

A Brief Analysis of SVOLT's Current Development and Challenges

Haijie Zhao*

Department of Mathematics, University of Liverpool, Liverpool, UK

*Corresponding author: sghzha48@liverpool.ac.uk

Abstract. SVOLT is committed to the research and production of new energy vehicle power batteries. It is an emerging enterprise in the power battery industry. The company also engages in battery and energy storage businesses. With a strategic perspective of global deployment, SVOLT has achieved remarkable growth. This article provides an analysis of SVOLT's development overview and examines the achievements and challenges the company faces in terms of its business areas, financial situation, and strategic layout using case studies and data charts. The research shows that SVOLT has experienced substantial losses for three consecutive years, making it difficult to gain a foothold in the highly competitive market. This situation is related to issues such as the company's low product gross margin, low-capacity utilization, and high management costs. It is also a predicament that arises from intense market competition. Additionally, the company's strategy of large-scale capacity expansion has brought about certain negative consequences. Therefore, SVOLT should consider adjusting its marketing approach, focusing on profit and loss conditions, reducing capacity expansion appropriately, and controlling production costs. The aim is to promptly reverse the trend of continuous losses, achieve sustainable development, gain industry recognition, and challenge leading companies in the field.

Keywords: SVOLT; power battery; market analysis.

1. Introduction

SVOLT is a battery manufacturing company under the Great Wall Motors Group. It has been independently involved in the research and development as well as production of battery materials and energy storage products since 2018. Due to the strong support of the government for the new energy industry, the cumulative market sales of electric vehicles in China have been increasing year by year [1]. The stock of new energy vehicles now accounts for 55% of the global total [2]. In 2022, the company experienced an 88% year-on-year increase in installed capacity and market share, allowing it to establish itself as a second-tier player in the battery industry. SVOLT has successfully carved a niche for itself in the competitive new energy market with its unique capabilities [3]. While competing with giants like CATL remains challenging, SVOLT's significant growth is noteworthy. SVOLT places a strong emphasis on research and development investments. According to statistics, SVOLT secured 329 patent approvals in 2022, ranking first among battery companies and making it the top player in terms of R&D strength and future competitiveness. Between 2020 and 2021, the company engaged in substantial financing activities to expand its operations, successfully raising a cumulative total of 21.152 billion Chinese yuan. Since going public, SVOLT has continuously expanded its production capacity, resulting in rapid revenue growth (Figure 1). However, despite its revenue growth, the company has struggled to achieve profitability. Financial reports from 2019 to 2022 consistently show losses exceeding 3 billion Chinese yuan, with a rising trend (Figure 2). Furthermore, SVOLT's development has been heavily reliant on the support of the Great Wall Motors Group. Great Wall's substantial procurement of SVOLT products accounted for over half of the company's revenue, with SVOLT deriving an impressive 82.73% of its revenue from Great Wall in 2021 alone. Additionally, NIO, as SVOLT's major supplier, purchases modules and battery cells, contributing significantly to SVOLT's sales. However, this heavy dependence on a few major customers has increased the company's profit risk. In the battery industry, where leading companies dominate a significant market share, SVOLT, as a newcomer, faces the challenge of expanding its market share. Therefore, this article will analyze the risks inherent in SVOLT's marketing model and

provide recommendations for overcoming these challenges based on SVOLT's recent developments and operational strategies.

