that the enterprise is always in a favorable position in the market competition. Hengrui Medicine has been developing rapidly in recent years, with good financial data, which relies on the asset-light operation mode. Therefore, this paper chooses Hengrui Medicine as the case study object, expounds the concept and relevant theories of asset-light operation mode, summarizes the financial characteristics and performance of the enterprise adopting the asset-light operation mode, and finally compares and analyzes the impact of the asset-light operation mode on the financial performance of the enterprise, so as to bring some experiential enlightenment for the transformation of the pharmaceutical industry's asset-light mode.

## Keywords

Asset-Light Operation Mode; Financial Performance; Pharmaceutical Enterprises.

## 1. Introduction

With the in-depth promotion of China's health care reform and the introduction of relevant health care policies, the Chinese government is paying more and more attention to the development of the pharmaceutical industry, the market demand for pharmaceutical enterprises is also expanding, many pharmaceutical manufacturing enterprises will usher in a new round of development opportunities. However, to grasp the opportunity at the same time will also face new challenges: the implementation of the new health care reform policy so that some foreign pharmaceutical industry giants to enter the market in China, and rapidly intensified the competition between the domestic pharmaceutical enterprises. Due to the late start of China's pharmaceutical manufacturing industry, the early accumulation of technology is insufficient, the industry's overall innovation capacity is weak. Coupled with the emergence of various unstable strains of viruses in recent years, more testing of the technical research and development capabilities of pharmaceutical companies. Therefore, in the current unpredictable international economic environment, how to enhance the core competitiveness of pharmaceutical enterprises, and constantly improve the level of profitability, will become a common problem faced by the entire pharmaceutical industry.

Asset-light operation mode is a more focused on technology research and development, brand building to improve the core competitiveness of the development model. Compared with the

traditional asset-heavy model, enterprises are able to save more manpower and material resources and focus their capital on their core business, thus improving their profitability. This topic will take Hengrui Medicine as the research object, through the comparative analysis of its financial performance changes under the asset-light operation mode, study the financial characteristics of Hengrui Medicine's implementation of the asset-light operation mode, summarize the experience of this operation process, and provide suggestions for the subsequent transformation of other pharmaceutical enterprises to asset-light.

## 2. Basic Theory of Asset-Light Operation Model

### 2.1. Connotation of Asset-Light

The concept of "asset-light" was first proposed by the American management company McKinsey and Company, and has been constantly supplemented and restated by scholars. Asset-light focus on "light", it is relative to the traditional heavy asset model, the heavy asset model refers to the enterprise to increase the investment in plant, production equipment and other tangible assets, through the expansion of production scale to obtain profits. In other words, the intangible assets owned by the enterprise can be considered as light assets, including the management experience accumulated by the enterprise, good brand image, irreplaceable patented technology, friendly customer relationship, etc. The light assets form is more light and flexible, and the occupied capital is also relatively small.

### 2.2. Connotation of Asset-Light Operation Mode

Simply put, the asset-light operation mode is a development strategy of the enterprise, which reduces the investment in fixed assets such as production equipment and puts the capital into more efficient non-physical resources in order to create greater profits and value. Compared with the heavy asset model, asset-light operation focuses more on the efficiency of resource use rather than the possession of assets. Enterprises can obtain the right to use assets for production by means of leasing, which can not only guarantee that enterprises have sufficient operating cash flow, but also make the utilization of resources more flexible. Enterprises can also outsource production processes that do not match inputs and outputs or those that are more difficult to manage, reduce investment in heavy assets and energy consumption, and invest limited resources in higher value-added processes to maximize enterprise value.

### 2.3. Relevant Theoretical Foundations

#### 2.3.1. Smile Curve Theory

The "Smile Curve" theory was first proposed by the founder of Acer Group, Mr. Shi Zhenrong, and its shape is high at both ends and low in the middle. Enterprises engaged in technology research and development or brand marketing and after-sales service at the two ends of the curve are able to obtain higher profits, while the manufacturing link in the middle creates lower value for the enterprise. Nowadays, along with the increasing number of labor-intensive enterprises and the gradual increase in the development level of social productivity, enterprises mainly engaged in assembly and manufacturing are making less and less profit. In order to continue to operate, enterprises must accelerate the upgrading of the industrial chain and shift the center of gravity of development to the high value-added areas at both ends. The "Smile Curve" theory provides the basis and motivation for an enterprise's asset-light operation mode. Both emphasize that enterprises should extend from the production and manufacturing area to the R&D and sales area, invest limited resources in high value-added areas, and divest low-value, low-technology, and low-profit-making intermediate links from the enterprise, so as to pry high returns with low inputs, and promote better development of the enterprise.

