

Financial Statement Analysis Processes According Financial Statement Performance of BYD Co., Ltd in China

Wei Xin

Researcher of Tashkent State University of Economics

Tashkent, Uzbekistan.

Email: strongwei1314@gmail.com

ORCID: 0009-0002-7134-4102

***Abstract:* Financial statement analysis is the processing, analysis, comparison, evaluation and interpretation of the data provided by the company's financial statements. Through analysis, we can judge whether the company's financial situation is good, whether the company's business management is sound, and whether the company's business prospects are bright. At the same time, we can also find out the crux of the company's business management through analysis and propose solutions to the problems. This paper selects the financial statements of BYD Co., Ltd., a well-known Chinese automobile listed company, for analysis. It conducts a financial analysis of BYD Co., Ltd. from the perspectives of debt repayment ability, operating ability, profitability and growth ability, and puts forward some suggestions in order to provide a reference for the development of new energy vehicle companies.**

Keywords: BYD; financial statement analysis; new energy vehicles

1. INTRODUCTION

BYD Co., Ltd. is a Chinese automobile brand. It was founded in February 1995. After more than 20 years of rapid development, it has established more than 30 industrial parks around the world and achieved a strategic layout in six continents. The company's comprehensive strength in new energy vehicle technology ranks first in China. In 2023, the company's new energy vehicle market share will further increase to 31.9%, an increase of 4.8 percentage points year-on-year. It has been the leading position in China's new energy vehicle sales for eleven consecutive years, and has won the global new energy vehicle sales crown. It has created the history of Chinese auto companies ranking among the top ten in global sales for the first time. BYD Co., Ltd.'s business layout covers electronics, automobiles, new energy and rail transportation, and plays a vital role in these fields. From energy acquisition, storage, to application, it builds a zero-emission new energy overall solution in all aspects. BYD Co., Ltd. is a listed company in Hong Kong and Shenzhen, with a turnover and total market value of more than 100 billion yuan.[1]

BYD Co., Ltd. mainly operates automobile business mainly based on new energy vehicles, mobile phone components and assembly business, secondary rechargeable batteries and photovoltaic business, and actively uses its own technological advantages to expand urban rail transportation and other businesses. [2]

In 2023, the company achieved revenue of approximately RMB 602,315 million, a year-on-year increase of 42.04%, of which the revenue from automobile, automobile-related products and other products business was approximately RMB 483,453 million, a year-on-year increase of 48.90%; the revenue from mobile phone components, assembly and other products business was approximately RMB 118,577 million, a year-on-year increase of 20.00%, accounting for 80.27% and 19.68% of the company's total revenue respectively.[3]

2. METHODOLOGY

The research in this paper is mainly based on literature survey and secondary data. In conducting this study, various journals and research papers, research reports and newspaper articles were investigated. This study combines different types of research methods and data, including ratio analysis, enumeration and comparative research methods. These methods are very suitable for the study of this topic.

3. RESULTS

The results of the paper show that from the comprehensive analysis of the financial data and financial indicators of BYD Co., Ltd., it can be seen that the company has certain strength and development potential. The company has certain technical and market advantages in the field of new energy vehicles, and the policy environment is also actively supporting the development of new energy vehicles. The company's financial situation is generally sound, with certain profitability and asset-liability structure advantages.

4. ANALYSIS

This paper takes the financial statements of BYD Co., Ltd. from 2019 to 2023 as the research object. On the basis of calculating various financial indicators, it conducts a comprehensive analysis of BYD Co., Ltd.'s debt-paying ability, operating ability, profitability, and growth ability. The original data comes from the Wind database. The automobile industry is used as the main stock selection indicator. 20 Chinese automobile listed companies are selected as the average measurement data of the same industry. Sample stocks with risk warnings (ST or *ST) are excluded. The data range is 2019-2023.[6]

(I) Debt-paying ability analysis

BYD Co., Ltd.'s debt-paying ability indicators include current ratio, quick ratio and debt-to-asset ratio. These indicators can reflect BYD Co., Ltd.'s short-term and long-term debt-paying ability, and then evaluate its financial status and risk level. The relevant data are shown in the table below. By comparing BYD Co., Ltd. with the average of the same industry, we can analyze and compare the company's position in the same industry.