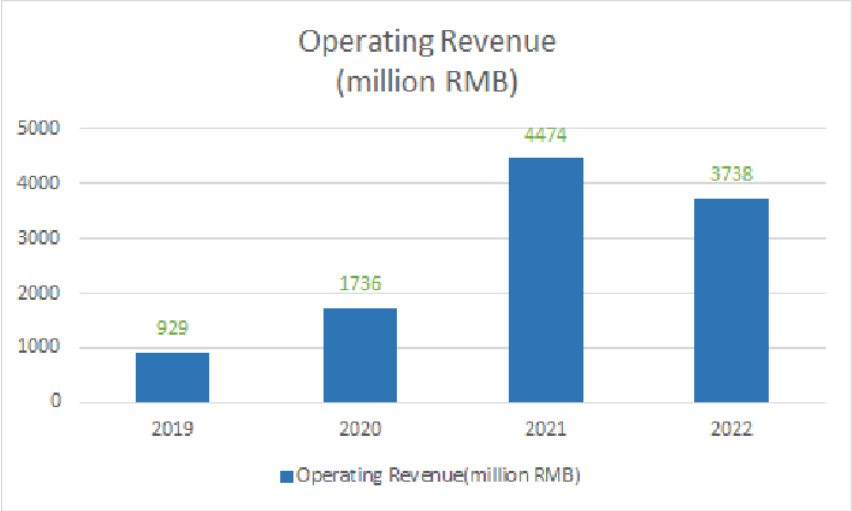


Figure 1 Operating revenue of SVOLT

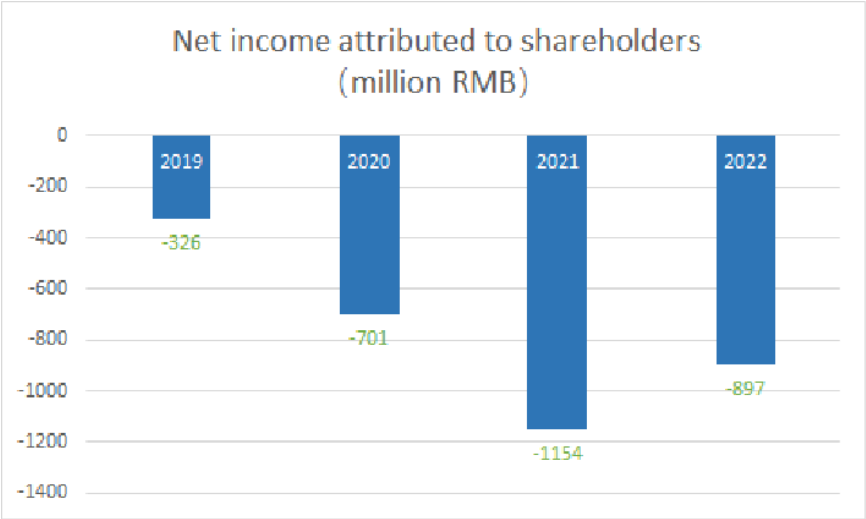


Figure 2 Net income attributed to shareholders of SVOLT

2. The Problems Existing in SVOLT Company

2.1. Blind Expansion of Production Capacity Leads to Overcapacity Crisis

Since 2021, SVOLT has pursued a strategic objective of extensive capacity expansion and has achieved tangible results. However, this aggressive expansion approach has sparked significant debate within the industry. The rapid expansion of capacity has led to a substantial increase in the company's expenses within a short period, causing financial strain and affecting product quality, giving rise to the dilemma of prioritizing speed over quality. On July 10, 2019, SVOLT held a product and strategic launch event in Baoding, Hebei. In addition to introducing three new products, SVOLT set an ambitious goal: achieving a global battery capacity of 120 GWh by 2025. However, NIO, a leading enterprise in the new energy battery industry, had a global battery capacity of only 50 GWh in 2020. Whether SVOLT can achieve a capacity target more than twice that of NIO, and whether this achievement can translate into profitability, are questions SVOLT must confront. Nobody knows whether such rapid expansion will ultimately have a positive or negative impact.

In April 2021, SVOLT made substantial investments in expanding its production capacity. They invested 11 billion yuan to establish a 28 GWh power battery production facility in Ma'anshan, Anhui. In June, they allocated 5.6 billion yuan to build a 14.6 GWh power battery production base in Lishui,

Nanjing. Furthermore, in September, they invested 22 billion yuan to establish a 60 GWh power battery production facility in Chengdu. With such an aggressive pace of factory construction, SVOLT's production capacity ranked tenth globally and sixth domestically in terms of automotive battery production in 2021.

