



Research on the Influence of Mixed Ownership Reform of State Owned Enterprises on Corporate Performance—Taking Yunnan Baiyao as an Example

Yunlin Bai^(✉)

Liaoning University, Shenyang 110136, China
Byllevi@163.com

Abstract. At present, China has entered a new stage of development. It is clearly pointed out in the 14th Five-Year plan that it is necessary to stimulate the vitality of various market entities, accelerate the improvement of modern enterprise system with Chinese characteristics, and deepen the reform of mixed ownership of state-owned enterprises. The pharmaceutical industry is closely related to the people's livelihood, making a significant contribution to the development of social economy. With the new epidemic sweeping the world in 2020, the pharmaceutical industry has been widely concerned by the public. In this paper, domestic and foreign research status of pharmaceutical industry, research content and methods are described, and on the basis of related concepts, case analysis is used for in-depth exploration, and relevant theories are summarized; then, taking Yunnan Baiyao company as an example, this paper analyzes the financial statements of Yunnan Baiyao group and puts forward the relevant improvement suggestions.

Keywords: Mixed ownership reform · State owned enterprises · Corporate performance · Yunnan Baiyao

1 Introduction

Efficiency is the main factor that determines the competition of enterprises. The development of state-owned enterprises must constantly improve the efficiency of enterprises. With the deepening of the reform of China's inherent enterprises, the efficiency of state-owned enterprises has been significantly improved. But at present, as an important part of China's economy, state-owned enterprises still have the problem of low management efficiency. The 14th Five-Year plan clearly pointed out that it is necessary to stimulate the vitality of various market entities, deepen the reform of mixed ownership of state-owned enterprises. With the implementation of a large number of mixed reform projects, the mixed ownership reform of state-owned enterprises will become the focus in the future.

The pharmaceutical industry is an important part of the national economy. With the prosperity and development of China's market economy and the progress of globalization, the pharmaceutical industry can open up a broader international market, but also

faces the impact of advanced technology and industrial advantages of foreign enterprises. Yunnan Baiyao is an important state-owned enterprise in Yunnan Province, At the same time, it is also a leading enterprise in the pharmaceutical industry, and its development has encountered great bottlenecks in recent years. In order to improve the problems of low equity concentration and unfavorable operation as soon as possible, Yunnan Baiyao began to explore and try the mixed ownership reform in 2016, until the whole listing was achieved in 2019, the reform achieved great success.

The case study of Yunnan Baiyao mixed ownership reform can improve the existing research on mixed ownership reform to a certain extent, thus enriching the theory of mixed ownership reform with Chinese characteristics. At the same time, the case study of Yunnan Baiyao mixed ownership reform has a strong demonstration effect on the mixed ownership reform of state-owned enterprises in China, it can also provide practical guidance for other state-owned enterprises to carry out mixed ownership reform.

Liu Xiaoxuan (2000) selected the competitive enterprises in more than 20 industries to analyze the influence of ownership structure on efficiency difference. It was found that the efficiency of overseas capital was always the lowest, while the efficiency of non-state-owned enterprises was higher than that of state-owned enterprises [1]. Zhang Wei and Yu Liangchun (2017) discussed the impact of various mixed ownership reform scheme designs on enterprise property right structure and market operation results, and found that if non-state-owned property rights enterprises appear in the market as new enterprises, the level of total social welfare will rise [2]. Oliver Tiemann and Jonas (2012) used the data obtained from field survey on the impact of privatization on the operational efficiency of German hospitals, and concluded that the change of enterprise ownership from public ownership to private ownership can effectively improve the operation efficiency, and the effect is effective for a long time [3]. Bennett and maw (2003) studied different types of enterprises in four Eastern European countries, and concluded that mixed ownership is an effective choice for the marketization of state-owned enterprises [4].

The existing literature on the motivation of mixed ownership reform of state-owned enterprises shows that the mixed ownership reform can improve the efficiency of state-owned capital operation and corporate governance, and alleviate the phenomenon of insider control in state-owned enterprises. In the aspect of efficiency evaluation of mixed ownership reform, most of the results show that mixed ownership reform is positively correlated with corporate performance.

This paper combines theoretical research with practical cases. On the basis of existing research, Yunnan Baiyao is taken as a case to analyze the specific situation and performance of mixed ownership reform of state-owned enterprises, so as to supplement and improve the existing research on the reform of mixed ownership of state-owned enterprises.

2 Analysis of the Case of Yunnan Baiyao Group's Mixed Ownership Reform

2.1 Introduction of Yunnan Baiyao Co., Ltd.

Yunnan Baiyao factory, established in June 1971, is the predecessor of Yunnan Baiyao Co., Ltd. On May 3, 1993, Yunnan Baiyao factory began to carry out the reform of

modern enterprise system. Yunnan Baiyao Industrial Co., Ltd. Was established and listed on Shenzhen Stock Exchange in December of the same year. After decades of development and accumulation. At present, the total assets of the company are less than 3 billion yuan. The company has a wide range of business and is the largest and strongest pharmaceutical enterprise group in Yunnan Province.