### 2.3.2. Division of Labor Theory

The theory of division of labor was firstly put forward by Adam Smith in "The Wealth of Nations", Adam Smith took factory workers as an example, and comprehensively and systematically elaborated how the division of labor improves social labor productivity and enhances national wealth. The division of labor theory is the theoretical basis of the asset-light operation mode, which emphasizes that different jobs should be entrusted to different professionals, and that the efficiency of the whole collective will be greatly improved when each employee is assigned to his or her best position. In the asset-light operation mode, the enterprise will outsource the production, assembly and other non-core links to other suppliers, leaving the core business, through this division of labor and cooperation, can effectively improve the operational efficiency of the enterprise, to create more economic benefits.

## 3. Financial Characteristics of Hengrui Medicine's Asset-Light Operation Mode

As a leading enterprise in China's pharmaceutical industry, Hengrui Medicine has always been value-oriented and used an asset-light operation mode, which has been effective in technology research and development, marketing layout, brand building and other aspects. After about 50 years of development, Hengrui Medicine's asset-light operation mode has presented obvious financial characteristics.

### 3.1. Liquid Assets with Sufficient Cash Flow

As can be seen from Table 1, during the period from 2018 to 2022, the current assets and total assets of Hengrui Medicine have been expanding year by year, and the current assets occupy a very large proportion of total assets, except for the fluctuations in the last two years, the current assets of Hengrui Medicine accounted for basically maintained at about 80%, which is much higher than the industry's average value. Secondly, from the internal structure of current assets, in the past five years, Hengrui Medicine's money funds accounted for an average value of 35.33%, of which the ratio of money funds in current assets in 2022 is 48.85%, while the inventory accounted for less than 8%. It can be seen that Hengrui Medicine, when utilizing the asset-light model, has stronger liquidity of assets and more sufficient cash reserves in daily operating activities.

**Table 1.** Current assets of Hengrui Medicine (Unit: billions of yuan)

Year	Cash and cash equivalents	Current assets	Total assets	Cash reserve ratio
2018	38.9	180.69	223.61	21.53%
2019	50.44	223.11	275.56	22.61%
2020	108.05	280.85	347.3	38.47%
2021	136.31	301.88	392.66	45.15%
2022	151.11	309.34	423.55	48.85%

### 3.2. Low Proportion of Fixed Assets

According to the disclosure of the financial report, Hengrui Medicine will gradually reduce its investment in fixed assets such as plant and equipment and production lines with weak profitability in the process of figuring out the asset-light operation mode. In the three years from 2020 to 2022, the proportion of fixed assets of Hengrui Medicine has gradually increased, which is due to the decline in the medical insurance price of some innovative drugs stipulated by the state, coupled with the impact of the epidemic and other external environments, the business volume of the enterprise's offline diagnostic and therapeutic institutions has been scaled back, and the increase in the total assets on the denominator has decreased significantly, making the

proportion of fixed assets increase. So we mainly study the data of the five years from 2015 to 2019 (see Table 2), and find that the proportion of fixed assets in the total assets of Hengrui Medicine as a whole shows a downward trend year by year, while the average value of the ratio of fixed assets in the pharmaceutical industry is usually more than 30%. It can be seen that Hengrui Medicine's asset-light operation mode has a relatively good effect on controlling the scale of fixed assets.

