Financial Performance Evaluation of Kweichou Moutai Based on the Comparison of Companies in Liquor Industry

Yaomeng Zhu

Department of economics and management, Beijing University of Technology, Beijing China

zym20119206@emails.bjut.edu.cn

Abstract. The liquor industry has rebounded in recent years, especially in the high-end liquor market competition (represented by Kweichou Moutai and others) has gradually stabilized. However, many liquor companies are still facing multiple challenges due to the macro environment and industry environment. Therefore, this paper explored the financial situation of representative enterprises in the high-end liquor industry, selecting three listed high-end liquor companies as the research sample and conducting factor analysis based on their financial report data from 2019 to 2022 to rank the performance of the enterprises, focusing on the competitiveness issues of the industry leader Kweichou Moutai. According to the anlaysis, Kweichou Moutai had a significant advantage in profitability. Conversely, Moutai's growth ability was a shortcoming that needed to be focused on. This paper offers an in-depth analysis of Kweichou Moutai's weaker growth capability so as to provide a reference for each liquor company to improve its market competitiveness and the healthy development of the liquor industry.

Keywords: Liquor Industry, Financial Performance, Factor Analysis, Business Economics.

1. Introduction

As China's economy gradually enters the new-normal development, along with industrial restructuring and consumption upgrading, the boom of the liquor industry has continued to rebound since 2016 [1]. Concurrently, the profitability of the liquor industry, especially the high-end liquor market, is becoming stronger than other traditional industry [2]. Presently, the high-end liquor market in China is mainly occupied by three major brands, namely Moutai, Wuliangye and Guojiao 1573. Notably, Moutai is the only liquor brand to enter the top 50 brands in China in 2022 [3]. Meanwhile, Kweichou Moutai has a unique geographical protection of origin, microbial colonies that cannot be duplicated, unique brewing technology that has been passed down for thousands of years, and the high-quality base wine resources composed of the four core potential energy [4]. Therefore, it has top brand value and authority in the liquor industry.

In recent years, Kweichou Moutai's main products such as Feitian Moutai have increased in both quantity and price, and its net profit in 2021 was 55.72 billion yuan, an increase of 12.51% compared with 2020. In addition, Kweichou Moutai's share price has continued to rise since 2019, hitting a new all-time high. Through previous researches, the high-end liquor market was believed that it has developed a monopolistic form, and Moutai, Luzhou Laojiao and Wuliangye could not be surpassed in the brand recognition of the majority of consumers [5]. Therefore, in terms of the overall liquor demand, middle and low-grade liquor showed a shrinking situation, while high-end liquor showed an upward trend. However, the high-end liquor industry still faced a series of problems due to various factors, such as the influence of national industrial policy, which reduced the demand for high-end liquor to a certain extent; the change of consumers' consumption concept and the rise of health care awareness would also reduce the demand for traditional liquor [6]. Meanwhile, Shiyu Wang has studied the value creation of Kweichou Moutai Company and found that financial factors such as sales growth rate, operating gross margin, and so forth were key factors in the value creation process of Kweichou Moutai [7]. Nevertheless, with the changing economic environment in China and the outbreak of the COVID-19 epidemic in 2020, it is worth to explore the financial performance of Kweichou Moutai recently.

Furthermore, Moffett and Macadam used several financial assessment methods to evaluate the company's financial activities and found that the results obtained using factor analysis were the most objective and comprehensive [8]. Li found that the application of factor analysis mainly involved the agriculture, real estate industry, banking industry, but there are few statements for the financial performance evaluation of companies in the liquor industry [9]. It was noteworthy that Lai Rui has used factor analysis to empirically analyze a number of liquor companies and finally came up with a comprehensive ranking of Wuliangye, finding the gaps and deficiencies between Wuliangye and excellent listed liquor companies [10]. This study had important implications for Wuliangye's development.

