Research on Lifecycle-based Financial Strategy on New Energy Enterprises: Take CATL as an Example

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Abstract. The emergence of energy security issues reflects the current global turmoil and division. The two energy crises and regional conflicts have put the global energy system in a severe winter. Energy security is not only the latest requirement for the high-quality development of countries under the "carbon neutrality" background but also an aspect of overall global progress. This study selects the leading enterprise in the new energy industry, Contemporary Amperex Technology Co., Limited (CATL), as the research object. Based on the life cycle theory and financial strategy theory, the paper analyzes the company's financing, investment, and profit distribution strategies and constructs a financial strategy matrix to study the problems existing in the company's current financial strategy. The research results show that there are issues such as unreasonable financing structure, insignificant investment benefits, and significant fluctuations in dividend distribution policies. Finally, targeted optimization suggestions are proposed, hoping to provide a reference value for peers.

Keywords: Life cycle theory; Financial strategy; Financial strategy matrix; Economic Value Added (EVA); New energy enterprise.

1. Introduction

Energy is the foundation of the national economy and social development, and it is an important material guarantee for the survival and development of human society. The development and utilization of energy, and the resulting "energy security crisis" have become an important issue in international politics. On October 13, 2022, the International Energy Agency (IEA) released the "World Energy Outlook 2022" report, closely focusing on global energy security and climate change issues, stating that the world is currently facing a severe energy crisis. Additionally, the Russia-Ukraine conflict that began in February 2022 has intensified the energy crisis, with wide-ranging and far-reaching impacts on the global energy supply. The duration and development of this crisis still face great uncertainties, and many countries around the world facing significant risks in terms of energy supply security (Li and Wu, 2022)[1]. In this context, it is urgent to change China's energy consumption structure, and actively promote technological innovation and transformation in the energy sector. Contemporary Amperex Technology Co. Limited (CATL) is a leading global new energy innovation and technology company, with core technological advantages in battery materials, battery systems, and battery recycling in the industrial chain. It has consistently ranked first in global electric vehicle installations for five consecutive years and has been strategically positioned in energy storage for many years. Its existing "renewable energy plus energy storage" structure has a leading advantage in the lifecycle cost of electricity. Starting from the perspective of the energy security crisis, this paper analyzes the current situation of CATL and conducts a financial strategic analysis from three aspects: financing, investment, and profit distribution. It also proposes optimization strategies to help the company achieve its strategic intentions. Meanwhile, it is hoped that through accelerating technological progress, it can promote the clean and low-carbon use of traditional energy and the widespread application of green and clean energy, thus becoming a realistic path for China to achieve the "dual carbon" goals while ensuring energy security and affordable energy prices, in other words, it kills two birds with one stone.
2. Literature Review

2.1 Life Cycle Theory

MasonHaire (1950) was the first to propose that the evolution process of a business is similar to the growth trajectory of a living organism, experiencing infancy, growth, and decline[5]. Later, Li (2000) believed that a company's sales reflect the comprehensive value created by its products or services in the market, and proposed a modified model for the typical business life cycle, which divides the growth process into the stages of infancy, growth, maturity, and decline[3]. Likewise, some researchers indicated that the division of the lifecycle should be measured by the main factor of corporate financial performance, and divided into four stages: startup, growth, maturity, and decline. As the financial performance of a company reflects its overall strength (Wang and Han, 2008)[4]. Through analysis of the overall lifecycle of some companies, Belak (2016) also summarized the original ten stages into four stages: establishment, growth, maturity, and decline[5]. Further, it was proposed that due to the different characteristics exhibited by companies in different stages, five stages (establishment, survival, growth, maturity, and decline) were identified, which enriched the views of predecessors (Sebastian D., 2019)[6].

2.2 Theory of Financial Strategy

Financial strategy refers to the comprehensive, sustainable, and creative planning of fund operations undertaken by a company to enhance its core competitiveness, achieve development goals, and ensure smooth implementation, considering internal and external environmental factors[7]. The concept of "strategic management" of a company was first proposed by Ansoff (1976) who emphasized the importance of aligning strategic decisions with the overall strategic objectives of the company and continuously monitoring its financial condition[8]. He further emphasized that financial strategy is the core of the strategic management system of a company, primarily focusing on the acquisition of funds, fund allocation, and dividend payments (Ansoff, 2011)[9]. A scholar suggested that financial strategy formulation should be aligned with overall objectives and can be categorized as proactive, stable, or retrenchment strategies (Lu, 1999)[10]. Further, the long-term objectives of the financial strategy were defined as developing internal financial activities aimed at achieving capital balance and effective cash flow through rational and efficient long-term planning (Liu, 2012)[7]. The core role of financial management has been analyzed for small and medium-sized enterprises from a strategic management perspective and discussed the relationship between financial strategic management and enterprise performance (Karadag, 2015)[11].

