

An Analysis on the Valuation of Listed Companies: A Case Study of Luzhou Laojiao

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Abstract. With the rapid growth of the capital market, assessing the value of listed companies has become crucial for investors, business operators, and academia. Accurate valuation aids investors in making informed decisions and supports strategic planning for business operators. This paper uses Luzhou Laojiao as a case study to explore corporate value assessment methods for listed companies. It focuses on quantitatively evaluating Luzhou Laojiao's corporate value by analyzing financial data, market performance, and industry status. The study begins by detailing Luzhou Laojiao's operations, market positioning, competitive advantages, and disadvantages. It then employs various evaluation methods, including the DFC model, CAPM model, and WACC model, to comprehensively assess Luzhou Laojiao's corporate value. The findings indicate that Luzhou Laojiao, a leading enterprise in the liquor industry, possesses strong market competitiveness and profitability. By predicting future cash flow and growth rates, the study estimates Luzhou Laojiao's corporate value and identifies the key driving factors. The evolving capital market will continue to influence corporate value assessment methods. The research methods and conclusions of this paper not only serve as a decision-making reference for investors but also provide a framework for valuing other listed companies.

Keywords: Company Valuation; Luzhou Laojiao; Financial Assessment.

1. Introduction

Liquor culture has always run through Chinese history, and the baijiu industry is booming. However, during the epidemic in 2022, China's liquor industry has been under multiple pressures such as economic downturn, obvious consumption contraction, and intensified industry competition, and the trend of further gathering the industry to the head is becoming more and more obvious. At present, China's liquor has entered a stage of structural growth and prosperity, and leading enterprises continue to benefit and maintain a steady and progressive growth trend. In 2022, Luzhou Laojiao's net profit will break through the 10 billion marks for the first time, becoming the third enterprise in the liquor industry with a net profit of more than 10 billion yuan, and in 2023, the net profit will be 13.246 billion yuan, a year-on-year increase of 27.79%, maintaining a good growth trend. At present, domestic scholars have evaluated the value of brands such as Kweichow Moutai, Wuliangye and Shanxi Fenjiu through EVA and excess improvement method in the liquor industry [1]. With the development of China's economy, enterprise valuation plays a vital role in corporate financial management, investment decision-making, mergers and acquisitions, etc., and is an important part of enterprise management decision-making. The valuation methods of enterprises in China mainly include the income method, the market comparison method and the cost method [2]. Among them, the income method is the most commonly used valuation method, including the discounted future earnings method, the discounted free cash flow method and the residual income method, etc., and there are different valuation tools to choose from for different industries, such as financial analysis, market comparison method, asset valuation method, etc. [3]. In terms of valuation standards, although there are specific methods and procedures stipulated in documents such as the Accounting Standards

for Business Enterprises and the Asset Valuation Standards, there is still a lack of unified standards, resulting in the low reference of the appraisal results. Valuation methods can be subjective, and the process is complex, so some companies can accurately assess but others will be limited [4]. Firstly, with the help of CAPM model, the risk-free rate of return, the market expected return interest rate, and the β coefficient are obtained to obtain the equity cost. Secondly, the WACC model is used to obtain the 2023 annual report data to calculate the weighted average cost of capital, and finally, the DCF model is used to estimate the cash flow during the forecast period, and then discounted to the present value of the enterprise to obtain the enterprise valuation of Luzhou Laojiao. In order to improve the efficiency of the company's own management, optimize the allocation of resources, guide the development strategy and risk management of the enterprise, and provide decision-making support for investors and promote the healthy and orderly development of the current capital market.

2. Case Analysis

Luzhou Laojiao Enterprise is located in Luzhou City, Sichuan Province. It was founded in 1950. It was integrated on the basis of 36 ancient wine-making workshops in the Ming and Qing Dynasties. The brewing history can be traced back to the 16th century. Luzhou Laojiao has a clear high-, medium- and low-end product system, and adheres to the pyramid structure of product price grades from high to low and sales from small to large [5]. Its China Cellar 1573 series is the top of the pyramid and the company's core product. The tower body products are mainly the Jiuling and Te Le series, which are the company's high-end products. The base products are mainly Touqu and Erqu, which are the company's low-end products.