To sum up, Kweichou Moutai, as a leader in the liquor industry, has a certain industry representation to evaluate and analyze its financial performance. At the same time, the management and investors of China's listed liquor companies and other stakeholders also need to make decisions based on the financial performance evaluation of the enterprises. Thus, it is necessary to make an objective and comprehensive evaluation of the financial performance of Kweichou Moutai. This paper conducted factor analysis on three representative companies in the high-end liquor industry (i.e., Kweichou Moutai Company, Wuliangye and Luzhou Laojia) to compare Kweichou Moutai's financial performance horizontally for its overall ranking in the industry, and study its important financial indicators longitudinally, as well as explore its shortcomings and give relevant suggestions.

2. Data & Method

2.1. Data

The data selected for this paper was obtained from wind financial database and financial statements of each company, and the financial data of Kweichou Moutai Co., Ltd, Yibin Wuliangye Co., Ltd and Luzhou Laojiao Co., Ltd from 2019-2022 were selected as the research samples for factor analysis, and factor analysis was conducted based on spss21.0. Furthermore, the relevant data from each financial annual report of Kweichou Moutai Co. from 2017-2021 were selected for specific analysis of the financial issues of Kweichou Maota.

2.2. Indicators

In this paper, financial performance was measured by four dimensions: profitability, solvency, growth and operating capacity, and eight indicators are used to determine financial performance: earnings per share (X1), return on net assets (X2), current ratio (X3), net gearing ratio (X4), earnings per share growth rate (X5), operating income growth rate (X6), inventory turnover ratio (X7) and total assets turnover ratio (X8).

2.3. Analysis procedure

The core principle of factor analysis is to use fewer factors to reflect more information [10], in order to reduce the complexity of the problem, based on which the interrelationships between the original variables are analyzed and studied. The basic steps are as follows: 1) standardization of data, which means descriptive statistical analysis; 2) applicability analysis, which includes Bartlett's sphericity test and KMO test; 3) extraction of common factors, which means factor extraction; 4) factor naming, which means rotation and calculation of factor loading matrix before and after rotation; 5) calculation of obtained common factor scores and calculation of factor analysis model, and finally solving for the composite scores of the common factors and ranked.

From the results of descriptive statistics, it could be seen that the standard deviations of earnings per share, return on net assets and current ratio are all greater than 1. This indicated that the differences in earnings per share, return on net assets and current ratio among the three enterprises are large. The standard deviations of net gearing ratio, earnings per share growth rate, gross operating income growth rate, inventory turnover ratio and total asset turnover ratio were all less than 1, indicating that the differences among the three companies in these indicators were relatively small.

Suitability tests are performed before conducting factor analysis [11]. the KMO value was 0.653, which suggested that the selection of each financial performance indicator was within the acceptable range and passed the KMO test. Therefore, overall, the selected financial performance data were suitable to be studied by using factor analysis method. The results of the characteristic root and variance contribution of the common factors showed that there were two extracted main factors. The characteristic root of the first main factor F1 was 4.340 with a variance contribution of 52.927%; the characteristic root of the second main factor F2 was 2.101 with a variance contribution of 27.586%; the cumulative variance contribution of the two main factors was 80.512%, so the factor analysis results were ideal. In other words, the two main factors can represent the original indicators for factor analysis. Through the analysis, it could be found that the first main factor showed higher loading values on earnings per share growth rate (0.977) and operating income growth rate (0.906), which together express the growth ability of the company, so the first main factor F1 mainly reflected the growth ability of the company. The second main factor showed strong loaded values on earnings per share (0.864) and return on net assets (0.730), which together reflect the profitability. Thus, the second main factor F2 mainly reflected the profitability of the company.