2.3 Financial Strategy Matrix

The financial strategy matrix, proposed by Hawawini and Viallet in 1999, represents the current financial strategy of a company by calculating its position on the quadrant, and there are two fundamental factors in measuring a company's financial strategy: value creation capability and funding capability (Hawawini and Viallet, 2019)[12]. They explained that funding capability measures the extent to which a company's financial fund management meets the needs of production and operations by comparing the difference between the sales growth rate and the sustainable growth rate. Value creation capability measures the operational performance and value status of a company by comparing the difference between EVA (Economic Value Added) or return on investment and the cost of capital[12]. The financial strategy matrix can help companies understand their own life cycle and make strategic adjustments that contribute to value enhancement based on the different positions on the matrix (Yao, 2006)[13]. Shahmansuri and Ghanbari (2014) reiterated the influence of the financial strategy matrix on the selection of financial strategies and emphasized the implementation of specific financial plans based on the operational results of the matrix[14]. Chai (2019) conducted a comprehensive analysis of the financial condition of the case company based on the dimensions of sustainable growth capability and value creation
capability, and optimized the current financial strategy to provide more reasonable, long-term, holistic financial strategy choices for the company\textsuperscript{[15]}.

2.4 Brief Summary

Based on previous research, this study divides the business lifecycle into four stages: startup, growth, maturity, and decline, which are easier to be understood and clearly defined. The lifecycle stage of CATL is defined by analyzing the company's net cash composition and revenue growth. Subsequently, the financial strategy of CATL is examined through a comprehensive analysis of three main aspects: financing, investment, and profit distribution. A financial strategy matrix is then constructed based on Economic Value Added (EVA) and Sustainable Growth Ability (FB) to provide a comprehensive analysis of the company's financial situation. Finally, reasonable strategic recommendations are proposed based on the operational results.

3. CATL Current Situation Analysis

3.1 Overview of CATL

CATL is a leading global new energy innovation and technology company. It set up its head office in Ningde City, Fujian Province after becoming independent from a wholly owned Japanese company in 2011. It was listed on the Shenzhen Stock Exchange in 2018. It took only 10 years for CATL to become a global leading enterprise with a market capitalization of over one trillion dollars from its foundation, and it is currently the largest power battery enterprise at home and abroad. CATL has a comprehensive layout with 7 bases; it participates in the formulation and revision of relevant standards such as battery recycling and battery materials, and 293 standards have been issued; as of December 31, 2022, the company and its subsidiaries have a total of 5,518 domestic patents and 1,065 foreign patents and a total of 10,054 domestic and foreign patents under the application. The main business of the company is the production and research and development of power battery systems, energy storage systems, and lithium battery materials. CATL's power battery systems have been ranked first globally for five consecutive years in terms of usage. Its energy storage battery production capacity holds the largest market share worldwide. CATL has been recognized as a "Lighthouse Factory" by the World Economic Forum.

In recent years, CATL has been devoted to improving its research and development system and conducting forward-looking technological deployments. Simultaneously, it actively responds to the United Nations Sustainable Development Goals and China's "Dual Carbon" policy. It not only provides innovative products and services but also integrates the concept of sustainable development into all aspects of its business operations. This includes establishing a sustainable development management system, adhering to principles of ethical and compliant operations, continuously strengthening communication with stakeholders, and ensuring the company's sustainable development while giving back to customers and society. In the future, based on its excellent R&D system and R&D capability, CATL will continue to screen potential material systems, realize the landing of new products and technologies, build a world-class innovation and technology company, and reduce mankind's dependence on fossil energy with revolutionary battery technology innovation, so as to realize the common vision of global sustainable development.