2.1. Operational Situation

Data from the World Health Organization show that in China's current alcoholic beverage consumption structure, strong liquor represented by liquor still accounts for 67.2%. The largest market is still Luzhou-flavor liquor, but driven by factors such as the "Moutai fever", the market for sauce-flavor liquor has grown very fast in recent years, with the market share rising rapidly from 15% in 2018 to 37%. Data show that the number of liquor companies above designated size has dropped from 1,593 in 2017 to 965 in 2021, a drop of 39%. Judging from sales revenue data, the revenue of Moutai and Wuliangye has continued to rise sharply in the past three years, their market share has continued to expand, and the concentration of the liquor industry has further increased [6].

The main business of Luzhou Laojiao Company covers the production of various high-quality liquor products, including Luzhou Laojiao series, Guojiao 1573 series, Luzhou Special Series, etc., covering products of different prices and flavors to meet the needs of different consumers, and selling products through multiple channels, including traditional wholesale and retail channels, e-commerce platforms, as well as self-owned stores and specialty stores. In addition, the company actively conducts product research and development innovation, continuously launches new varieties and new flavors, maintains competitiveness, actively expands the international market, exports products to overseas markets, and conducts business in the international market through joint ventures and cooperation, etc., to enhance the brand's global visibility and influence.

Achieved revenue of 9.188 billion yuan in the first quarter of 2024, a year-on-year increase of 20.74%, and achieved a net profit of 4.574 billion yuan, a year-on-year increase of 23.20%, showing a strong growth momentum. Luzhou Laojiao specifically mentioned the growth of the company's Guojiao 1573 high and low-alcohol products in the first quarter in its annual report, indicating that the company is actively adapting to market changes and optimizing its product structure. Among them, low-alcohol products are expected to become one of the development trends of the industry. The company will continue to strengthen the quality advantages of low-alcohol products and produce products that suit consumer tastes. Compared with the same period last year, Luzhou Laojiao's sales rate and bottle opening rate in the first half of this year have increased, and the inventory level is good, showing the company's good market performance and inventory management capabilities, but it also

faces challenges such as industry anxiety, the peak of the demographic dividend, and the iteration of the main consumer groups.

2.2. Competitive Advantages and Disadvantages

Advantage 1: The product SKU structure is complete, which can be pulled up and supported downward. The company implements the product strategy of "dual brands, three product lines, and large single products". The sales scale of the core product Guojiao 1573 in 22 years is nearly 20 billion yuan. The high-end customization supports the brand potential, practices long-termism, and focuses on multi-dimensional marketing such as art and sports. Guojiao has become the second largest variety with a price of thousands of yuan.

Advantage 2: Flexible + sophisticated + fine channel model. The company's channel model is a brand franchise model, which binds the interests of the channel by means of equity investment, and controls the operating rights of the franchised company instead of delegating power. The flexibility of the channel lies in comprehensively considering the consumption atmosphere and the strength/cooperation of dealers, and adopting dealer-led models, manufacturer 1+1 models, and direct sales models according to local conditions to increase control over terminals and consumers [7].

Disadvantage 1: There are two reasons why Feitian Moutai, Puwu and Guojiao 1573 can become the three main high-end liquor products: one is good quality, and the other is scarcity. It cannot have one without the other. Quality is beyond words, the key is scarcity. No matter how good the product is, if it can be supplied unlimitedly, it is difficult to get a premium. As the saying goes, "scarcity makes things valuable."

Disadvantage 2: The management has long been aware of the reality of the new growth level faced by Luzhou Laojiao. The company has been emphasizing the recovery of categories in the past two years, hoping to create a new growth pole in the non-high-end market. In 2020, the company launched "Highlights", focusing on new light luxury wines. In 2021, Luzhou Laojiao launched two new products, namely "Black Cap" for the light bottle wine market (referring to wine that can be seen directly without packaging or cartons) and "Luzhou Laojiao 1952" for the secondary high-end positioning. The idea is good, but the prospects are not very good.