The factor score is the final expression of factor analysis. By calculating the factor scores, the scores of the 8 selected financial indicators in the 2 extracted common factors and analyze the level of financial performance of each indicator in the common factors could be understood based on the results. The resulting calculation models were shown as below:

$$F1 = -0.019X1 + 0.188X2 - 0.211X3 + 0.132X4 + 0.234X5 + 0.217X6 + 0.004X7 + 0.207X \quad (1)$$

$$F2 = 0.387X1 + 0.371X2 + 0.038X3 + 0.008X4 + 0.025X5 + 0.026X6 - 0.412X7 - 0.061X8 \quad (2)$$

$$F = 0.657F1 + 0.343F2 \quad (3)$$

3. Results & Discussion

From the above model, the component scores, composite scores, and rankings of Kweichou Moutai, Wuliangye and Luzhou Laojiao could be calculated for each of the three companies from 2019 to 2022. The calculation results are shown in the Table. 1.

Table 1. Moutai, Wuliangye and Luzhou Laojiao scored by each factor: 2019-2022

	Year	F1	F2	F
Moutai	2019	5.00	24.98	11.86
Moutai	2020	4.54	26.05	11.91
Moutai	2021	4.22	27.26	12.13
Moutai	2022	2.29	22.11	9.09
Wuliangye	2019	4.27	10.80	6.51
Wuliangye	2020	3.97	10.92	6.35
Wuliangye	2021	4.11	11.34	6.59
Wuliangye	2022	2.56	8.95	4.76
Luzhou Laojiao	2019	4.53	10.40	6.54
Luzhou Laojiao	2020	4.94	11.87	7.32
Luzhou Laojiao	2021	5.53	13.53	8.27
Luzhou Laojiao	2022	4.39	12.34	7.12

3.1. Comparison with other companies

Based on the Table. 1, during the period 2019 to 2022, Kweichou Moutai's comprehensive score F was continuously ranked first and significantly higher than the other two companies, indicating that its holistic financial situation has maintained a higher level in the industry during the last four years and was the leader in the high-end liquor industry. A similar situation occurred in the scores and rankings for the main factor F2, meaning that Moutai is at an excellent level in the industry in terms

of profitability and operating capacity. However, the score of Moutai on the main factor F1 was quite different. Its score on this factor was lower than two competitors in 2022 and still lower than Luzhou Laojiao by 2021 and 2020, only in 2019 Moutai's score on this factor was the strongest among three companies. This implied that Kweichou Moutai has gradually lost its growth and solvency advantage as expressed by the F1 factor in the last four years.

3.2. Financial Analysis

As shown in Fig. 1, while Moutai's composite score F was relatively stable and F2 score increased significantly during the three years from 2019 to 2021, which indicated that Moutai's overall financial indicators remained sound and profitability improved year by year, Moutai's factor F1 score dropped sharply, which pointed to the need for Moutai to pay more attention to the lack of growth capability and optimize it.

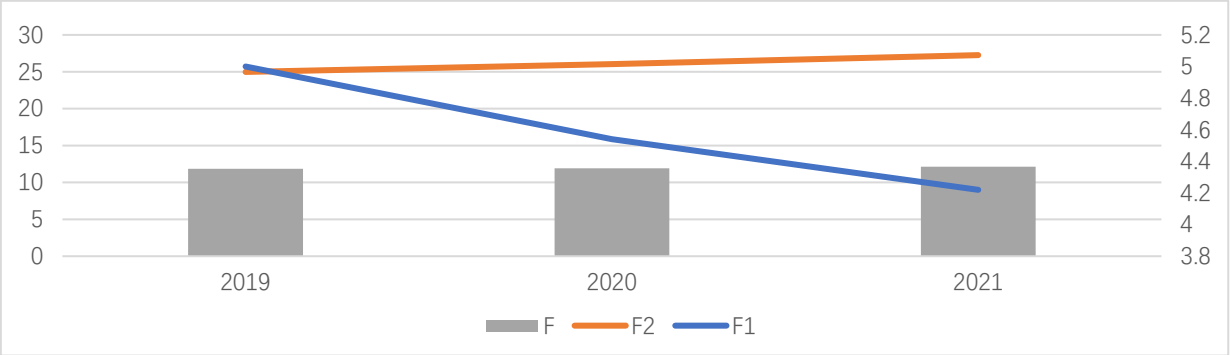


Figure 1. Kweichow Moutai score by factor: 2019-2021

3.3. Analysis

Through the above comparative analysis, it could be easily found that the main factor affecting Kweichou Moutai's financial performance was growth capability. Thus, the issue of Moutai's growth capability would be analyzed and corresponding comments would be made in this section.