3.2 Life Cycle Analysis of CATL

3.2.1 Cash Flow Portfolio Approach

The combination of positive and negative net cash flows from the three major activities of a company can comprehensively reflect the characteristics of different stages in its lifecycle (Ding, 2021\textsuperscript{[16]}). This paper collected relevant data of CATL from 2017 to 2022, and the classification results are shown in Table 1. Except for 2019, CATL exhibited a "positive-negative-positive" pattern in operating, investing, and financing net cash flows during the observation period, which is
consistent with the characteristics of a growing stage company. However, in 2019, there was a phenomenon of "positive-positive-positive" that does not belong to any of the four periods. This special situation occurred because a large number of financial products invested by the company matured and were redeemed, leading to a significant increase in the investment net cash flow on the books.

Table 1. Net cash flow of CATL (in billions of yuan)

<table>
<thead>
<tr>
<th>Year</th>
<th>Net operating cash flow</th>
<th>Net investing cash flow</th>
<th>Net financing cash flow</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>24.49</td>
<td>-77.44</td>
<td>89.33</td>
<td>+ - +</td>
</tr>
<tr>
<td>2018</td>
<td>113.20</td>
<td>-194.90</td>
<td>70.43</td>
<td>+ - +</td>
</tr>
<tr>
<td>2019</td>
<td>134.70</td>
<td>18.56</td>
<td>41.68</td>
<td>+ + +</td>
</tr>
<tr>
<td>2020</td>
<td>184.30</td>
<td>-150.50</td>
<td>374.30</td>
<td>+ - +</td>
</tr>
<tr>
<td>2021</td>
<td>429.10</td>
<td>-537.80</td>
<td>236.60</td>
<td>+ - +</td>
</tr>
<tr>
<td>2022</td>
<td>612.10</td>
<td>-614.40</td>
<td>822.70</td>
<td>+ - +</td>
</tr>
</tbody>
</table>

Source: Oriental Fortune

3.2.2 Operating Income Growth Rate Method

The revenue curve of enterprises can directly reflect the level of development objectively. During the growth period of enterprises, the revenue shows a trend of rapid growth (Wang and Gao, [17]). Combining Figure 1, it can be observed that in the past six years, CATL's revenue has been growing year by year. Except for the slight decrease in growth rate in 2020 due to the impact of the pandemic, the growth rate in other years has been greater than 10%, indicating rapid growth and conforming to the characteristics of the growth period.

By integrating the analysis from the comprehensive cash flow method and the revenue growth rate method, the results of both approaches are generally consistent. Among them, the decrease in growth rate in 2020 is relatively small, thus it is classified into the growth period. Therefore, it can be concluded that CATL has been in the growth period from 2017 to 2022.

Source: CATL Financial Reports

Figure 1 Operating Revenue Growth Rate of CATL (2017-2022)

3.3 Analysis of CATL Financial Strategy

3.3.1 Financing Strategy

In financing, CATL has shown a continuous upward trend in scale from 2017 to 2022. The growth rate of liabilities was particularly high in 2021, reaching 145.98%, indicating that debt financing has gradually become significant. The continuous decrease in the equity ratio also indicates an increase in the company's debt leverage.

From the perspective of financing maturity, the scale of current liabilities in CATL during the growth period is far higher than that of non-current liabilities, indicating that the company mainly adopts short-term financing strategies. After 2019, the company's debt-to-equity ratio has been
increasing year by year. This is primarily due to many ongoing projects related to power batteries and energy storage. Relying solely on internal profits is insufficient to support the expansion of the company's scale, so CATL has increased its debt financing. As a result, the asset-liability ratio climbed to 70.56% in 2022, exceeding the industry average, indicating that the company may face financial risks.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total liabilities</th>
<th>Growth Rate</th>
<th>Total liability</th>
<th>Owners' equity</th>
<th>Gearing ratio</th>
<th>Equity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>496.6</td>
<td>73.72%</td>
<td>231.9</td>
<td>264.7</td>
<td>46.70%</td>
<td>53.30%</td>
</tr>
<tr>
<td>2018</td>
<td>738.8</td>
<td>48.77%</td>
<td>386.8</td>
<td>352</td>
<td>52.36%</td>
<td>47.64%</td>
</tr>
<tr>
<td>2019</td>
<td>1014</td>
<td>37.18%</td>
<td>591.6</td>
<td>421.9</td>
<td>58.34%</td>
<td>41.61%</td>
</tr>
<tr>
<td>2020</td>
<td>1566</td>
<td>54.53%</td>
<td>874.2</td>
<td>691.9</td>
<td>55.82%</td>
<td>44.18%</td>
</tr>
<tr>
<td>2021</td>
<td>3077</td>
<td>96.44%</td>
<td>2150</td>
<td>926.2</td>
<td>69.90%</td>
<td>30.10%</td>
</tr>
<tr>
<td>2022</td>
<td>6010</td>
<td>95.33%</td>
<td>4240</td>
<td>1769</td>
<td>70.56%</td>
<td>29.40%</td>
</tr>
</tbody>
</table>