However, this expansion occurred in the context of a global economic downturn due to the COVID-19 pandemic. Both domestic and international markets saw a decline in demand for battery products. There is an issue of overcapacity in the power battery sector [4]. According to estimates by HighLink Li-ion, power battery shipments for 2022, 2023, and 2024 are projected to be 490 GWh, 850 GWh, and 1010 GWh, respectively. Meanwhile, battery manufacturers are expected to have a total production capacity of 1000 GWh, 1550 GWh, and 2200 GWh during these three years. This indicates that the industry's production capacity far exceeds demand. SVOLT, as a non-monopolistic player, has expanded its capacity beyond its market share. In a market with slowing demand, such massive expansion can lead to issues like inventory pile-up, overcapacity, and potential compromises in product quality. This, in turn, could increase sales and after-sales pressures and erode brand reputation. Considering the company's consecutive years of losses, blind expansion could also strain its financial resources. The company must not only compete for customer orders against top-tier enterprises but also stand out among its peers. Relying solely on capacity expansion may not be the best choice to turn losses into profits.

2.2. Gross Profit Margin of Products is Significantly Below the Average Level

The expansion of the company's scale has indeed increased production capacity, but the company's product gross profit margin remains significantly below the industry average. According to the company's disclosed annual reports, from 2020 to 2022, the company's main business gross profit margin was 0.89%, 3.23%, and 4.57%, respectively. The author conducted a horizontal comparison of the main business gross profit margin of SVOLT with other new energy companies. During the same period (2020-2022), CATL had a main business gross profit margin of 26.50%, 23.14%, and 17.42%, while EVE Energy's main business gross profit margin was 29.01%, 21.49%, and 16.19%, all of which significantly exceeded SVOLT's margins. The persistently low gross profit margin to some extent explains why the company has had low profitability in recent years. This is one of the downsides brought about by the rapid growth of the company: rapid expansion of production capacity without sufficient time for factory machine adjustments and trial production, resulting in insufficient production experience. As a result, there is a longer waiting period for mass production after equipment testing, and product yield rates are not very high. Most factories are still in the process of trial and error while producing, and they cannot compete with mature factories in terms of efficiency and quality. In addition, in recent years, the company has been trying to improve its competitiveness by developing new products and changing production ratios, while some new technologies have been validated, using new materials or techniques to optimize the power battery [5]. However, the actual results have also been negative. After some initial trial production experience, factories want to increase production quickly, but the target products suddenly change, causing some production lines to start from scratch to accumulate experience and repeat the trial production to mass production process. This delay in time and efficiency has been detrimental to the company's operations.

2.3. Product Prices Are Lower than Competitors

SVOLT's main products, such as battery packs, modules, and battery cells, generally have lower prices compared to market prices. According to the financial data released by the company, the market price for ternary battery packs is 1.18 yuan/Wh, while Hive Energy's price is 1.04 yuan/Wh. For lithium iron phosphate battery packs, the market price is 1.03 yuan/Wh, whereas SVOLT's price is 0.88 yuan/Wh. In the case of ternary modules, the market price is 1.1 yuan/Wh, while SVOLT's price is 0.74 yuan/Wh. The author believes that in today's saturated new energy industry market, continuous innovation and research and development are essential to secure a position in the competitive market. Besides innovation, one of the more direct and effective ways to gain market share is by lowering

prices. While SVOLT has been lowering prices, it has also consistently increased its investment in innovation. Over the past three years, SVOLT's research and development investment amounted to 380 million yuan, 724 million yuan, and 1.145 billion yuan, respectively, demonstrating SVOLT's determination to win market share through technological innovation. Although cost reductions can be achieved through lower prices, the long-term situation of prices below the market average has placed the company in a less favorable position in the new energy market. This has not only lowered the company's profits but also hindered a proactive competitive environment in the market, despite the support of some new technologies.