**Table 2.** Fixed assets of Hengrui Medicine (Unit: billions of yuan)

Year	Fixed assets	Total assets	The proportion of fixed assets
2015	14.24	114.97	12.39%
2016	16.77	143.30	11.70%
2017	19.98	180.39	11.08%
2018	23.29	223.61	10.42%
2019	25.42	275.56	9.22%
2020	32.80	347.30	9.44%
2021	44.63	392.30	11.37%
2022	53.83	423.55	12.71%

### 3.3. High Ratio of Interest-Free Liabilities

As can be seen from Table 3, the ratio of current liabilities to total liabilities of Hengrui Medicine has been maintained at a high level, and even reached 97% at the highest time. Moreover, most of the enterprise's liabilities are non-interest-bearing liabilities such as short-term borrowings, accounts payable, tax payable, and employee compensation payable, so the enterprise's pressure to repay debts is lower, the use of funds is more flexible, and the lower interest expenses can also improve the return on capital. These are the characteristics of Hengrui Medicine's asset-light.

**Table 3.** Current liabilities of Hengrui Medicine (Unit: billions of yuan)

Year	Current liabilities	Total liabilities	The proportion of current liabilities
2018	24.94	25.63	97.31%
2019	24.73	26.19	94.43%
2020	37.72	39.43	95.66%
2021	34.02	36.94	92.10%
2022	36.39	39.42	92.31%

## 4. Financial Performance Analysis of Hengrui Medicine

Financial performance evaluation refers to the evaluation of the whole process of whether the strategy formulated by the enterprise is reasonable, and whether the implementation and execution of the strategy is conducive to the achievement of the ultimate business objectives of the enterprise, which is essentially an analysis and evaluation of the enterprise's development mode and management methods. This paper will analyse the financial performance of Hengrui Medicine's asset-light operation mode from four aspects: profitability, solvency, operating capacity and development capacity.

### 4.1. Profitability Analysis

How much profit an enterprise makes is one of the most important concerns of enterprise investors, creditors, and operators, and it is the source of the enterprise's ability to reproduce and grow. In this paper, the three indicators of return on net assets, net profit margin on sales and earnings per share are selected to analyse the enterprise's profit level from the three

dimensions of owner's equity, sales revenue, and each share of stock held by common shareholders respectively. As can be seen from Table 4, in the past five years, the values of these three indicators of Hengrui Medicine are significantly higher than the average value of the industry, which indicates that the profit level of the enterprise is high. However, since 2021, there has been a significant decline in its profit level, which is the result of the triple factors of the new crown epidemic, the new health insurance drug price reduction and the national policy of collecting generic drugs. Even in the same external environment, Hengrui Medicine's ROE and EPS is still more than double the industry average, net sales margin is more than twice the industry average. It can be seen that the advantage of asset-light operation mode is still more prominent. However, the profitability of Hengrui Medicine is easily affected by the external environment, which indicates that its assets can be made more "light" to improve the enterprise's anti-risk ability.

**Table 4.** Profitability of Hengrui Medicine

Year	ROE		Net profit margin		EPS(yuan)	
	Hengrui	Industry average	Hengrui	Industry average	Hengrui	Industry average
2018	23.60%	7.67%	23.32%	7.60%	1.10	0.34
2019	24.02%	7.10%	22.87%	7.17%	1.20	0.36
2020	22.51%	7.09%	22.75%	8.71%	1.19	0.38
2021	13.96%	7.46%	17.31%	8.20%	0.71	0.35
2022	10.89%	6.58%	17.93%	7.89%	0.61	0.33

#### 4.2. Solvency Analysis

Solvency is an important symbol reflecting whether the enterprise can continue to operate healthily, if the solvency is insufficient, then the enterprise faces the risk of liquidation and bankruptcy at any time when it is unable to repay the debt. In this paper, the four indicators of current ratio, quick ratio, debt to asset ratio and equity ratio are selected to evaluate the short-term solvency and long-term solvency of Hengrui Medicine respectively. Table 5 shows that in the past five years, the CR and QR of Hengrui Medicine have not fluctuated much, basically maintaining above 7, while the average value of the pharmaceutical industry is below 4. It can be seen that Hengrui Medicine's assets have strong liquidity and good short-term solvency. In addition, Hengrui Medicine's debt to asset ratio and equity ratio are much lower than the industry average, and the overall trend of slow decline. Therefore, whether measured from the perspective of assets or owners' equity, the degree of protection of Hengrui Medicine's creditors' rights and interests is relatively high, and the long-term solvency of the enterprise is strong.