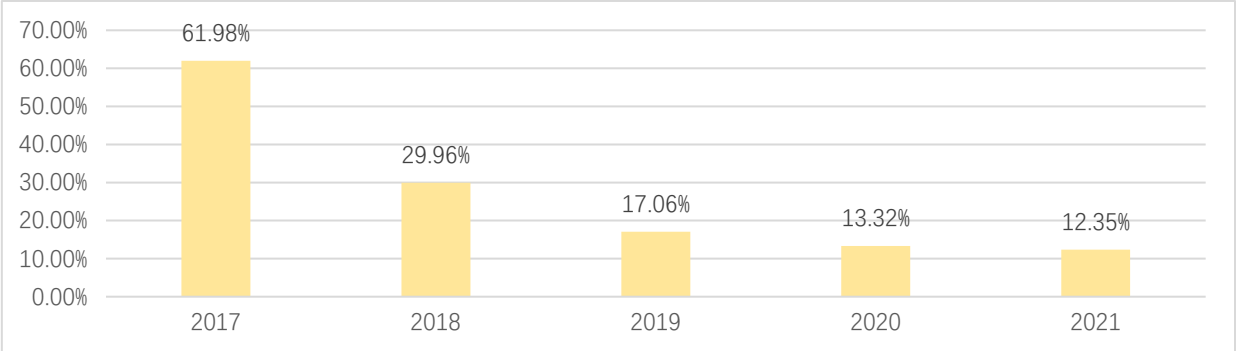


Figure 2. Kweichow Moutai's EPSG: 2017-2021

Seen from the Fig. 2, Moutai's EPS growth rate within 2017-2021, which is one of the representative indicators of growth capability, were positive but falling annually, which illustrated that Moutai's EPS has simply experienced a deceleration in the rate of increase. While Moutai's share capital has stabilized at 1,256,197,800 shares since 2015, indicating that the change in Moutai's EPS is determined by its net profit after tax. Then, the decrease of the EPSG would imply the drop of Moutai's profit growth rate. Moutai's main source of profit is the profit from the sale of Moutai liquor. Meanwhile, as the cost of raw materials and production process of Moutai liquor is relatively fixed, so the root cause of determining the growth rate of Moutai's sales profit is the change in sales price and quantity.

The multiple reasons affecting the lower growth rate of Moutai's sales would be demonstrated as follows. Moutai had externally planned to increase the supply of Moutai liquor in recent years. The

intention was to alleviate the short supply situation in order to control the excessive rise in terminal sales prices and thus promote healthy growth in sales quantity. Although, for ordinary consumer goods, with stable demand, the price will be lowered by increasing the supply, it was not effective for Moutai. In other words, the increased supply of Moutai liquor was not actually used to meet consumer demand. This was because the increase in supply could easily be neutralized by the various non-consumer demands for Moutai liquor, such as collection and investment demand. For example, with the addition of capital, Moutai distributors will over-market Moutai for its social value in business meetings and other occasions, emphasize Moutai's extreme collector value due to its intangible cultural heritage craftsmanship, and even adjust the amount of free trade in Moutai liquor on the open market, thus stabilizing the high price of Moutai liquor and even raising the end price. One study found that the media used the "scarce commodity" frame as a primary frame when reporting on Moutai-related issues, mainly spreading the economic image of Moutai wine, including "Flying Moutai", "sky-high Moutai ", "high-end liquor", "scarce Moutai", "Kweichou's business card", etc. [12]. Based on the various premium value of Moutai, the approach of increasing supply has failed to fundamentally promote the long-term healthy growth of it, and its sales volume has not risen significantly in recent years.

