

Investment Value Analysis of Listed Companies based on Stock Valuation Methods

-- Take Golden Seed Wine, for Example

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Abstract

Because stock prices are affected by a variety of factors, their market value may deviate from its intrinsic value in the short term. From a value investment perspective, stock value remains an important reference factor in long-term investment. This article takes the listed company Golden Seed Wine as an example, and takes the company's 2018-2020 annual report data to calculate the company's relative investment value through the price-to-earnings ratio, price-to-book ratio and dividend discount model, giving investors a certain investment reference.

Keywords

Stock Valuation; Investment Value; Earnings; Price-to-Book Ratio.

1. Introduction

In the secondary market, the stock price is subject to a variety of factors and shows an undulating price trend, and many retail investors are prone to the "herd effect" and make wrong judgments about the investment value of stocks. The estimation of the value of the stock can help investors analyze the future trend of stock prices, guide the investment strategy and direction of investors, and have important reference value in long-term investment [1]. In recent years, the consumer industry has ushered in rapid development, among which the performance of the liquor field is even more prominent, attracting a large number of investors, but the strength of many liquor companies is different, and the stock price shown is inconsistent with the inherent value of self-generation. Many investors lack in-depth knowledge of the industry, blindly chasing the rise and killing the fall to make irrational investments, and eventually causing losses. Therefore, it is particularly important to value stocks and invest in value. This paper selects the listed companies of Golden Seed Liquor in the consumer industry, calculates the value of their stocks based on the annual report data from 2018 to 2020, and comprehensively analyzes the investment value of the company in combination with the horizontal comparison in the same industry.

2. Literature Review

The analysis of the investment value of listed companies has always been an in-depth field of academic research, and there are many factors affecting the investment value of listed companies, which can be roughly divided into three levels, namely, the micro level of the company's own operation, the meso level of the industry in which it is located, and the macro level of the overall economic trend [2, 3]. The production, operation and sales of all companies in the society are inseparable from the allocation of resources in the market, the macroeconomic environment has a huge impact on the company's operation, especially for the investment value of listed companies to first consider the overall social economic environment, in the rising stage of the economic cycle makes the income increase, investment willingness to

increase, on the contrary, in the depressed economic cycle makes the company's income decline. In addition to the impact of the macroeconomic environment on the assessment of the company's investment value, the industry in which the listed company is located is also an important influencing factor, and the degree of competition of the enterprises in the industry, the product prices of the relevant enterprises and the future development potential of the overall industry are all important reference factors for the evaluation of the company's value[4]. On the other hand, the company's own operating conditions are the main factors in assessing the value of investments, including the company's fundamentals, its profile, and its financial position.

Regarding the evaluation of the investment value analysis of listed companies, many scholars have valued listed companies from different angles and using different methods. Shen Fanwei and Tan Zehui (2021) selected Chinese construction enterprises as representatives to evaluate the investment value of enterprises from the perspective of price-to-book ratio and free cash flow, and the results showed that their corporate value was undervalued and had long-term investment value [5]. Consumer industries such as liquor and beverages have always been a popular investment sector, but from the perspective of stock prices, the stock prices of many companies deviate from their actual corporate valuations. Kong Xiaochun and Kong Weijun (2018) took the alcoholic liquor as an example and used the price-to-earnings ratio, price-to-book ratio and dividend discounting methods to estimate and compare the value of their stocks, respectively, and obtained a reasonable range of stock value [6].

In this paper, combined with the relevant research methods of scholars, golden seed wine enterprises are selected as the research object, and the fundamental situation of golden seed wine enterprises is analyzed by making horizontal comparisons between their relevant financial data with each industry, and on this basis, the stock of golden seed wine is valued.

3. Golden Seed Wine Company Profile and Analysis of Related Financial Indicators

3.1. Company Profile

Golden Seed Wine Co., Ltd. is one of the famous large-scale liquor enterprises in Anhui Province, founded in July 1949 and listed on the Shanghai Stock Exchange in 1998.