Source: Oriental Fortune

Table 3. Financing term of CATL (unit: 100 million yuan)

<table>
<thead>
<tr>
<th>Accounting year</th>
<th>Current liabilities</th>
<th>Non-current liabilities</th>
<th>Total liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Growth rate</td>
<td>Total</td>
</tr>
<tr>
<td>2017</td>
<td>178.90</td>
<td>75.69%</td>
<td>53.02</td>
</tr>
<tr>
<td>2018</td>
<td>310.80</td>
<td>73.76%</td>
<td>75.99</td>
</tr>
<tr>
<td>2019</td>
<td>456.10</td>
<td>46.72%</td>
<td>135.60</td>
</tr>
<tr>
<td>2020</td>
<td>549.80</td>
<td>20.54%</td>
<td>324.50</td>
</tr>
<tr>
<td>2021</td>
<td>1493.00</td>
<td>171.63%</td>
<td>657.00</td>
</tr>
<tr>
<td>2022</td>
<td>2958.00</td>
<td>98.04%</td>
<td>1283.00</td>
</tr>
</tbody>
</table>

Source: Oriental Fortune

3.3.2 Investment Strategy

In terms of investment scale, the investment scale of CATL has shown a year-on-year upward trend from 2017 to 2022. Among them, the investment amount in 2022 soared to 151.61 billion yuan. The reason for this surge is due to adverse factors such as the rise in raw material prices and the continuous interest rate hikes by the United States, which has CATL continuously increase its investment in industry, technology, and production capacity to strengthen its independent and controllable capabilities and lay the foundation for future growth. From the perspective of investment direction, although long-term equity investment accounts for a relatively small proportion of foreign investment, its proportion has been increasing year by year to achieve the company's vertical integration development strategy. The proportion of available-for-sale financial assets has remained at zero since 2019, indicating that the company has reduced non-core business investments to save funds. In terms of domestic investment, fixed assets account for the largest proportion, mainly for the production lines and research and manufacturing to form economies of scale, and the production balance of construction in progress at the end of 2022 reached 35.4 billion yuan. Overall, foreign investment is much lower than investment, indicating that the company pays more attention to internal investment and relatively less attention to external. addition, the net flow from investment activities of CATL showed negative growth from 2017 to 2022, indicating that the effectiveness of the company's investment activities is not. CATL's gross profit margin has been declining for five consecutive years, and the return on net assets and total assets are also unsatisfactory. The overall profitability situation is not so ideal, and the company needs to adjust in investment decision-making (Mao, 2022).
3.3.3 Profit-sharing strategy

In terms of dividend distribution, CATL was listed in 2018 and did not distribute dividends before going public. As of 2023, it has distributed dividends a total of five times, with a cumulative amount of 9.105 billion yuan. The dividend payout ratio has been increasing annually, with significant fluctuations during this period. In 2022, the dividend payout ratio reached 19.51%, which was higher than the average. From the perspective of equity incentives, this company has established a community of interests between the company and its employees through equity tools. This not only helps to reduce the turnover rate of core employees but also brings more imaginative income expectations to the employees. Starting from 2015, even before going public, CATL initiated an employee stock ownership plan and set a minimum service period of 5 years. If an employee leaves before the service period ends, they will lose the incentive shares they have obtained. From 2016 to 2022, CATL issued one round of equity incentive plans each year, with the number of employees covered by each plan consistently in the thousands. Overall, CATL's equity incentives maintain characteristics such as high frequency, large-scale incentives, a wide range of participants, and a performance-driven orientation. It has built a positive community of interest between employees and the company. It can be said that the success of CATL is inseparable from its equity incentives.