2.2 Motivation Analysis of Yunnan Baiyao's Mixed Ownership Reform

The reasons for the mixed reform of Yunnan Baiyao are mainly driven by the national macro policies, the development bottleneck of the pharmaceutical industry and the decline of the company's operating conditions in recent years. First, the mixed ownership reform of state-owned enterprises has always been the key content of China's economic system reform. Second, although the overall profits of Chinese pharmaceutical enterprises still show an upward trend, the growth rate has slowed down in recent years, especially in the past two years impacted by the COVID-19, the profitability of the pharmaceutical industry has decreased significantly. Finally, since 2014, Yunnan Baiyao has been affected by the overall decline of the pharmaceutical industry. The return on net assets of Yunnan Baiyao has decreased from 28.75% in 2013 to 19.95% in 2016. Its profitability has continued to decline, Baiyao had to take the initiative to reverse the situation in the case of continuous low performance.

2.3 Process of Yunnan Baiyao Mixed Transformation

(1) Introduce strategic investors. In 2016, the Administration Commission of Yunnan Province first introduced the strategic investor Xinhua capital through bidding, which increased the capital of Baiyao holdings by about 25.4 billion yuan. After the completion of the transaction, the SASAC of Yunnan Province and Xinhua Du each held 50% of the equity, it indirectly changed the exclusive control of Yunnan Baiyao by SASAC. Then in 2017, as a new strategic investor, Jiangsu Yuyue also obtained the controlling right by way of capital contribution. After the completion of the transaction, Baiyao holdings formed a shareholding structure of 45% of SASAC, 45% of Xinhua capital and 10% of Jiangsu Yuyue.

(2) Merger of parent company to achieve overall listing.

Since the beginning of the mixed reform, Baiyao Holdings has brought about more than 30 billion yuan of strategic investors. In order to improve the decision-making efficiency. In 2018, Baiyao holdings appraised the shares held by the three shareholders in proportion and injected all its assets into the listed company, and finally completed the overall listing in July 2019. At the same time, Yunnan Baiyao began to implement the ESOP. So far, the mixed ownership reform of Yunnan Baiyao was over.

3 The Impact of Yunnan Baiyao Mixed Ownership Reform on Company Performance

3.1 Market Performance Analysis

It can be seen from the data in Fig. 1 that before the mixed reform, the overall closing price of Yunnan Baiyao rose first and then decreased. However, after the mixed ownership

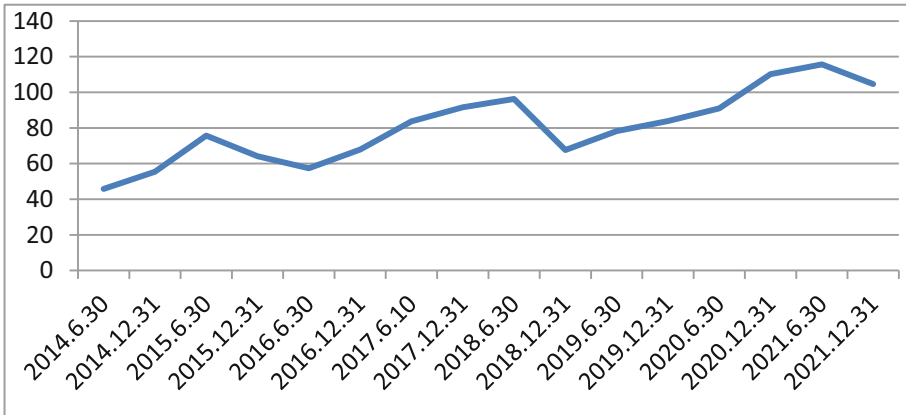


Fig. 1. Change of closing price of Yunnan Baiyao before and after the mixed reform

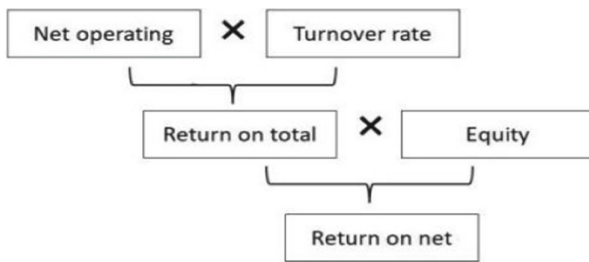


Fig. 2. Architecture of DuPont analysis

reform was carried out in July 2016, the share price of Yunnan Baiyao began to rise all the way, reaching 96.28 yuan at the highest. Although the mixed reform ended in 2019, the positive impact of the mixed reform still continues.

