

Research on the development of BYD based on SWOT and Financial analysis

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Abstract. With the continuous maturity of new energy utilization technology in the future, BYD, as a leader in the new energy industry, will usher in a greater development opportunity. Through SWOT analysis of BYD's financial indicators in recent years, we can draw the following conclusions: BYD has a stable financial situation, outstanding technological innovation ability, strong cost control ability, and obvious advantages; However, the market competition is fierce, and brand influence needs to be improved. At the same time, it faces threats such as rapid technological updates and uncertainties in the international trade environment. Therefore, BYD should fully utilize opportunities such as policy support and market demand growth, strengthen brand building and technological research and development, improve market competitiveness, and respond to potential risks and challenges. In summary, by using the SWOT analysis method to conduct in-depth analysis of BYD's financial indicators in recent years, we can not only understand the company's operating status and competitive advantages, but also discover the challenges and potential risks it faces. This will help investors and decision-makers make more scientific and reasonable strategic decisions, providing strong support for the future development of the company.

Keywords: Development; BYD; new energy industry.

1. Introduction

From the perspective of national policies, the new energy industry has received strong support and promotion. In order to promote the industrialization and commercialization of new energy technologies, relevant departments encourage industry university research cooperation and strengthen talent cultivation in the field of new energy. In addition, a series of supportive policies have been introduced, including providing tax incentives, increasing purchasing power for new energy products, establishing sound market supervision mechanisms, etc., to enhance the competitiveness of new energy products in the market. At the same time, encourage enterprises to carry out green finance, support financing of new energy projects [1], reduce financing costs of the new energy industry, and create favorable conditions for its healthy development.

Specifically, BYD has a strong development momentum in the field of new energy. BYD, as a global leader in new energy vehicles, has continuously broken records in recent years and made significant progress in new energy technology. For example, BYD plans to increase investment in energy storage technology resources in 2024, bringing economic value and ecological benefits to global customers. In addition [2], BYD will also launch the fifth generation DM-i super hybrid system, further improving the level of hybrid technology and bringing more excellent fuel economy performance to users.

In addition to technological innovation, BYD also focuses on after-sales service and rights protection. The company provides consumers with an eight year or 150000 kilometer battery warranty service, which is longer than the warranty period of traditional vehicles. At the same time, BYD's new energy vehicles are equipped with remote control rescue systems [3], and consumers can send rescue requests to the after-sales service center through mobile apps or in car devices, enjoying 24-hour remote control rescue services. In addition, BYD has established a mechanism to protect the legitimate rights and interests of new energy vehicle owners.

In terms of new energy industry layout, BYD is also actively promoting key projects. For example [4], BYD's new energy vehicle component expansion project in Xi'an has been fully put into operation,

with an annual production capacity of 600000 sets. These projects not only help enhance BYD's competitiveness in the new energy market, but also inject new impetus into the development of the entire new energy industry [5]. Overall, the country's support for new energy has provided a favorable development environment for new energy enterprises such as BYD. BYD, on the other hand, has continuously consolidated its leading position in the new energy market through technological innovation, high-quality services, and industrial layout [6], making positive contributions to promoting the healthy development of the new energy industry.

In recent years, scholars have paid great attention to research in the field of new energy. The multi group analysis of vehicle policy adopts the construction of a model of residents' travel intentions under the new energy vehicle policy to study their attitudes towards new energy vehicles [7]. The results show that the more positive and low-carbon attitudes residents have towards the new energy vehicle policy, the stronger their intention to choose new energy vehicles or public transportation for travel; The more actively residents respond to the new energy vehicle policy, the stronger their intention to choose new energy vehicles for travel [8]; Improving residents' attitudes and responses to new energy vehicle policies can promote the use of new energy vehicles.

2. SWOT analysis of BYD

2.1. Strengths

1. BYD has performed well in the new energy market and has become a leading enterprise in the new energy vehicle industry with its strong technological strength and market layout. BYD's sales in April 2024 reached an astonishing 313245 units, including 312048 new passenger car sales, a year-on-year increase of 49% and a month on month increase of 3.4%. Such achievements not only enabled BYD to remain the champion of domestic passenger car sales, but also enabled its cumulative sales of new energy vehicles to exceed 7.3 million units, continuing to lead the global new energy vehicle market.