3.2. Analysis of Financial Indicators

This paper comprehensively analyzes the company from three aspects: solvency, operational ability and profitability through the financial data of the annual report of Golden Seed Wine from the three aspects of enterprise solvency, operational ability and profitability[7], Make reasonable predictions about future development capabilities.

3.2.1. Solvency Analysis

The solvency of an enterprise refers to its ability to repay its debts, which can reflect the anti-risk ability of an enterprise, and the indicators that measure the solvency of enterprises usually include current ratio, quick ratio and asset-liability ratio, etc. Table 1 shows the relevant ratio of Golden Seed Wine Company from 2018 to 2020. From the perspective of the current ratio, it is generally believed that the reasonable current ratio of the production enterprise is 2, and it can be seen from the table that the current ratio of the Golden Seed Wine Company in the past three years is greater than 2, and its current assets are relatively more short-term debts and have a stronger liquidity, indicating that the Golden Seed Wine Company has a strong short-term solvency. From the perspective of the quick ratio, its value is also greater than 1, indicating that even if the inventory with poor liquidity ability is removed from the current assets, its remaining liquidity is still strong, which further shows that Golden Seed Wine Company has a good short-term solvency in the past three years.

Table 1. 2018-2020 year Analysis of the solvency of Golden Seed Wine

project	2018	2019	2020
Total Assets (RMB100 million)	88.42	95.01	98.06
Gearing ratio(%)	30.25	26.2	26.19
Current Ratio (Times)	2.46	2.91	2.73
Quick ratio (times)	1.69	1.93	1.54

3.2.2. Profitability Analysis

Table 2 lists the relevant indicators for the profitability of golden seed wine enterprises in the past three years, and it can be seen from the data that the net profit margin on sales, the net interest rate on total assets and the return on net assets have shown an upward trend from 2018 to 2019, and the ratio has declined in 2020 due to the impact of the new crown epidemic. Net profit margin on sales is the ratio of net profit to sales revenue, reflecting the amount of net profit brought by each yuan of sales revenue, which can measure the income level of sales revenue. The increase in the net profit margin of total assets shows that the input and output of Golden Seed Liquor Company have been continuously optimized, and the operational efficiency of assets has been improved, which is related to the recent popularity of the liquor industry and the continuous optimization of Kouzijiao's own operation and management.

Table 2. 2018-2020 Profitability analysis of Golden Seed Wine

project	2018	2019	2020
Net profit margin on sales(%)	35.90	36.82	31.81
Net interest rate on total assets(%)	17.33	18.11	13.01
Return on equity(%)	24.85	24.53	17.62

3.2.3. Operational Capability Analysis

Table 3. 2018-2020 Analysis of golden seed wine operating capacity

project	2018	2019	2020
Accounts receivable turnover days(days)	1.12	0.30	0.14
Inventory turnover (times)	0.57	0.54	0.38
Total Asset Turnover (days)	0.48	0.49	0.41

Operational capacity can reflect the operating capacity of an enterprise and the utilization efficiency of assets, this paper measures the operating capacity of Golden Seed Wine Company by selecting three ratio indicators of accounts receivable turnover days, inventory turnover rate and total asset turnover rate. Table 3 lists the relevant indicators for the reflected operating capacity of Golden Seed Wine Company, from which it can be seen that the inventory turnover rate has been in a downward trend from 2018 to 2020, indicating that the inventory turnover rate of Golden Seed Wine Company has slowed down. Generally speaking, the inventory turnover rate reflects the comprehensive management of all aspects of the enterprise, the more inventory turnover, the stronger the inventory liquidity, indicating that the performance of inventory management is better. However, this statement for the liquor industry is not necessarily accurate, and some better liquor companies may have a lower inventory turnover rate. In short, from the data point of view, the operating capacity of Golden Seed Wine Company

needs to be improved, which can strengthen the turnover management of assets and improve the efficiency of inventory management.

4. Golden Seed Wine Stock Valuation Analysis

Related theories hold that prices fluctuate up and down around value, and that prices always move closer to value in the long run. Stock value investing is buying when the price is below its intrinsic value, and selling in the future when the price returns to or even above its value, so as to make a profit. Stock valuation is to estimate its intrinsic value, determine the degree of deviation between the current price and the intrinsic value of the stock, and seek investment opportunities. There are many stock valuation methods, this paper selects the price-to-earnings ratio and price-to-book ratio to calculate the relative value of Golden Seed Wine stocks, and judges the investment value of Golden Seed Wine by calculating the price-to-earnings ratio and price-to-book ratio of other 4 companies of the same industry size.