4. CATL Financial Strategy Matrix Construction

4.1 Financial Strategy Matrix Modeling

4.1.1 X-Axis: Sustainable Growth Capacity

This article measures the cash shortfall of a company by calculating the difference between the sales revenue growth rate and the sustainable growth rate (Li, 2021)[19].

Sales revenue growth rate = (Current year sales revenue - Previous year sales revenue) / Previous year sales revenue

Sustainable growth rate = Asset turnover ratio × Net profit margin × Equity multiplier × Retention ratio
Table 5. Sales Revenue Growth Rate and Sustainable Growth Rate (in billions of dollars)

<table>
<thead>
<tr>
<th>Section</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales revenue</td>
<td>200</td>
<td>296.1</td>
<td>457.9</td>
<td>503.2</td>
<td>1304</td>
<td>3286</td>
</tr>
<tr>
<td>Sales growth rate</td>
<td>34.40%</td>
<td>48.08%</td>
<td>54.63%</td>
<td>9.90%</td>
<td>159.06%</td>
<td>152.07%</td>
</tr>
<tr>
<td>Net Sales Margin</td>
<td>20.97%</td>
<td>12.62%</td>
<td>10.95%</td>
<td>12.13%</td>
<td>13.70%</td>
<td>10.18%</td>
</tr>
<tr>
<td>Total Asset Turnover</td>
<td>40.27%</td>
<td>40.08%</td>
<td>45.16%</td>
<td>32.13%</td>
<td>42.38%</td>
<td>54.67%</td>
</tr>
<tr>
<td>Retained Earnings Ratio</td>
<td>100%</td>
<td>91.35%</td>
<td>89.49%</td>
<td>90.38%</td>
<td>100.00%</td>
<td>81.47%</td>
</tr>
<tr>
<td>Equity multiplier</td>
<td>1.87</td>
<td>2.09</td>
<td>2.4</td>
<td>2.26</td>
<td>3.32</td>
<td>3.39</td>
</tr>
<tr>
<td>Sustainable Growth Rate</td>
<td>15.79%</td>
<td>9.66%</td>
<td>10.62%</td>
<td>7.96%</td>
<td>19.28%</td>
<td>15.37%</td>
</tr>
<tr>
<td>FB</td>
<td>18.61%</td>
<td>38.42%</td>
<td>44.01%</td>
<td>1.94%</td>
<td>139.78%</td>
<td>136.70%</td>
</tr>
</tbody>
</table>

4.1.2 Y-Axis: Corporate Value Creation Capacity

This paper evaluates the value creation of a company through economic value added (EVA). The formula is as follows:

\[
EVA = NOPAT - (TC \times WACC)
\]

Table 6. CATL 2017-2021 Economic Value Added (in billions of dollars)

<table>
<thead>
<tr>
<th>Section</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOPAT</td>
<td>56.08</td>
<td>57.38</td>
<td>84.31</td>
<td>98.74</td>
<td>260.44</td>
<td>465.65</td>
</tr>
<tr>
<td>TC</td>
<td>305.63</td>
<td>418.83</td>
<td>537.18</td>
<td>944.22</td>
<td>1215.00</td>
<td>2531.43</td>
</tr>
<tr>
<td>WACC</td>
<td>8.04%</td>
<td>5.62%</td>
<td>5.99%</td>
<td>7.02%</td>
<td>7.51%</td>
<td>7.02%</td>
</tr>
<tr>
<td>EVA</td>
<td>31.52</td>
<td>33.86</td>
<td>52.15</td>
<td>32.41</td>
<td>169.15</td>
<td>287.97</td>
</tr>
</tbody>
</table>

Source: based on 2017-2021 CATL financial statements

4.2 CATL Financial Strategy Matrix Analysis

Table 7. CATL Financial Strategy Matrix Construction (unit: billion yuan)

<table>
<thead>
<tr>
<th>Section</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>FB</td>
<td>18.61%</td>
<td>38.42%</td>
<td>44.01%</td>
<td>1.94%</td>
<td>139.78%</td>
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</tr>
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<td>31.52</td>
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<td>52.15</td>
<td>32.41</td>
<td>169.15</td>
<td>287.97</td>
</tr>
</tbody>
</table>

According to Figure 2, both Economic Growth Value (EVA) and Sustainable Growth Capacity (FB) are greater than 0. From the content of the financial strategy matrix, it can be judged that located in the first quadrant belongs to the value-added cash shortage status, which proves that the company's after-tax net operating profit is greater than the cost spent on raising funds, and the company realizes the value-added value in the actual operation process. As for the financial status, it shows that CATL has been in a cash shortage, and the existing capital is not enough to meet the needs of sales growth (Li, 2021)[20].