2. The cost advantage of BYD is mainly achieved through the combination of semi-automatic equipment and manual labor, achieving cost reduction and efficiency improvement through this model. Through China's relatively cheap labor force, the total cost is relatively lower than that of the industry.

3. BYD Company By cultivating innovative talents, enhancing independent innovation capabilities, developing and producing production equipment with independent intellectual property rights, and updating management concepts, BYD has become a leader in innovation capabilities within its industry in China.

2.2. Weaknesses

1. Starting disadvantage: Although BYD holds a leading position in the global market in the battery industry and adheres to independent innovation, it is still in its early stages in the field of new energy, with a relatively weak foundation and a significant gap in scale compared to large global automobile manufacturing enterprises.

2. Disadvantages in Production Process Due to the immaturity and perfection of domestic manufacturing processes, BYD's manufacturing process also lags behind other large enterprises in the world, and semi mechanized production may also lead to improved production processes.

3. Marketing outlets and financial disadvantages: Due to its initial stage, the marketing network is not yet sound enough, marketing services are not yet complete, and funds cannot compete with world giants in the same industry.

2.3. Opportunities

1. In the future, the direction of industrial development is energy conservation and cleanliness, and BYD has always had plans to develop new energy products, along with the original energy

The increase in the cost of sources and the damage to the environment will lead to a greater emphasis on the development of new energy

2. The increasingly high emission standards in the international market have been continuously formulated by the international and domestic communities to reduce various environmental problems

With higher emission standards, BYD's new energy products will further develop under this opportunity

3. Strong support from government policies. The government not only provides significant support for the development of the new energy industry in terms of policies, but also provides support for the new energy industry

The industry has increased its subsidy efforts, not only reflected in funding, but also in talent, system, and innovation

4. The prices of similar new energy products from other brand enterprises are relatively high due to their leading position in the battery industry and their semi manual and semi mechanical nature. Production reflects the price and cost advantages of BYD's similar products

5. The celebrity effect brought by Buffett's investment in BYD. Buffett not only brought financial support but also increased people's expectations for the BYD brand.

2.4. Threats

1. Problems such as inadequate technology and difficulty in supporting facilities cannot be improved in the short term solely by the limited strength of a certain enterprise

2. Domestic and foreign companies in the same industry have also started investing heavily in the production and development of electric vehicles. Domestic and foreign companies have also taken a keen look at the development of new energy, which not only brings a clean and hygienic environment, but also higher benefits.

3. Insufficient consumer confidence in domestic new energy vehicles due to the late start of domestic domestic domestic brands and significant gaps in quality, craftsmanship, and safety standards compared to other foreign counterparts, BYD should establish consumer confidence

4. The safety and quality standards for new energy products are gradually increasing both domestically and internationally. Due to the late start of new energy development, there are challenges in equipment, technology, and quality

The safety standards for new energy products are still not mature compared to original energy products, so BYD should keep up with them.

3. Financial analysis of BYD

3.1. ROE

BYD's profitability indicators have shown some volatility. Among them, the gross profit margin and net profit margin show a trend of first decreasing and then increasing, which may be related to the company's expansion in new business areas and efforts in cost control. ROE shows a steady upward trend, indicating that the company's emphasis on shareholder returns is constantly increasing.

BYD's ROE has continued to grow over the past three years, from 10% in 2021 to nearly 15% in 2022 (figure 1). This indicates that the company's profitability is gradually increasing.