3. Valuation

3.1. Valuation Method

Based on the DCF (discounted cash flow) model, which is an absolute valuation method that obtains the value of an asset by discounting the free cash that the asset can generate in the future. Using this model, the business valuation of Luzhou Laojiao can be obtained by calculating the present value of operating cash flows in the next few years and adding it to the terminal value a few years later. In this model, a forecast period needs to be set and the cash flows for each year in the forecast period need to be estimated. Since the liquor industry operates more smoothly, has less volatility, and forecasts for the future are more reliable, this paper sets the forecast period to five years in the actual estimation. It calculates the value of RWACC as the discount rate for future cash flows through the formula, and use the value of this discount rate to discount the estimated cash flows for the next five years to calculate the present value of the cash flows for the next five years. The estimated growth rate is then incorporated into the formula to calculate the value of future cash flows discounted after the forecast period to the end of the forecast period as the terminal value.

3.2. Valuation Results and Analysis

3.2.1 DCF model

This paper needs to set a forecast period and estimate the cash flow for each year during the forecast period [8]. Since the liquor industry runs more smoothly, with less volatility, and forecasts for the future are more reliable, it sets the forecast period to five years. It calculates the present value

of the cash flow over the next five years by calculating the weighted average cost of capital (WACC) as the discount rate for future cash flows and using this discount rate to discount the estimated cash flows over the next five years. The estimated growth rate is then incorporated into the formula to calculate the value of future cash flows discounted to the end of the forecast period after the forecast period as the final value.

3.2.2 CAPM model

The CAPM model is used to study the relationship between the expected returns and equilibrium price formation of assets and risky assets in the securities market [9]. The CAPM model assumes that each investor invests according to Markowitz's asset selection theory and has the same estimates of expected returns, variances, and covariates. Based on this assumption, the CAPM model focuses on the quantitative relationship between risky asset returns and risks, and examines how much return an investor must obtain to offset a certain level of risk.

According to the definition of β , substituting into the equilibrium capital market conditions, it gets the capital asset pricing model: $R_i = R_f + \beta (R_m - R_f)$ The capital asset pricing model has three explanations: (1) The expected return of a single security consists of the risk-free rate and the compensation for taking risk - the risk premium, which consists of two parts. (2) The risk premium is determined by the size of β . The larger the β , the greater the personal security risk and the higher the compensation. (3) Beta measures the systematic risk of personal security, and there is no risk compensation for non-systematic risk.

The formula is as follows: $R_i = R_f + \beta(R_m - R_f)$

R_i is the expected rate of return

R_f is the risk-free rate

β is the beta coefficient

R_m is the market rate of return

Calculate the risk-free rate of return and the market rate of return: The risk-free rate of return is 1.57% and the market rate of return is 19.16%.

Calculate the beta coefficient of Luzhou Laojiao: By calculating the beta coefficient of Luzhou Laojiao, it found that the recent beta coefficient is 1.84. Then it uses the CAPM model to calculate the cost of equity R_s : $R_s = 1.57\% + 1.84 \times (19.16\% - 1.57\%) = 33.94\%$

3.2.3 WACC model

According to Luzhou Laojiao's 2023 annual report data, it can be concluded that the debt capital is 142,500,000 yuan and the equity capital is 404,700,000 yuan.

Calculation of tax rate and borrowing cost: The tax rate is equal to 25% and the borrowing cost (R_b) is equal to 3.42%.

WACC formula: $RWACC = \text{Total debt capital} \times R_b \times (1 - \text{tax rate}) + \text{Total equity capital} \times R_s$

After incorporating all these parameters into the WACC formula, it arrives at a WACC of 3.18%.

3.2.4 Forecast future cash flows and growth rates

Based on data from 2019 to 2023, it calculates the free cash flow for these five years using the corporate free cash flow formula (FCFF).

The cash flow forecasts for the next five years (2024-2028) are as follows: 29,277,637,883, 30,287,716,390, 31,332,642,605, 32,413,618,775, 33,531,888,623.

Calculate the constant growth rate (g): Based on the cash flows of the past five years and the next five years, the weighted constant growth rate of cash flows is $g = 2.73\%$.