From the perspective of the vertical axis, the continuous growth of Economic Value Added (EVA) for CATL will have a strong impact on value creation capability. Firstly, after-tax net operating profit is an important indicator that affects EVA for a company. The main factors that significantly affect the after-tax net operating profit include net profit, minority shareholder gains/losses, as well as financial and sales expenses. For CATL, the net profit increased from 4.194 billion yuan in 7 to 33.46 billion yuan in 2022. Although the growth rate is remarkable, future competition in the power battery industry will intensify due to weakening downstream market demand and a slowdown in market growth. The minority shareholders' equity increased from 1.77 billion yuan in 2017 to 12.43 billion yuan in 2022. It can be said that through an expansionary financial strategy, the company quickly rose and achieved continuous growth in economic value added. The increasing financial and sales expenses should not be overlooked. Among them, the interest expenses have grown nearly a fold in the past five years, which directly leads to a decrease in net profit and thus affects economic value added. Secondly, EVA is also influenced by the
weighted average cost of capital, and the financing structure of a company is a major factor affecting the weighted average cost of capital. Due to CATL having a higher proportion of current liabilities compared to non-current liabilities, it tends to adopt a short-term financing strategy, leading to an unreasonable financing structure. It is necessary to adjust the financing strategy in a timely manner, otherwise, it will affect the value creation of the enterprise.

![Financial Strategy Matrix (2017-2022)](image)

Figure 2 Distribution of the Financial Strategy Matrix (2017-2022)

Regarding the horizontal axis, the sustainable growth capacity is influenced by the net profit margin, total asset turnover, retention rate, and equity multiplier. From the above graph, the growth rate of CATL fluctuates greatly, primarily due to the volatility in its sales growth rate. Since the revenue from CATL's power battery system accounts for 70% of its main business revenue, any changes in the macro environment would affect the overall income level. The sharp decline growth rate in 2020, caused by both the regression of national subsidy policies and the impact of the pandemic, was followed by a recovery in 2021 due to the revival of the new energy market and the continuous growth in sales revenue of lithium-ion materials and energy storage systems. In particular, the development of energy storage systems has led to a rapid rebound in the sales growth rate and the gradual formation of a diversified income structure, thereby enhancing the sustainable growth capacity of the company. Another factor is the change in the retention rate. Based on the previous discussion on profit distribution strategies, CATL is currently in a growth stage and should reduce the proportion of cash dividends while expanding non-dividend or low-dividend distributions. However, the dividend payout ratio of the company reached 19.51% in 2022, significantly higher than the non-dividend in 2021 and 9.62% in 2020. This indicates that the dividend distribution policy of the company at this stage does not align with its current growth characteristics. Lastly, the equity multiplier is high, indicating an inappropriate financing structure for the company (Zan, 2022)[21]. The equity multiplier of CATL increased from 1.876 in 2017 to 3.397 in 2022, suggesting a significant increase in liabilities. Moreover, the debt-to-assets ratio reached 70% in 2022, indicating a high financial risk.

5. CATL Financial Strategy Optimization Suggestion

5.1 Suggestions for Financing Strategy

5.1.1 Issuing More Bonds

According to the previous life cycle judgment, CATL is in the growth period, the market development ability is increasing rapidly, the market share is expanding rapidly, the cost is decreasing, the profit is increasing, and the business credit of the enterprise is gradually increasing. When analyzing the financing term structure of CATL, it can be clear that the company prefers short-term financing, and there are fewer bonds payable in long-term financing, while the issuance of bonds, as an important financing method, can satisfy the operational capital demand of CATL such as production capacity layout, R&D investment and so on. The bonds issued generally belong to long-term funding, which can meet the strategic layout requirements of it.
The question of whether CATL should issue long-term bonds in RMB, or USD suggests that currently, it is more favorable to issue RMB bonds rather than USD bonds. As of July 18, 2023, the benchmark interest rate for one-year deposits in China is 1.5%, and the yield of one-year and ten-year government bonds are 1.872% and 2.629% respectively. Meanwhile, the United States Federal Reserve has raised interest rates more than ten times since March 2022, totaling 500 basis points, resulting in a benchmark interest rate between 5% to 5.25%. The yields of one-year and ten-year government bonds in the United States are approximately 5.314% and 3.895% respectively. In other words, the benchmark interest rate in the United States is 3.5 times that of China, while the yields of one-year and ten-year government bonds in the United States are around 2.8 times and 1.5 times higher than those in China. As the benchmark interest rate and bond yields serve as anchors for bond issuance by companies, considering the significant differences in benchmark interest rates and government bond yields between the two countries, issuing RMB bonds clearly incurs significantly lower costs compared to USD bonds.