Table 1: BYD's solvency indicators from 2019 to 2023 [6]

	2019	2020	2021	2022	2023
Current Ratio	0.98	1.05	0.97	0.72	0.67
Quick Ratio	0.67	0.67	0.65	0.42	0.44
debt-to-asset ratio (%)	68.00	67.94	64.76	75.42	77.86

Table 2: Comparison of average debt-paying capacity of the automobile industry in the same period of 2023

	BYD	Industry average
Current Ratio	0.67	1.24
Quick Ratio	0.44	0.82
debt-to-asset ratio (%)	77.86	67.55

The company's current ratio is relatively stable, basically maintaining around 1 from 2019 to 2021. The ratio has slightly declined since 2021, mainly due to the increase in accounts payable and other payables. The average current

ratio of the automotive industry is roughly 1, and BYD's current ratio is within the normal range. Overall, BYD's short-term debt repayment ability is acceptable, with more working capital to repay short-term debts, a large amount of liquid assets, and less risk to creditors.

The quick ratio refers to the ratio of a company's quick assets to current liabilities, which makes up for the shortcomings of the current ratio. From a vertical comparison, BYD Co., Ltd.'s quick ratio was relatively stable from 2019 to 2023, but it was all below 1. The company's quick ratio of 0.44 in 2023 was lower than the industry average, indicating that BYD Co., Ltd.'s short-term debt repayment ability after deducting slower-to-liquid inventory was low. From this perspective, BYD Co., Ltd.'s short-term debt repayment ability is poor.

The debt-to-asset ratio can measure the extent to which a company relies on debt development, and can also understand the contribution of creditors to corporate resources. From 2019 to 2023, BYD Co., Ltd.'s asset-liability ratio remained at 64% to 77%. The asset-liability ratio has been decreasing since 2019, and the asset-liability ratio in 2021 is the lowest, indicating that the company's risk control is constantly strengthening. The company's asset-liability ratio in 2023 is slightly higher than the industry average, indicating that the company's long-term debt repayment ability is weak. This may be because BYD Co., Ltd. has adopted high financial leverage for rapid expansion and development in the past two years, resulting in excessive debt and relatively high financial risks. Although the company's use of high financial leverage may reduce financing costs and financial costs, if this structure is maintained for a long time, financial risks are likely to occur. It can be seen in the 2023 report that the company's short-term loans are 18.3 billion yuan and long-term loans are 11.9 billion yuan, accounting for a very small proportion of the total liabilities of 529 billion yuan. The company does not rely on bank loans to operate and has good profitability.[4]

(II) Operational Capacity Analysis

The operating capacity indicators of BYD Co., Ltd. include accounts receivable turnover rate, inventory turnover rate, and total asset turnover rate. These indicators can reflect the asset management and utilization efficiency of BYD Co., Ltd., and then evaluate its operating capacity and profitability.

Table 3: Operating Capacity Indicators of BYD Co., Ltd. from 2019 to 2023

	2019	2020	2021	2022	2023
accounts receivable turnover rate	2.74	3.68	5.58	11.3	11.96
inventory turnover rate	4.12	3.64	5.03	5.74	5.76
total asset turnover rate	0.65	0.79	0.87	1.07	1.03

Table 4: Comparison of average operating capacity of the automobile industry in the same period of 2023

	BYD	Industry average
accounts receivable turnover rate	11.96	8.43
inventory turnover rate	5.76	5.5
total asset turnover rate	1.03	0.79

Since 2019, BYD Co., Ltd.'s accounts receivable turnover rate and inventory turnover rate have increased year by year. In 2023, the accounts receivable turnover rate increased by 4.36 times compared with 2019. The data are higher

than the average of comparable listed companies in the same industry, showing that BYD is relatively efficient in accounts receivable and inventory management. This indicator of BYD Co., Ltd. is not only higher than the industry average, but also shows that the company has strong strength in operational capabilities[5].

In vertical comparison, BYD's total asset turnover rate first fluctuated and then rose. In horizontal comparison, BYD Co., Ltd.'s total asset turnover rate is higher than the industry average. This shows that BYD Co., Ltd. has high efficiency in the use of total assets and good operational capabilities.

(III) Profitability Analysis

BYD Co., Ltd.'s profitability indicators include operating profit margin, net profit margin and gross profit margin. These indicators can reflect BYD Co., Ltd.'s profitability over a certain period of time, and then evaluate its operating performance and value creation capabilities.

Table 5: Profitability indicators of BYD Co., Ltd. from 2019 to 2022

	2019	2020	2021	2022	2023
operating profit margin (%)	1.81	4.52	2.14	5.08	6.33
net profit margin (%)	1.3	2.7	1.4	3.9	5
gross profit margin (%)	16	19	13	17	20

Table 6: Comparison of average profitability of the automobile industry in the same period of 2023

	BYD	Industry average
operating profit margin (%)	6.33	1.14
net profit margin (%)	5	0.9
gross profit margin (%)	20	11

From a vertical comparison, BYD Co., Ltd.'s operating profit margin, net profit margin, and gross profit margin increased year by year from 2019 to 2023. From a horizontal comparison, these three indicators are generally much higher than those of the same industry, which shows that BYD Co., Ltd. has low operating costs, high gross profit margins, strong profitability, and is in a dominant position in the same industry. Against the backdrop of the epidemic, BYD Co., Ltd. has not been affected by the supply and price fluctuations of raw materials, and still maintains a relatively high gross profit margin, mainly due to BYD's vertical integration advantages, scale benefits, and significant cost reduction effects.