**Table 5.** Solvency of Hengrui Medicine

Year	CR	QR	Debt to asset ratio	Equity ratio
2018	7.25	6.83	11.46%	0.13
2019	9.02	8.37	9.50%	0.11
2020	7.44	6.97	11.35%	0.13
2021	8.87	8.17	9.41%	0.11
2022	8.50	7.83	9.31%	0.10

#### 4.3. Operation Capacity Analysis

The operating capacity of an enterprise is generally reflected in the number of asset turnovers or the number of days required for one turnover in a reporting period. As shown in Table 6,

Hengrui Medicine's accounts receivable turnover ratio gradually increased from 2018 to 2020, while in the last two years, in order to alleviate the pressure of revenue decline, the enterprise actively facilitated transactions and extended the collection period of some accounts receivable, which led to the decline of ARTR. Hengrui Medical has already possessed a relatively well-developed marketing model and stable customer relationships, with a large scale of day-to-day business involving a wide range of pharmaceutical products. Therefore, on the one hand, the volume of its accounts receivable is very large, resulting in the turnover rate of the enterprise's accounts receivable is slightly lower than the industry average; on the other hand, the inventory reserves of raw materials, finished goods and other inventory is very large, the inventory turnover rate is declining, and inventory management needs to continue to be optimised. In addition, Hengrui Medicine's fixed asset turnover ratio was higher than the industry average in the past five years. Under the strategic orientation of asset-lightness, enterprises gradually reduce their investment in fixed assets and transfer capital to high value-added segments, thus improving the efficiency of the use of remaining fixed assets and accelerating the turnover of fixed assets. Finally, from the perspective of total assets, the turnover rate is basically higher than the industry average, indicating that the operating efficiency of all assets of the enterprise is high.

**Table 6.** Operation capacity of Hengrui Medicine

Items		2018	2019	2020	2021	2022
ARTR	Hengrui	4.05	4.72	5.28	4.80	3.51
	Industry average	5.03	5.09	5.03	5.57	5.27
ITR	Hengrui	2.57	2.21	1.98	1.79	1.44
	Industry average	2.07	3.05	2.91	2.80	2.81
FATR	Hengrui	8.05	9.56	9.53	6.69	4.32
	Industry average	3.33	3.71	3.55	3.41	3.33
TATR	Hengrui	0.86	0.93	0.89	0.70	0.52
	Industry average	0.61	0.68	0.65	0.62	0.60

#### 4.4. Development Capacity Analysis

To judge the development of an enterprise, we should not only look at its current financial situation and operation, but also analyse and predict the future growth potential of the enterprise, so this paper has selected two indicators of operating revenue growth rate and net profit growth rate. As can be seen from Table 7, the growth rate of Hengrui Medicine's operating revenue from 2016 to 2019 has increased year by year, but in the past two years it has declined all the way to negative growth, and has been overtaken by the industry average. At the same time, in addition to the beginning of the rebound of profits in 2022, the trend of the net profit growth rate of the enterprise is basically similar to the revenue growth rate. Firstly, the impact of the new crown epidemic is the direct cause of the decline in revenue and profit of Hengrui Medicine. Secondly, in the face of the severe and complex competitive environment outside, Hengrui Medicine still continues to increase its investment in research and development, and the cumulative investment in research and development in 2020 has reached 6.203 billion yuan, an increase of 24.34% year-on-year, occupying 1/4 of the sales revenue, which affects the corporate profit to a certain extent. But the first quarter financial report of Hengrui Medicine in 2023 shows that the operating income has increased by 0.25% year-on-year, and it has rebounded to a positive value. Nowadays, the external environment is developing favorably, the national economy is recovering, and Hengrui Medicine has always attached importance to the investment in research and development and marketing, which provides a strong support for

the company's future long-term stable development, and the enterprise has a very promising growth potential.