E-commerce has been developing rapidly in recent years, but Kweichou Moutai has been opening its market in the form of offline retail, lacking the experience of "new retail", and has long been limited by the thinking of single sales. Moreover, the global outbreak of the COVID-19 epidemic in 2020 also hit Moutai's offline sales channels severely. Therefore, the growth rate of Moutai's sales revenue has rapidly declined over the past few years. Currently Kweichou Moutai has attempted to open new sales channels by laying out e-commerce, celebrity anchors live with goods, seeking to mitigate the adverse effects. However, due to the late layout of Moutai's e-commerce, its effect is limited.

As a high alcohol product, the homogeneity and substitutability of liquor are extremely high, making competition increasingly fierce. After the rapid rise of a new group of liquor companies to capture the market, the current liquor market was dominated by Moutai, with Fenjiu, Gujing Gongjiu and other liquor companies dividing the market into "one super and many strong" situations. As illustrated in Fig. 3, as of the second quarter of 2022, although Moutai was still the company with the largest market share, it can also be found that other mid-range liquor products such as Yanghe liquor and Shanxi Fenjiu also occupied a noticeable market share. Meanwhile, with the trend of rational consumption, some consumers stopped pursuing the added value of expensive Moutai and switched to buying affordable products with reasonable quality such as Shanxi Fenjiu. Furthermore, the rapid growth of baijiu substitutes, such as beer, wine, and soft drinks, have also limited the expansion boundary of baijiu. As a result, Kweichou Moutai lost part of its consumers, and thus its sales and revenue growth rate declined.

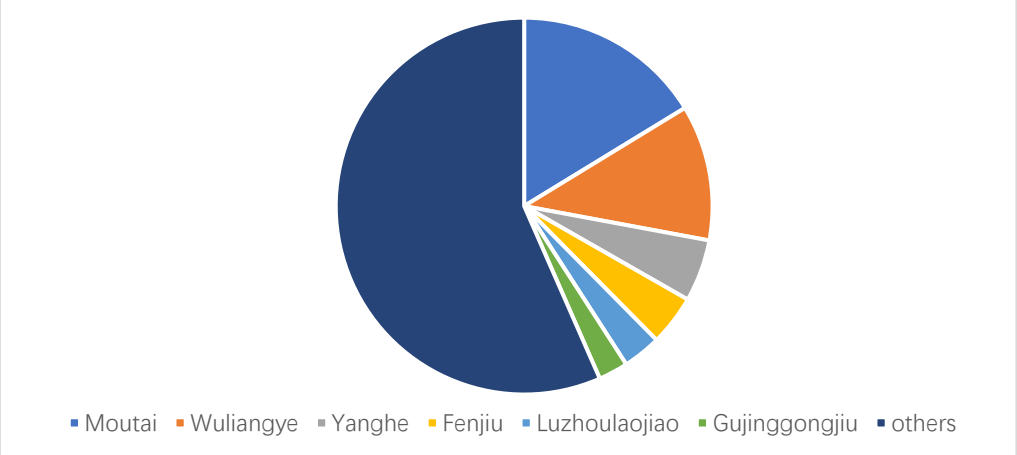


Figure 3. The market share of liquor enterprises in Q2 2022

3.4. Suggestions

First, Kweichou Moutai's sales channels should accelerate the transformation, actively explore the Internet sales model, taking advantage of its own good brand recognition and corporate culture, and then expand diversified and effective marketing strategy in order to attract consumption and improve the consumer experience. Secondly, in response to the over-marketing of Moutai liquor with unreasonably high prices for a long time, resulting in the loss of some consumers, it should focus on the coincidence of Kweichou Moutai liquor media image and user perception value, establish a user network communication mechanism, focus on the new media end of corporate image communication, and strive to shape the corporate image of "cultural Moutai". Third, it should stabilize and develop its main business so that its business income can have a sustainable growth capacity, while appropriately controlling costs and increasing investment in product R&D to achieve continuous product innovation, actively exploring the low-end liquor market, and designing products to meet the diversified consumer needs so that it could enhance its core competitiveness. Finally, in the context of China's economy entering globalization, Kweichou Moutai Company should also positively explore the international market to further maximize its corporate value and transform Moutai into an international brand influenced by traditional Chinese liquor culture, thereby further promoting the healthy development and growth of the company.