5.1.2 Further Issues of Shares

CATL is now in the growth period, the demand for capital is large, and the issuance of additional shares can quickly raise a large amount of funds to alleviate the pressure to cope with the upstream raw material price increases and the OEM's serious price control, and to meet the enterprise's production and operation construction. Secondly, it can improve the capital structure of the enterprise. From the above analysis, in recent years, the proportion of debt capital of CATL has been rising year by year, and the issuance of shares can reduce the debt financing of the enterprise and mitigate the financial risk. In addition, the issuance of additional shares is also conducive to the expansion of corporate reproduction, the realization of the global layout plan, and the improvement of organizational capacity.

5.1.3 Maximizing the Utilization of Government Policies

Currently, the global energy security crisis has led governments to prioritize their own energy security issues. The ban on combustion bill landing in Europe, and the United States to increase the subsidies for purchasing a new energy vehicle, will accelerate the transformation of automotive electrification. In China, the "dual-carbon" policy includes increased subsidies for the new energy battery industry and various support policies. The State Council has issued the "new energy automobile industry development plan (2021-2035)," which emphasizes the need for breakthroughs in battery technology and the promotion of the entire value chain of power batteries, as well as the management of power battery recycling. Given these circumstances, it is imperative for CATL to actively contribute to the development of new energy batteries. This involves conducting research on key core technologies such as positive and negative electrode materials, electrolytes, etc., addressing the technological deficiencies of power batteries and fuel cell systems, establishing, and improving modularized standard systems for power batteries, and continuously enhancing the recycling system for graded utilization and re-resourcing based on existing power battery recycling capabilities. However, it is worth noting that as the market continues to evolve, government subsidy policies may undergo regression.

5.1.4 Utilizing Global Depository Receipts

In recent years, the issuance of Global Depository Receipts (GDR) has become a new path for Chinese lithium battery enterprises to go overseas, and five domestic enterprises have been successfully issued and listed in China, including CATL's competitors, Gotion Hi-Tech Co., Ltd and Sunwoda Electronic Co., Ltd. The issuance of GDR not only broadens the company's external financing channels, provides financial support for the construction of overseas projects, but also wins the strategic initiative in the case of the gradual intensification of competition in the overseas market, but there are also environmental protection and tax policies, labor costs, localized supply chain, and other various challenges.
5.2 Investment Strategy Recommendations

5.2.1 Expanding Overseas Markets

According to the previous analysis, the domestic revenue accounted for about 80% of the main business revenue of CATL, while only about 20% outside. With the rapid development of overseas markets, especially the new energy industry in Europe, the power battery market is continuing to grow. In addition, countries in Europe and the United States have an urgent need for energy storage, and although the deployment of energy storage is active, the speed is less than the target requirements, and energy storage is in short supply. CATL should further improve the company's overseas production capacity layout to meet the needs of the company's future business development and overseas market expansion, optimize the domestic and overseas revenue structure and promote diversified development.

5.2.2 Binding Quality Customers

CATL has a broader customer base in China, from the Ministry of Industry and Information Technology announced the new energy models' effective catalog and its power battery matching models accounted for about 50%, are the most supporting models of power battery manufacturers. This company should enter the customer supply chain by virtue of rapid product research and development, rapid expansion, and becoming a customer supply, and actively through equity participation, joint ventures, and in-depth binding customers so that competitors can only be subordinate to auxiliary supply, loss the opportunity to release volume. This way not only can lock the customer, but also hold the right to speak of the joint venture battery plant. Overseas customers, firmly grasp the Volkswagen MEB platform battery supply chain, as well as BMW, and Daimler's large orders, aiming at the transformation of traditional automotive giants, and rapid expansion.