During this period, the stock price of Yunnan Baiyao has increased by 47.92%. It can be seen that investors are very optimistic about the mixed ownership reform of Yunnan Baiyao. At the same time, it also shows that the mixed reform mode adopted by Yunnan Baiyao has been recognized by the market.

3.2 Financial Performance Analysis

This paper uses DuPont analysis to analyze whether the mixed ownership reform has an impact on the financial performance of Yunnan Baiyao, and which aspect of the impact is more significant. Figure 2 shows the structure of DuPont analysis system.

3.2.1 Return on Equity Analysis

According to the above analysis, Yunnan Baiyao mixed ownership reform can be divided into three stages: the introduction of Xinhua Du and Jiangsu Yuyue private enterprises

Table 1. Return on net assets of Yunnan Baiyao from 2014 to 2020

ROE	2014	2015	2016	2017	2018	2019	2020
Yunnan Baiyao	24.86%	22.51%	20.03%	18.63%	17.48%	14.50%	14.52%
Industry median	15.18%	14.01%	12.55%	11.39%	10.07%	9.25%	7.75%

Table 2. Operating income and year on year of Yunnan Baiyao in 2014–2020

Yunnan Baiyao	2014	2015	2016	2017	2018	2019	2020
Operating revenue (100 million yuan)	188.14	207.38	224.11	243.15	267.08	296.65	327.43
Year on year	18.97%	10.23%	8.07%	8.50%	9.84%	9.80%	10.38%

Table 3. Net operating interest rate of Yunnan Baiyao from 2014 to 2020

Net operating rate	2014	2015	2016	2017	2018	2019	2020
Yunnan Baiyao	13.27%	13.29%	13.08%	12.88%	12.32%	14.07%	16.83%
Industry median	12.98%	13.86%	14.34%	13.02%	11.97%	10.68%	9.04%

in equity level at the end of 2016, and the absorption and merger of Baiyao holding of the parent company by issuing shares in 2019.

According to Table 1, both Yunnan Baiyao and the median value of the industry are declining year by year. However, in 2020 after the completion of the third stage mixed ownership reform of Yunnan Baiyao, the return on net assets of Yunnan Baiyao increased from 14.50% in 2019 to 14.52% in 2020, and the industry average decreased from 9.25% to 7.75% in the same period, indicating that the level of return on net assets of Yunnan Baiyao is always far higher than the median level of the industry, and the mixed reform has a great role in promoting its ROE.

3.2.2 Profitability Analysis

According to Table 2, the growth rate of Yunnan Baiyao's business income in 2014 was 18.97%, but in 2015 and 2016, the growth rate of the company's operating income rapidly dropped to 10.23% and 8.07%, reflecting that before the reform of mixed ownership of Yunnan Baiyao, the growth of its main business slowed down and met with some resistance. Since the company began to carry out the mixed ownership reform in 2016, the company's business growth rate started to increase again. The growth rate increased from 8.07% in 2016 to 10.38% in 2020, and the growth rate was increasing year by year except for 2019, indicating that the weak growth trend of Yunnan Baiyao's business income has changed.

Table 4. Total assets turnover rate of Yunnan Baiyao from 2014 to 2020

Turnover rate of total assets	2014	2015	2016	2017	2018	2019	2020
Yunnan Baiyao	1.29	1.16	1.02	0.93	0.92	0.74	0.62
Industry median	0.75	0.69	0.60	0.60	0.59	0.59	0.60

From Table 3, from 2014 to 2017, the net operating interest rate of Yunnan Baiyao was only slightly higher than the industry median in 2014, and was lower than the industry median in the rest of the time. However, after the completion of the first stage of Yunnan Baiyao mixed ownership reform, the operating net interest rate began to realize reverse overrun, and the industry median began to decline since 2015, only 9.04% in 2020. On the contrary, Yunnan Baiyao has risen to 16.83% since it reached a phased low of 12.32% in 2018, and the difference between Yunnan Baiyao and the industry's median value has expanded to 7.79%, indicating that Yunnan Baiyao's profitability has improved rapidly.

3.2.3 Operation Capacity Analysis

From Table 4, the total asset turnover rate of Yunnan Baiyao has always been higher than that of the industry.

However, from a vertical perspective, the industry level has been basically stable since the decline from 0.75 times in 2014 to 0.60 times in 2016, while the asset turnover rate of Yunnan Baiyao shows a continuous downward trend, from 1.29 times in 2014 to 0.62 times in 2020, indicating that the operating capacity of Yunnan Baiyao has declined. This is mainly caused by two reasons, first, in 2019, Yunnan Baiyao issued shares to Yunnan SASAC, Jiangsu Yuyue and Xinhua Du, the three shareholders of Baiyao holding. This process expanded the balance sheet of Yunnan Baiyao, and the total assets increased rapidly in the short term, resulting in the decrease of total asset turnover rate; second, Yunnan Baiyao has increased its foreign investment, this part forms the company's assets, but does not contribute to the company's operating income.