3.2.5 Value estimation

Calculate the present value of the five-year cash flow: Use RWACC to discount the cash flow over the next five years to obtain the present value of the five-year cash flow of ¥ 142,620,982,770.

Calculate the terminal value: Substitute the estimated perpetual growth rate g into the formula and calculate the terminal value of future cash flows discounted to the end of the forecast period after the end of the forecast period, which is approximately ¥ 7,650,000,000,000.

Valuation results: Adding the present value of cash flow to the terminal value, the company's valuation is approximately ¥ 7,790,000,000,000.

4. Suggestions

4.1. For Companies

Based on the valuation results of Luzhou Laojiao's listed company and the expected future cash flow for the company's future strategic changes and risk management, this paper can give the following suggestions:

(1) Assess the relationship between valuation and future cash flows: If future cash flow can support the company's valuation, then it can consider continuing with the existing strategy and business model. If future cash flow cannot support the company's valuation, then it may need to re-evaluate the company's strategic direction or consider measures such as cutting costs and optimizing resource allocation to improve profitability [10].

(2) Pay attention to industry trends and competitive environment: When formulating strategies, it needs to pay close attention to the development trends of the industry and changes in the competitive environment, which includes understanding the market size, consumer demand, technological innovation, and observing the strategic trends of competitors. Only by adjusting strategies in a timely manner can cope with the ever-changing market environment.

(3) Strengthen brand building and R&D investment: As a wine company with a long history, Luzhou Laojiao has a deep brand heritage and a broad consumer base. Therefore, when formulating strategies, it needs to focus on brand building and marketing promotion to enhance brand awareness and reputation. At the same time, with the development of technology and changes in consumer demand, wine companies also need to continuously innovate technology and upgrade products, increase investment in research and development, and launch more new products that meet market demand.

4.2. For Investors

Based on the valuation results and expected future cash flows of Luzhou Laojiao's listed companies, the following suggestions are given for investors' future investment strategies:

(1) In-depth analysis of valuation results: Luzhou Laojiao has been rated as "undervalued" in the valuation analysis of many institutions. For example, institutions such as Guolian Securities, Orient Securities and Haitong International have given higher valuation expectations, which are 272.85 yuan, 238.68 yuan and 281.5 yuan respectively. Investors should pay attention to the logic behind these valuation results, including the company's performance growth expectations, industry status, brand influence and other factors.

(2) Focus on future cash flow expectations: According to a research report by Kaiyuan Securities, Luzhou Laojiao's target revenue growth in 2024 is no less than 15% year-on-year, showing the company's positive expectations for future cash flow. Investors should pay attention to the company's future profitability and cash flow, which are important bases for judging the company's investment value.

(3) Investment strategy advice: As a leading company in the liquor industry, Luzhou Laojiao has strong brand influence and market competitiveness. Investors can consider holding Luzhou Laojiao's shares for a long time to share the company's future growth benefits. Although Luzhou Laojiao's valuation results and expected future cash flow are relatively optimistic, investors still need to pay attention to risk control, which includes paying attention to the impact of macroeconomic fluctuations, changes in the industry's competitive landscape and other factors on the company's performance, and adjusting investment strategies in a timely manner to cope with market changes.

5. Conclusion

When evaluating the corporate value of Luzhou Laojiao, the accuracy of data and calculations plays a vital role, such as the acquisition and consideration of data such as the beta coefficient, risk-free rate of return, and discount rate. In addition, there are also some values that require us to make professional judgments, such as market expected returns. Because of the subjective judgment of some data, there may be certain errors and deviations in the process of Luzhou Laojiao's corporate value evaluation. These problems have affected the reference and credibility of the evaluation results to a certain extent. Therefore, it is necessary to further strengthen research and practice in the future to promote the standardization and normalization of corporate value evaluation. The research in this paper not only enriches the theoretical achievements in the field of corporate value evaluation, but also provides a useful reference for actual corporate management and investment decisions. In the future, it will continue to pay attention to the development trends in the field of corporate value evaluation, explore new evaluation methods and technologies in depth, and contribute more wisdom to the sustainable development of enterprises.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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