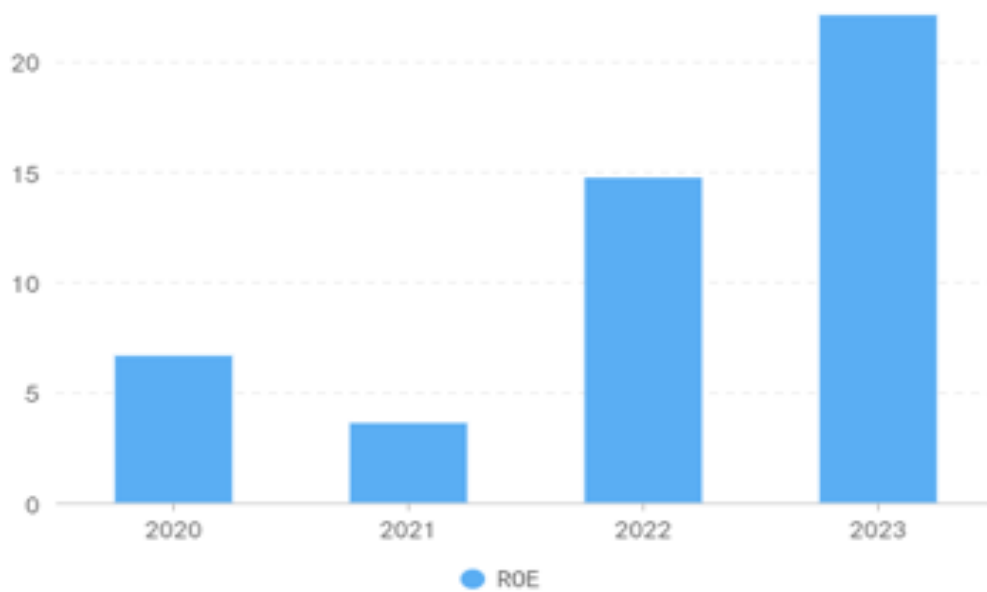


Figure 1: ROE of BYD from 2020-2023.

3.2. Asset liability ratio

According to the financial report, BYD's asset liability ratio in the first half of the year was as high as 94% is the highest asset liability ratio for the same period in nearly 10 years. Moreover, among BYD's increased liabilities, the main one is current liabilities. As of June 30th this year, BYD's total liabilities were 460.732 billion yuan, while its current liabilities were as high as 4036.9 yuan, with a current liability ratio of 87.62%, which requires caution.

The data indicates that a normally going concern enterprise is fluid (figure 2). The debt ratio is generally within the range of 30% -70%. If the current liability ratio exceeds 70%, it indicates that the company has a strong dependence on short-term funds and the debt repayment risk will increase. Although BYD's profitability has reached an unprecedented level, it still needs to be taken seriously and vigilant in the face of an 88% current liability ratio and increasingly fierce market competition.\

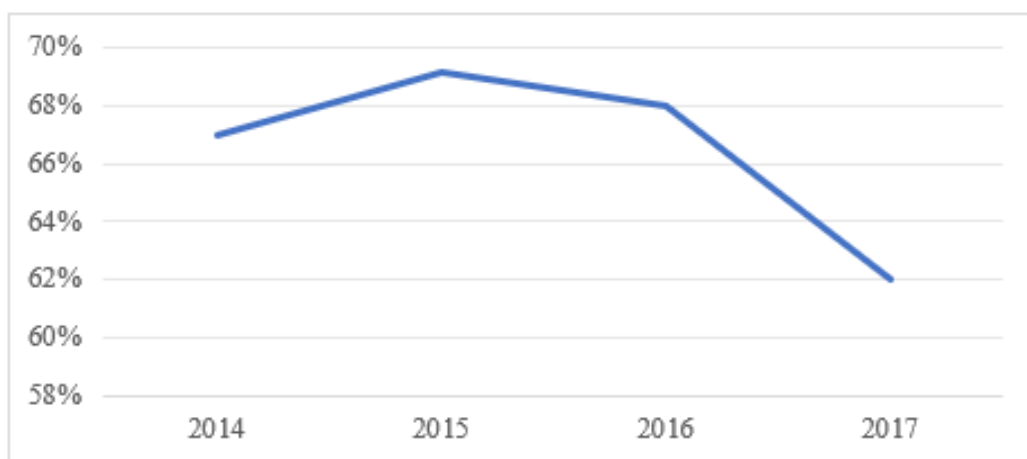


Figure 2: BYD's asset liability ratio in the past decade.

4. BYD's Future Investment Forecast

Firstly, the industry has a promising future. In the next 3-5 years, some institutions predict that BYD's compound growth rate can reach 31%. If it can reach 31%, the Magee valuation method has been applied to the PE corresponding to the compound growth rate. If the compound growth rate

reaches 31%, the PE value that should be given is 58 times. BYD has also mentioned in the previous video that its PE is now 187 times higher, which is clearly overestimated.