3.2.4 Solvency Analysis

It can be seen from Table 5 that the equity multiplier of Yunnan Baiyao in 2014–2017 was basically increased, from 1.45 in 2014 to 1.55 in 2017, indicating that the company's operating leverage is increasing and its solvency is weakening. However, after 2017, Yunnan Baiyao's equity multiplier continued to decline, from 1.55 in 2017 to 1.38 in 2020. Especially in 2019, due to the introduction of equity assets by issuing shares, the equity multiplier of that year decreased from 1.55 in 2018 to 1.38 in 2020 to 1.39, indicating that Yunnan Baiyao's solvency is enhanced and its operational risk is smaller.

Table 5. Equity multiplier of Yunnan Baiyao from 2014 to 2020

Equity multiplier	2014	2015	2016	2017	2018	2019	2020
Yunnan Baiyao	1.45	1.43	1.5	1.55	1.54	1.39	1.38
Industry median	1.55	1.47	1.47	1.45	1.43	1.46	1.43

4 Conclusion

Based on the theories at home and abroad, taking Yunnan Baiyao mixed ownership reform as a case, this paper analyzes and compares the financial data of the company before and after the mixed ownership reform, studying the impact of mixed ownership reform on corporate performance and drawing the following conclusions:

(1) The mixed ownership reform improves the company performance. From the stock market performance, we can see that the stock price of Yunnan Baiyao has continued to rise. From the perspective of financial performance, the introduction of strategic investors has improved the profitability of Yunnan Baiyao. Although the company will be greatly impacted by the new epidemic in 2020, Yunnan Baiyao with its own strong strength and excellent operating experience, profitability is still above the industry median.

(2) The mixed ownership reform improves the efficiency of corporate governance. In the aspect of equity structure, Yunnan Baiyao introduced strategic investors through mixed ownership reform, which changed the ownership structure of the company, made non-state-owned shareholders have the willingness and ability to supervise the state-owned large shareholders, which is conducive to change the absolute holding of individual capital. At the same time, after the mixed reform, Yunnan Baiyao also issued the incentive policy of employee stock ownership, which is very helpful to stimulate the enthusiasm and creativity of employees, and then promote the improvement of financial performance.

Authors' Contributions. This paper is independently completed by Yunlin Bai.

References

1. Xiaoxuan Liu, The influence of ownership structure of China's industrial enterprises on efficiency difference -- An Empirical Analysis of the data of the national survey of industrial enterprises in 1995 [J] *Economic research*, 2000 (02): 17–25 + 78–79.
2. Wei Zhang, Liangchun Yu, The choice of optimal property right structure of mixed ownership enterprises [J] *China industrial economy*, 2017 (04): 34–53.
3. P. Arocena, and Oliveros, D. The efficiency of state-owned and privatized firms: Does ownership make a difference? [J]. *International Journal of Production Economics*, 2012, 140(1):457–465.
4. J. Bennett, J. Maw, Privatization, partial state ownership, and competition [J]. *Journal of Comparative Economics*, 1997, 27(3):58-74.
5. G.S. Liu, J. Beirne, P. Sun, The performance impact of firm ownership transformation in China: mixed ownership vs. fully privatized ownership [J]. *Social Science Electronic Publishing*, 2013, 27(6):697–711.

6. Santos, Moreira, Vieira. Governance with complex structures: evidence from Western European countries [J]. *Journal of Business Economics and Management*, 2015, 16(3):86–89.
7. Zhaoyuan Xu, Wenkui Zhang, Research on the boosting effect of state-owned enterprise reform on economic growth [J]. *Economic research*, 2015, 50 (04): 122-135.
8. Weihua Jiang, An empirical study on financial performance of mixed ownership enterprises [J] *Financial sector*, 2016 (29): 262–263.
9. Hanmin Yan, Yangwen Chen, Research on the effect and influence mechanism of mixed ownership reform of state-owned enterprises [J] *Friends of accounting*, 2019 (13): 150–156.
10. Guliang Tang, Dai Lu, The economic consequences of partial privatization of state-owned listed companies -- Based on the case study of “wuchangyu” [J] *Accounting research*, 2006 (09): 48–55 + 96.
11. Yuheng Gong, Innovation investment and enterprise performance of high-tech enterprises [D] *Yunnan University of Finance and economics*, 2019. DOI:<https://doi.org/10.27455/d.cnki.gycmc.2019.000413>.
12. Dai Wen, Ying Sun, Research on the impact of mixed ownership reform of state-owned enterprises on Corporate Performance -- Taking Northeast Pharmaceutical as an example [J] *Special Economic Zone*, 2021 (12): 153–156.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter’s Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter’s Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