3. The Competition in the New Energy Market is Excessively Fierce

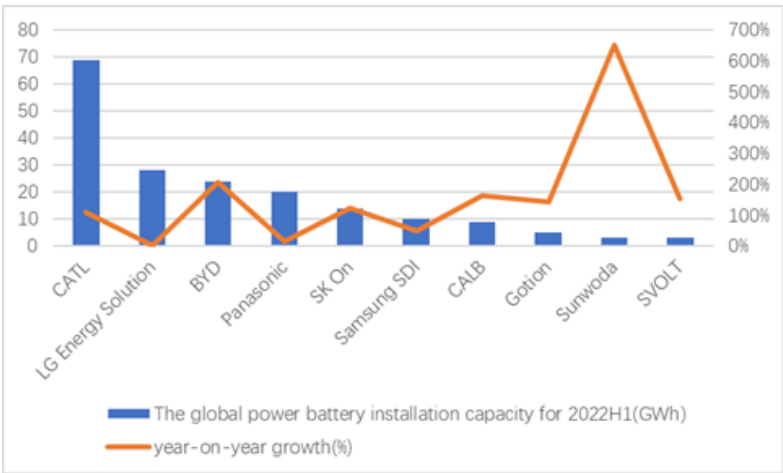


Figure 3 The global power battery installation capacity and year-on-year growth for 2022H1

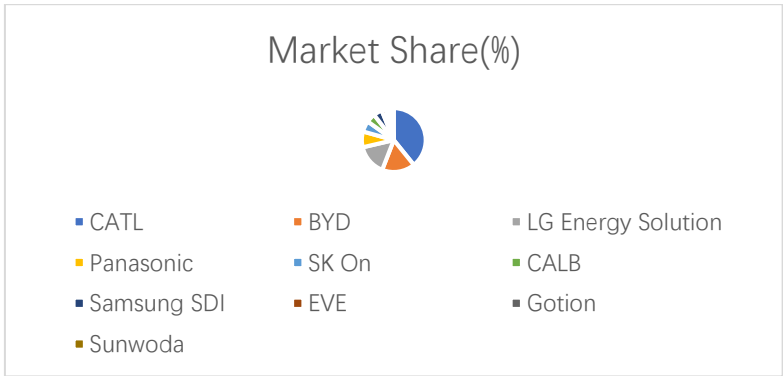


Figure 4 Market share for power battery for 2023H1

In the emerging market of new energy power batteries, competition has reached a white-hot stage, and companies continue to make efforts in capacity layout and joint ventures and cooperation [6]. Leading companies in this industry include CATL, LG Energy Solution, and BYD. In the domestic market, competition is even more intense. As Figure 3 shows, in the first half of 2022, SVOLT ranked among the top ten companies globally [7]. However, in the same period of 2023, SVOLT was replaced by EVE Energy, which achieved the highest growth rate and ultimately ranked among the top ten companies globally. As Figure 4 shows, six Chinese companies collectively held a market share of 62.6%. However, the majority of the market share is still dominated by companies like CATL and BYD. SVOLT, facing a market that is nearing saturation, must focus on maintaining its position and seek opportunities for breakthroughs.

4. Solution

4.1. Matching Capacity Expansion with Market Demand

Currently, SVOLT's strategy of increasing market share through capacity expansion has not yielded favorable results. Rapid expansion has led to a significant increase in costs within a short period, potentially straining the company's financial stability. In today's investment market, there is a declining tolerance for losses among technology companies, and in a more challenging financing environment, sustained losses could have a detrimental impact on the company's market performance, posing potential crises. While the issue of excess capacity is prevalent in the dynamic battery industry, SVOLT, which has not yet achieved a dominant position, is vulnerable to market dynamics as excess capacity can quickly become obsolete due to advancements in downstream technologies, making it challenging to clear accumulated inventory. Given SVOLT's significant achievements in capacity expansion, it is essential to strike a balance between production capacity and market demand. Slowing down the pace of expansion and placing greater emphasis on improving product quality and alignment with industry requirements is advisable. This approach will ensure that production capacity aligns with the company's scale, industry position, and order volumes, ultimately maximizing profitability and minimizing inventory buildup, allowing for greater adaptability to market and technological changes.