(IV) Growth Capacity Analysis

BYD Co., Ltd.'s growth capacity indicators include operating income growth rate, net profit growth rate and net asset growth rate. These indicators can reflect BYD Co., Ltd.'s growth capacity and expansion speed in a certain period of time, and then evaluate its future development potential and growth value.

Table 7: BYD Co., Ltd.'s growth capacity indicators from 2019 to 2023

	2019	2020	2021	2022	2023
operating income growth rate (%)	-1.78	22.59	38.02	96.2	42
net profit growth rate (%)	-41.93	162.27	-28.08	445.36	80.72
net asset growth rate (%)	3.14	2.96	61.73	16.45	23.95

Table 8: Comparison of average growth capabilities of the automobile industry in the same period of 2023

	BYD	Industry average
operating income growth rate (%)	96.2	16.43
net profit growth rate (%)	346.48	56.24
net asset growth rate (%)	16.45	2.72

From a vertical comparison, BYD Co., Ltd.'s revenue growth rate, net profit growth rate, and net asset growth rate have fluctuated and increased since 2019, with a large increase. From a horizontal comparison, all three indicators are greater than the industry average. This shows that BYD Co., Ltd. has good operating conditions, market share and business prospects, and the company's growth ability is very good. 2022 is a key year for BYD Co., Ltd. BYD became the first car company in the world to stop producing fuel vehicles, and its global sales of new energy vehicles topped the list. Its operating income doubled, its net profit increased by more than three times, its cost leadership, strong technology, and future growth ability are very good.

5. CONCLUSIONS

In this study, I analyzed the financial status of BYD Co., Ltd. from the perspective of ratio analysis. Ratio analysis is an analytical method that analyzes the financial status and operating results of an enterprise and understands the development prospects of an enterprise by calculating the ratios of relevant indicators in financial statements. The purpose of this study is to conduct a financial analysis of BYD Co., Ltd. from four aspects: debt-paying ability, operating ability, profitability and growth ability, and to put forward some suggestions, in order to provide a reference for the development of my country's new energy vehicle enterprises, thereby providing empirical literature support for further and future research.

The main suggestions for BYD Co., Ltd. in this paper are:

(I) Profitability is strong, and attention should be paid to increasing R&D investment

With the development of new energy vehicle business, BYD Co., Ltd.'s market share has gradually expanded, its competitiveness has been improved, and its profitability has also increased, providing the company with a new profit

growth point. In the future development, attention should be paid to policy dependence, maintaining low-cost advantages, while increasing R&D expenditures, striving for technological advantages, and improving profitability. In addition, we should be wary of chip supply risks.

(II) Debt-paying ability is good, and attention should be paid to financial risks

The current ratio and quick ratio have increased steadily, indicating that the debt-paying ability has improved to a certain extent. At present, BYD Co., Ltd. is still in the expansion stage, involving more and more fields, and the scale of debt is also expanding, which will greatly increase the financial burden of the company. Therefore, BYD Co., Ltd. still needs to maintain a reasonable level of debt and enhance its repayment ability, so as to reduce the financial risk of the company.

(III) Operational capacity needs to be strengthened

The company still needs to continue to improve the company's operational capacity, develop marketable products, strengthen sales work, strengthen asset management, pay attention to the risk of large-scale bad debts or even capital chain rupture, strengthen the recovery management of accounts receivable, and at the same time, the reasonable use of current assets and total assets also needs to be paid attention to.

REFERENCES

- [1]. Liu Minwen, "BYD's profitability and suggestions for improvement" China Foreign Investment, vol. ED-08, pp.96–99, Apr. 2022.
- [2]. Qu Yannan, "A study on the impact of government subsidy policy on BYD's innovation capability," Investment and Entrepreneurship, vol. ED-34, pp.70–72, Apr. 2023.
- [3]. Huang Pei, "BYD continues its efforts in pure electric commercial vehicles," China Energy News, May.2020.
- [4]. Yan Y. Research on enterprise valuation and risk of BYD. Progress in Applied Mathematics, 2022, 11 (12): 15.
- [5]. Huang Z. Investment risk analysis of BYD Co., Ltd. Modern Commerce and Trade Industry, 2019, 40 (13): 2.
- [6]. BYD's balance sheet, profit statement.