Secondly, the industrial chain is sound. The perfect industrial chain is the company's own competitive advantage. From two dimensions, the upstream of the industrial chain is the Three Electric, which refers to batteries, motors, and electronic control. Basically, all three types of electricity are self-produced, produced and controlled by oneself, so there is no right to speak. So the entire upstream is in one's own hands, with strong control.

Thirdly, blade batteries. BYD has its own unique blade battery, and blade batteries have good safety. I have conducted a needle puncture experiment, and I believe most fans have seen it. It is believed that using a needle to penetrate other lithium batteries will cause an explosion, but BYD's will not explode, so this is the main safety card.

Fourthly, the trend of BYD. BYD is essentially. From 20 years to 21 years, it took a year and a half for a company to increase by 6 times. If a company increases by 6 times in a year and a half, it is impossible for its profits to increase by 6 times in a year and a half. Therefore, a 6 time's increase basically includes the beautiful expectations for the next few years in the price.

Fifthly, has BYD's current pullback of over 200 yuan been fully absorbed? I believe it has not been fully digested yet, so don't worry, all high valuations are due to the stock price containing too many good expectations.

5. Conclusion

In summary, BYD should continue to increase investment in innovation and research and development, expand its product line, strengthen brand building and dissemination, strengthen international cooperation and communication, focus on sustainable development, optimize supply chain management, and pay attention to the development of intelligent networking in the future development process, in order to achieve the company's sustained and healthy development.

The suggestions of this paper include,

1. Increase investment in innovation and research and development, and maintain technological leadership. As a leading enterprise in the field of new energy vehicles, BYD should continue to increase investment in technological innovation and research and development. By deepening the research and development of core technologies, we aim to improve the performance, safety, and range of new energy vehicles to meet the growing market demand. At the same time, actively seeking cooperation with domestic and foreign universities and research institutions to jointly carry out cutting-edge technology research and development, to ensure the company's leading position in the field of technology.

2. Expand product line to meet different market demands. With the continuous expansion of the new energy vehicle market, consumer demand for diversified products is also increasing. BYD should continue to expand its product line, covering more segmented markets and meeting the needs of different consumers. At the same time, pay attention to market trends and consumer preferences, adjust product strategies in a timely manner, and ensure product competitiveness in the market.

3. Strengthen brand building and communication. Brand is an intangible asset of a company, and for BYD, strengthening brand building and dissemination is crucial. The company should increase brand promotion efforts to improve brand awareness and reputation. By participating in international automotive exhibitions, hosting brand events, and other means, showcase the company's technological strength and product advantages. At the same time, we focus on improving customer service quality and enhancing consumer loyalty to the brand.

4. Strengthening international cooperation and exchanges. Globalization is an inevitable trend for BYD's future development. The company should strengthen cooperation and exchange with foreign peers, learn and draw on advanced international experience and technology, and improve its international competitiveness. At the same time, actively exploring overseas markets, expanding sales channels, and enhancing the brand's influence on a global scale.

5. Emphasize sustainable development and fulfill social responsibility. As a leading enterprise in the field of new energy vehicles, BYD should actively fulfill its social responsibility and focus on sustainable development. In the production and operation process, attention should be paid to environmental protection, energy conservation and emission reduction, and the green development of new energy vehicles should be promoted. At the same time, actively participate in social welfare undertakings, give back to society, and establish a good corporate image.

6. Optimize supply chain management and reduce costs. Supply chain management is an important link in cost control for enterprises. BYD should strengthen cooperation with suppliers, optimize supply chain management, and ensure stable supply of raw materials and components. At the same time, by improving production efficiency and reducing energy consumption, production costs can be reduced and profitability improved.

7. Pay attention to the development of intelligent networking and improve user experience. With the rapid development of intelligent connected technology, consumers have an increasing demand for intelligent and connected cars. BYD should pay attention to the development trend of intelligent networking, strengthen the research, development and application of on-board Internet, automatic driving and other technologies, and improve the intelligent level and driving experience of products. By providing more convenient and intelligent travel services, we can meet the personalized needs of consumers and enhance brand competitiveness.

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