4.2. Refining Production Lines and Products to Increase Profit Margins

The company's gross profit margin is below the market average due to several factors. On one hand, the lack of experience in newly commissioned production lines results in longer lead times, higher raw material costs, and lower product yield during trial production. On the other hand, the company's pricing strategy, aiming to gain a quicker foothold in the market, has contributed to this issue. However, in the highly monopolistic market of power batteries, SVOLT faces challenges in rapidly increasing its market share. Currently, it still falls significantly short of its goal of holding a 25% global market share.

In such a fiercely competitive market landscape, the company needs to evaluate its overall revenue situation and make greater efforts to turn losses into profits. This is crucial to attract sustained investments that can support the company's long-term development. To improve the product gross margin, the company should focus on optimizing the capacity of newly added production lines. It should gradually accumulate production experience while ensuring daily uptime and basic product output. This approach aims to enhance production line efficiency, product yield, and cost-effectiveness to increase profit margins. Once the core product output stabilizes, the company can then invest in the research and trial production of new products to enhance competitiveness. This strategy can create a virtuous cycle where core products secure revenue, while new products boost the company's overall competitiveness. Simultaneously, the company should consider adjusting its pricing strategy based on market fluctuations to avoid the profit challenges and cutthroat competition that may arise from continuous price reductions.

4.3. Increase Research and Development Investment to Innovate Product Performance

For SVOLT to make a mark in the field of power batteries, it needs to make breakthroughs and innovations in terms of product performance and accelerate technological revolution in the power battery sector. As a core component of pure electric new energy vehicles, the power battery has a significant impact on the vehicle's driving range, collision safety, and drivability[8]. Currently, the basic battery supply in the market has reached saturation, but there are still issues related to battery safety when applied in the automotive industry. Additionally, the performance degradation leading to high-energy-density battery failures is a common bottleneck in the industry. This significantly restricts the development of new energy vehicles and presents a pressing technical challenge that needs to be addressed[9]. SVOLT can approach this challenge from two main aspects: increasing research and development investment and talent allocation in the areas of battery safety and

performance, with the aim of reducing safety hazards caused by factors like high temperatures during battery usage. Moreover, efforts should be made to enhance the stability of battery performance in various environmental conditions and after prolonged usage[10]. This will expand the usability and application of electric vehicles, address industry pain points, and meet the urgent demands of consumers. By introducing new technologies and products that gain industry recognition, SVOLT can elevate its reputation and market position. This approach can help SVOLT break free from the cycle of continuous losses and tough competition with leading companies, ultimately leading to an increase in market share.

5. Conclusion

Through analysis, it can be seen that SVOLT has made significant progress in the field of electric vehicle (EV) batteries, firmly establishing itself as a second-tier company. Both its sales revenue and production capacity are gradually expanding. As an emerging player in the industry, SVOLT continues to invest in the research and development of new products, aiming to enhance product performance and expand its market competitiveness. Concurrently, the company is planning to go public to raise additional capital to support its future growth. Despite facing intense market competition, SVOLT still possesses considerable growth potential.

However, the rapid expansion of production capacity has led to the challenge of overcapacity for SVOLT. The adoption of a pricing strategy aimed at lowering product prices has, to some extent, affected the profit margin. Moreover, the company grapples with high management costs and sustained financial losses. Consequently, SVOLT needs to adjust its marketing strategies in response to market changes, avoiding inventory build-up resulting from excessive production. It also needs to strive for higher profitability to address its financial deficits.

This study focuses on SVOLT's recent developments and challenges while providing corresponding development recommendations. It paints a concise portrait of the company, offering theoretical insights for research on the development of companies in the EV battery industry. Additionally, the study provides a comprehensive overview of the competitive landscape in the new energy market. However, there are areas where the analysis could be deeper, and international market exploration remains limited. In the future, as competition in the new energy market intensifies, emerging companies like SVOLT will face both opportunities and challenges. To stand out and turn losses into profits, SVOLT must navigate multiple tests related to market dynamics, technology, and industry trends.

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