**Table 7.** Development capacity of Hengrui Medicine

Year	Operating revenue growth rate		Net profit growth rate	
	Hengrui	Industry average	Hengrui	Industry average
2016	19.08%	10.87%	19.22%	18.39%
2017	24.72%	-2.54%	24.25%	36.24%
2018	25.89%	22.56%	26.39%	9.79%
2019	33.70%	18.63%	31.05%	4.21%
2020	19.09%	-2.49%	18.78%	10.24%
2021	-6.59%	9.77%	-28.41%	17.87%
2022	-17.87%	5.71%	-13.77%	-9.70%

## 5. Optimisation Strategies and Implications of Asset-Light Operating Mode

### 5.1. Optimisation Strategies

#### 5.1.1. Optimising the Corporate Value Chain to Enhance Risk-Resistant Capability

The above research results show that due to the impact of the external environment, in the past two years, Hengrui Medicine has seen a significant decline in all aspects of performance, unstable profitability, and lack of sufficient risk-resistant ability. Therefore, for its own development, Hengrui Medicine should continue to vigorously take the road of asset-light operation mode, and continuously invest funds in new drug development and clinical research, especially for the current domestic difficult to break through the difficult and complicated diseases, such as malignant tumours, diabetes, liver failure and other areas, to master the core technology that others can not be copied in order to expand the competitive advantage of the enterprise. At the same time, from the perspective of the value chain, Hengrui Medicine can eliminate the integration of unnecessary or non-strategic links in the existing business process, and actively eliminate backward production capacity. Only by strengthening the core advantages and optimising the enterprise value chain can we enhance the enterprise's risk-resistant ability, so that the enterprise's financial position will not fluctuate substantially when facing a poor external environment.

#### 5.1.2. Strengthen Inventory and Accounts Receivable Management

Hengrui Medicine's inventory turnover rate has been declining year by year, and the accounts receivable turnover rate has been fluctuating greatly, and both of them are lower than the average level of the industry, which indicates that there is still a lot of room for improvement in the enterprise's operating ability. First of all, in terms of inventory management, enterprises should establish a scientific and reasonable procurement system, before purchasing can be added to the research link, in a timely manner to grasp the direction of the market price of raw materials. At the same time, the enterprise should establish a perfect inventory management system, with the help of electronic information technology to register the information of products in and out of the warehouse as well as the balance of inventory, and timely customise the marketing strategy for the products that are likely to be slow-moving. Secondly, in terms of accounts receivable management, enterprises should pay attention to the management of suppliers, and formulate different credit sales policies according to different objects. For enterprises with a high degree of creditworthiness, their payment time can be appropriately relaxed; for enterprises with a low degree of creditworthiness, transactions should be delivered as realistically as possible. Enterprises should establish a database of customer credit files to

strengthen customer management, reduce the occupation of working capital by accounts receivable, and enhance the operating capacity of enterprises.

## **5.2. Implications for Other Pharmaceutical Enterprises**

### **5.2.1. Cultivation of Core Business**

An enterprise in the process of its development and growth will inevitably involve a number of business activities, but not all business can enhance the competitive advantage of the enterprise, only a certain part of the production and operation of the enterprise plays a decisive role in the business for the enterprise to bring the main profit income, which constitutes a part of the enterprise's core business. As early as the 1990s, Hengrui Pharmaceuticals understood that it had been relying on the production of generic drugs to seek low-priced profits, the enterprise can not develop and grow, from 2003 onwards, the enterprise gradually sold its packaging company, will be limited resources into drug innovation, science and technology innovation as the overall development strategy. After years of R&D and innovation, anti-tumour, anaesthesia, contrast agents and other fields have become the core business of the enterprise, Hengrui Medicine occupies 22% of the anaesthetic drug market in China, and has become the main source of sales revenue. Therefore, for other pharmaceutical enterprises, they should be like Hengrui Medicine, to clarify their long-term development strategic objectives, timely identify the market situation, seize the key pain points of the current development of the enterprise, divest the business that is not conducive to the development of the enterprise or the competitive advantages of the business is not obvious, fully integrate the internal and external resources, and invest them in the enterprise's core products or business, build a differentiated product business model, and continuously shape the enterprise's core competitiveness, thereby promoting the long-term development of the enterprise.