4.1. Valuation of Stocks under the Price-to-Earnings Ratio Method

The price-to-earnings ratio refers to the ratio of the price per share to earnings per share, expressed by the formula $PE=P/E$, where PE is the price-to-earnings ratio, P is the price per share, and E is earnings per share. P/E ratio indicators are often used in investment analysis to determine whether the stock price is overvalued or undervalued, its internal logic is: the P/E ratio represents the price that investors are willing to pay for each yuan of income, if the P/E ratio of a company's stock is higher than the average level of other stocks or industries in the same industry, it indicates that investors believe that the profit level of the enterprise will be rapidly grown in the future, so its P/E ratio will drop to a reasonable level, so the higher P/E ratio indicates that the public has a higher evaluation of the stock. It is believed that the company has great potential for future growth[8].

Table 4. Comparison of P/E ratios of five companies in the same industry (March 31, 2021)

project	Mouth cellar	Golden Seed Wine	Welcome to the tribute	Golden Emblem Wine	Elite
Shares	62	13.18	35.26	34.4	19.86
Earnings per share	1.44	0.16	0.66	0.65	0.47
P/E ratio (times)	43.06	82.38	53.42	52.92	42.26
Average (times)	54.81				

Table 4 shows the price-earnings ratio of the stocks of 5 liquor companies in the same industry at the end of the first quarter of 2021, from which it can be seen that the P/E ratio of Golden Seed Wine is higher than the average of 5 companies, indicating that investors have greater confidence in the future profitability of Golden Seed Wine, and it is expected that the stock price will rise in the future. But on the other hand, since the earnings per share of Golden Seed Wine stocks are 0.16, which is much lower than that of 5 liquor companies in the same industry, when the earnings per share are very small, the price-earnings ratio will generally be very high, which does not necessarily indicate the future upward trend of stocks. Combined with the operation of Golden Seed Wine in the past few years, in addition to the negative net profit in 2019, the net profit of the rest of the years showed an upward trend, and the turnaround of losses into profits in 2020 shows that in the long run, the operation of Golden Seed Wine Enterprises is in good condition. Combined with the performance data at the end of the first quarter of 2021, the stock

valuation of Golden Seed Wine is calculated according to the formula to be $54.81 \times 0.16 \approx 8.77$ (yuan).

4.2. Valuation of Stocks under the Price-to-Book Ratio Method

Price-to-book ratio refers to the ratio of price per share to net assets per share, expressed by the formula as $PB = P/B$, where PB is the price-to-book ratio, P is the price per share, B is net assets per share, and the price-to-book ratio reflects the ratio between the market value and the book value of a listed company. In general, the carrying amount of an enterprise's net assets reflects its operational strength and ability to create value in the future. Under normal circumstances, if the market value of a company is higher than the book value, it means that the public is optimistic about the future development potential of the enterprise, believing that the probability of its stock rising in the future is very large, and the investment risk is relatively small, especially in the bear market, the price-to-book ratio indicator has a higher reference value.

Table 5 is a comparison of the price-to-book ratio of 5 liquor companies of comparable size at the end of the first quarter of 2021, through the comparison, it can be seen that the net assets per share of Golden Seed Wine are relatively low compared to other enterprises, indicating that its ability to create value is average, but the price-to-book ratio is the lowest among the 5 companies, indicating that its investment risk is relatively the lowest, and from the perspective of price-to-book ratio alone, Golden Seed Wine stocks still have a certain intervention value. Based on the industry's average price-to-earnings ratio and net assets per share, it can be calculated that the stock valuation of Golden Seed Wine is $4.82 \times 4.14 = 19.95$ (yuan), which still has a large upward trend compared with its market value.