5.2.3 Adopting Integrated Investment Strategy

When the enterprise is in the growth period, due to the rapid development of its own business, it should adopt an integrated investment strategy, both horizontally to realize the scale effect and vertically to extend the industrial chain. At the present stage, the investment direction of CATL focuses on internal investment and neglects external investment. Although internal investment can enhance the productivity and production scale of the enterprise, the investment return cycle is long, and it will limit the flow of the enterprise's capital to a certain extent, and there is the risk of capital chain breakage. The company should strengthen the investment assessment, control the scale of internal investment, and moderately invest in financial products and long-term equity investment, which can not only diversify the risk but also optimize the investment structure.

5.2.4 Improving the Technological Innovation Capacity

Under the strategy of "carbon neutral", the trend of new energy business development is unchanged, and ultimately, we need to rely on technology, cost, and other comprehensive strengths to win the green race and obtain long-term development. In recent years, no matter at home or abroad, the competition in the new energy industry is fierce, and more and more enterprises are seeking the right to control batteries with the intention of controlling the power battery industry chain by themselves, which will be a great threat to CATL. The company should firmly grasp the five-core competitiveness of power batteries, including "high specific energy, long lifespan, ultra-fast charging, real safety, and self-control temperature". The company should firmly grasp the "high specific energy, long life, ultra-fast charging, true safety, self-control temperature" five core competitiveness of power battery, only in the technology, to stabilize the industry leader. Hydrogen fuel cells may be the trend in the future, and CATL should also actively invest in the research and development of hydrogen fuel cells to keep pace with the times.
5.3 Suggestions for Profit Distribution Strategy

5.3.1 Establishing Dividend Distribution Method

According to the life cycle theory above, it can be seen that CATL is in the growth period and should implement the stock dividend payment policy, but the enterprise has been implementing the cash dividend distribution policy since its listing, and then combined with the financial strategy matrix theory, the company is in the state of value-added cash shortage, and it will further increase the pressure of the enterprise's shortage of funds if it continues to implement the cash dividend distribution policy, so the enterprise can appropriately adjust the distribution strategy by adopting the appropriate stock dividend distribution policy, or a combination of the distribution method of the distribution of dividends and cash distribution.

5.3.2 Continuing to Enhance Equity Incentives

In the era of science and technology innovation, the impact of talent on business operations has gradually deepened. Especially for highly talent-dependent enterprises, the loss of some core talents may even affect the survival of the enterprise. According to the financial report disclosed by CATL, the company has 16,322 R&D technicians, which is the core component of the company. Through equity tools, not only can we reduce the core staff turnover rate, but also bring more imaginative income expectations to employees. Equity incentives are essential in a competitive industry.

6. Conclusion

This paper conducts a financial strategic analysis of new energy enterprises using the case of CATL. Firstly, through the background and overview, it is known that CATL is in the favorable position of the new energy wave and belongs to a thriving industry. Moreover, the corporation has established a well-connected industry layout from upstream, midstream, to downstream, which allows it to maintain its leading advantages. However, as a nascent sector, the new energy industry faces market uncertainties in the medium term, and limited reserves of raw materials may have profound impacts if strictly controlled by the government.

Secondly, utilizing the lifecycle theory and methods, CATL is determined to be in the "growth stage". Its issues are analyzed from three aspects. In terms of financing, this company has increased its reliance on debt financing in the past five years, leading to higher financial risks. For investment, CATL's recent investment returns have been unsatisfactory. Regarding dividend distribution, it follows a policy of cash dividends but adopts a single method of dividend distribution. Then, by organizing and analyzing CATL's financial data from 2017 to 2022 and constructing a financial strategy matrix, it is concluded that this company falls into the first quadrant, indicating a shortage of value-adding funds.

Lastly, corresponding optimization recommendations are proposed. In terms of funding strategy, it is advisable to fully utilize bond and equity financing while closely following government support policies. Additionally, it is important to determine the direction of industrial development reasonably in order to obtain funds for corporate growth. Regarding investment strategy, efforts should be made to strengthen investment evaluation and control the scale of investments. Establishing strong relationships with high-quality clients will lay a solid foundation for sustainable growth. Furthermore, it is crucial to continue increasing investment in research and development to maintain a competitive advantage. Lastly, in terms of dividend distribution, it is recommended to establish a dividend allocation mechanism while enhancing equity incentives.

References