### **5.2.2. Attaching Importance to R&D Management and Talent Training**

Nowadays, the country attaches more and more importance to the development and innovation of the pharmaceutical industry, but from the point of view of China's current market structure of generic and invented drugs, generic drugs still occupy a dominant position in China's pharmaceutical market capacity, according to the latest data of the 2022 Minet Online, China's generic drugs occupy as much as 69% of the market size, while the market size of innovative drugs is only 11%, much lower than the United States during the same period of time accounted for the level of the same proportion. Therefore, China's pharmaceutical market still has a great potential for growth in R&D investment, and the first generic and first-innovation drugs will also be the most powerful economic growth point for pharmaceutical enterprises in the future. As the most typical light-asset operation enterprise, Hengrui Medicine has continuously increased the investment of R&D funds since its establishment, and attaches great importance to the introduction and cultivation of high-end talents, and at the same time, it has constructed a number of international and domestic technical exchange platforms, and has deeply promoted the technological exchanges and fusion with domestic and foreign famous pharmaceutical enterprises as well as colleges and universities. Therefore, for all pharmaceutical companies, we should follow the trend of the times, always adhere to the "technological innovation" as the first development momentum, increase investment in R & D of core products, improve the introduction of talent policy and team management mode. At the same time, enterprises can not be closed doors, we must adhere to the combination of R & D innovation and open cooperation, the process of technological exchanges with the outside world is conducive to the enterprise to learn from the advanced management experience of others, in order to form a technological synergistic effect, so that the enterprise is always in a favourable position in the competition in the industry.

### 5.2.3. Emphasis on Marketing Capabilities and Brand Management

Good brand image is also one of the very important light assets of the enterprise, Hengrui medicine always adhere to the "science-based, patient first" purpose, always to the most sincere needs of the majority of patients as the starting point and landing point, the enterprise based on quality, combined with its own product advantages, the implementation of multi-channel marketing model, and constantly broaden the sales field..Nowadays, in the fierce market competition, the differentiation advantage of the enterprise's own R & D products has been fully demonstrated, such as its anti-tumour drugs, anaesthetics and other products have gained the recognition of experts and consumers, the market share is far ahead.However, at present, the use of asset-light mode is still more mature to Nike, Microsoft, Coca-Cola and such foreign enterprises, many Chinese enterprises are relatively lack of brand awareness, and many domestic brands are still labelled with imitation or plagiarism.For Chinese pharmaceutical enterprises, if they want to have a long-term stable foothold, they must pay attention to the establishment of their own brand image.In today's highly competitive market environment, an enterprise only has a brand, in order to have enough right to speak and advantage in the industry.Shaping a good brand image is not overnight can be completed, the most important thing is to slowly refine to create high-quality products, to the needs of patients as the first priority, only the quality of the product over the quality of the product, in order to gradually open the door to the market.

## 6. Conclusion

In summary, the light asset operation model can improve resource utilization efficiency and keep enterprises in a favorable position in market competition.

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## References

- [1] Ang Hyuck Kim,Suhyang Noh,Seul Ki Lee. Asset-light strategy and real estate risk of lodging corps and REITs[J]. International Journal of Hospitality Management,2019,78.
- [2] Cédric Poretti,Inès Blal. The asset-light strategies and the dividend puzzle: International evidence from the hospitality industry[J]. International Journal of Hospitality Management,2020,91.
- [3] Märklin Paulina,Bianchi Giuliano. A Differentiated Approach to the Asset-Light Model in the Hotel Industry[J]. Cornell Hospitality Quarterly,2022,63(3).
- [4] Zhou Zejiang, Zou Bingqing, Li Ding. Journal of Central University of Finance andEconomics, 2020, (03):101-117.
- [5] Sun Tianrui. Research on the driving effect of R&D investment on the performance of asset-light enterprises: A case study of Haisco Pharmaceutical Group[J].Friends of Accounting,2018,(19):51-56.
- [6] Chen Hua. Analysis of asset-light business model and profitability[J].Journal of Business Economics,2021,(11):110-113.
- [7] Chen Aitao, Liu Jiwei. Financial performance analysis and enlightenment of Group A under asset-light operation model[J].Finance and Accounting Learning,2021,(33):172-174.