Table 5. Price-to-Book Ratio Comparison of Five Companies in the Same Industry (March 31, 2021)

project	Mouth cellar	Golden Seed Wine	Welcome to the tribute	Golden Emblem Wine	Elite
Shares	62	13.18	35.26	34.4	19.86
Earnings per share	11.38	4.14	5.9	5.48	6.15
P/E ratio (times)	5.45	3.18	5.98	6.28	3.23
Average (times)	4.82				

4.3. Valuation of Stocks under the Dividend Discounting Model Method

The dividend discount model is a common method in stock valuation, the main principle is to treat the discounted value of dividends that investors can obtain in the future as the intrinsic value of the stock. In general, the future income of investors holding stocks is mainly derived from stock dividends and capital gains at the time of transfer, in order to simplify the problem, we assume that investors hold stocks for a long time, that is, they hold them for more than the calculation period, and the dividend growth rate is fixed. Based on this, the dividend fixed growth model in the dividend discount model is: $V = D1 / (R - G)$, where V represents the intrinsic value of the stock, D1 is the cash dividend that is expected to be obtained in the next period, R represents the investment return required by rational investors, and G is the fixed growth rate of stock dividends. This method of stock valuation through dividend discounting is mainly based on stock dividends, but whether the intrinsic value of the stock is related to the dividend is still controversial, although the stock price is affected by many factors such as the company's own operation and the external macro environment, but the dividend is closely related to the profit level of the company's operation, that is, the better the company's operating conditions,

the higher the profit level, the greater the stock dividend that investors may get, so the intrinsic value of the stock is estimated by discounting the stock dividend, It has certain reference value. Since the dividend distribution system of listed companies has many influencing factors and has great uncertainty and cannot be fully predicted, this paper calculates the fixed growth rate of stocks based on historical data.

Table 6 shows the dividend payment of Golden Seed Wine from 2015 to 2019, and due to the company's operating conditions and market conditions, no cash dividends were issued in 2016 and 2019, and if the dividend growth rate is estimated according to this period, it will be biased. In order to solve this practical problem, this paper selects the old white dry wine equivalent to the size of the golden seed wine as a reference basis, and through the analysis and calculation of the historical data of the old white dry wine, the dividend growth rate is obtained, and instead of the dividend growth rate of the golden seed wine during this period, the dividend payment of the old white dry wine from 2015 to 2019 is shown in Table 7.

Table 6. Golden Seed Wine 2015-2019 shares pay cash dividends

Time	2015year	2016year	2017year	2018year	2019year
Stock Cash Dividend (RMB/Share)	1.2	0	0.8	1.0	0

Table 7. Old White Dry Wine 2015-2019 stock pays cash dividends

Time	2015year	2016year	2017year	2018year	2019year
Stock Cash Dividend (RMB/Share)	0.3	0.15	0.2	0.2	0.18

Based on the data in Table 7, the dividend growth rate is calculated as: $\sqrt[4]{\frac{0.18}{0.3}} - 1 \approx -12\%$, This figure is used as the dividend growth rate of Golden Seed Wine from 2014 to 2019. The dividend of Golden Seed Wine stock in 2020 is 1.3, the dividend in 2021 should be 1.1 according to the assumption of fixed dividend growth, and the current stock value calculated using the dividend discount model is assuming that the investor requires a return on investment of 6%.: $V = \frac{1.1}{6\%+12\%} \approx 6.11(\text{Yuan})$.

5. Conclusion and Recommendations

This paper first analyzes the relevant financial indicators of Golden Seed Wine, and on this basis, the intrinsic value of Golden Seed Wine stock is estimated through the price-earnings ratio, price-to-book ratio and dividend discount model, and the price per share of Golden Seed Wine should be between 6.11-19.95 yuan, combined with the actual closing price of Golden Seed Wine on March 31, 2020 of 13.18 yuan, it can be seen that there is still some room for growth in Golden Seed Wine, and investors can choose to buy in moderation. Combined with the current market conditions, the current golden seed wine stock is still in an upward trend, when the future stock price exceeds the valuation range of the stock, investors should adopt a conservative investment strategy, the future price may still be in the valuation range of the stock, investors can be based on their own risk and return requirements, the investment strategy of "high selling and low sucking".

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