4. Limitations & Prospects

This paper mainly applied factor analysis to evaluate the performance of Kweichou Moutai Company's financial indicators, but the impacts of macroeconomic environment and policies cannot be ignored during the operation. They are difficult to measure scientifically as qualitative non-financial indicators, hence this paper did not include such indicators. In the future research process, financial and non-financial indicators might be combined, considering the impact of these indicators on financial performance, in order to enrich the index system of financial performance evaluation. At the same time, this paper analyzed the financial performance evaluation by only eight representative indicators, which to a certain extent lacked comprehensiveness. Therefore, the scope of indicators could be expanded in the subsequent research to evaluate the financial performance more comprehensively.

5. Conclusion

In summary, this paper evaluated the financial performance of Kweichou Moutai company and its ranking within the liquor industry by using factor analysis. It was found that its overall financial performance, especially profitability, excelled within the industry while continuously improving during 2019-2021. In contrast, its growth capacity has been declining in recent years, putting it at a disadvantage in the high-end liquor competition. Reasons for this outcome included the extraordinary value of Moutai liquor being over-marketed, imperfect sales channels, the tendency of liquor consumers to rationalize and the increasing competitive power of substitutes. Since the analysis in this paper was based only on representative financial indicators and did not include non-financial indicators, more comprehensive indicators ought to be used in the further study to assess the financial performance of the company in future studies. Based on the deeper analysis of Moutai's lack of growth capability, this study also provided corresponding suggestions for Moutai's future development. These results provide a guideline for the financial performance evaluation of Kweichou Moutai company and other companies in the liquor industry.

References

[1] Cai Peng. Thoughts on the management innovation of liquor enterprises. Modern business, 2022, 27: 32-34.

[2] Xiao Yuhang. The valuation of the liquor industry is clearly differentiated. Financial management, 2021, 10: 32-33.

[3] Xiao Li. Moutai became the only wine brand among the top 100 world brands in 2022. Brewing Technology, 2022, 9: 64.

[4] Xi Kang, Jia Chen. Building the four pillars of Kweichow Moutai's high-quality development. China Securities Journal, 2022, A06.

[5] Zhao Naijing, Liao Wangke. Comparative study on the performance of representative enterprises in China's liquor industry based on financial indicators. Brand Research, 2019, 18: 68-69.

[6] Zheng Kunyue. Problems and countermeasures in the development of domestic high-end liquor enterprises. Hebei University, 2014.

[7] Wang Shiyu. Research on financial drivers of value creation in Kweichow Moutai, Ltd. Changsha University of Science and Technology, 2018.

[8] Sandra Moffett, Rodney Macadam. Knowledge management: a factor analysis of sector effects. Knowledge Management, 2009, 13(03): 44-59.

[9] Li Tianhong. Financial performance evaluation of liquor industry based on factor analysis method. Fuyang Normal University, 2019.

[10] Li Rui. Performance evaluation of Wuliangye company based on factor analysis method. Business Accounting, 2016, 20: 53-55.

[11] Xiang Ming, Fang Shu. Analysis of Financial Performance Evaluation of Pharmaceutical Industry Based on Factor Analysis Method. Journal of Hubei University of Economics (Humanities and Social Sciences Edition), 2020, 17(11): 77-78+82.

[12] Meng Lingjin. Research on the media image of "Kweichow Moutai liquor". Guizhou Minzu University, 2021.