Analysis of Financial Statements in Power Battery Industry

-- Take CATL (300750) as an Example

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Abstract

Financial statements comprehensively reflect the operating results and financial situation of a company, and financial statements analyze the financial situation, operating results and cash flow of the enterprise by collecting and collating the relevant data in the financial report of the enterprise, and combining with other relevant information, so as to provide the basis of management decision and control. This paper takes CATL as an example, takes the 2018-2022 annual report of CATL and its competitor GOTION HIGH-TECH as the basic research materials, uses comparative analysis method and trend analysis method to analyze the financial statements, master the operating capacity, debt paying capacity, profitability and development capacity of the two companies, and forecasts the prospects and risks of CATL.

Keywords

Case Analysis; Financial Analysis; CATL.

1. Introduction

In the face of increasingly serious environmental problems, the energy-saving and environmental protection industry is developing rapidly. In September 2020, China clearly put forward the goal of "carbon peak" and "carbon neutralization" in 2060. Traditional internal combustion vehicles are the main source of carbon dioxide emissions. In order to achieve the purpose of reducing carbon emissions and protecting non-renewable energy, the new energy automobile industry has received strong support from the state. At present, the development momentum of the new energy automobile industry in the world is good.

The three core components of new energy vehicle are battery, motor and electronic control, in which battery is the energy source of new energy vehicle, which directly determines the mileage of electric vehicle and is the core link of electric vehicle industrial chain. The development of power battery is the core of the progress of new energy automobile industry. In this paper, CATL as an example of analysis, compared with GOTION HIGH-TECH, a detailed analysis of the financial situation of the two companies, CATL and the whole new energy power battery industry to predict the future development prospects.

2. Development of Power Battery Industry

With the continuous promotion of the good policy of China's new energy vehicles, the progress of related technologies, the change of consumer habits, the improvement of supporting facilities and so on, the new energy vehicle market in China has developed rapidly, but also led to the rapid development of the power battery market, the market size of power batteries is expected to reach 307.38 billion yuan by 2025. The mainstream power batteries are mainly ternary lithium batteries and lithium iron phosphate batteries. The power batteries are located in the middle of the industrial chain, the upstream of which is positive and negative materials, the downstream is new energy vehicles and 3C digital and so on.
According to SNE Research statistics, the proportion of CATL global installed capacity soared from 24.6% in 2020 to 32.6% in 2021 to 37% in 2022. The development of global new energy battery has set off a new upsurge, and the head effect of CATL is obvious. In 2020 and 2021, the TOP5 of power battery enterprises in China is the new energy of CATL, BYD, CALB, GOTION HIGH-TECH and LG Energy Solution, in which the two-year loading of vehicles in CATL accounts for more than 50% of the total domestic share.

As LG Energy Solution just listed in January 2022, CALB applied for listing in Hong Kong in 2022, the data is not easy to obtain; the main business of Panasonic and BYD differs greatly from that of CATL and is not comparable; GOTION HIGH-TECH main business has a high degree of coincidence with CATL, so GOTION HIGH-TECH (stock code 002074) is selected as the object of horizontal comparison in CATL. GOTION HIGH-TECH was listed in 2015. Currently, its main business is power lithium battery products and transmission and distribution products. In 2021, the revenue of power lithium battery products accounted for 94.29% of the total revenue.

3. A Case Study of CATL

3.1. Brief Introduction to CATL

CATL was listed on the Shenzhen Stock Exchange in 2018 with the stock code 300750. As of April 7, 2023, CATL has a total market capitalization of more than 950 billion yuan, and 2022 has a total market value of more than 1.3 trillion yuan. It is the world’s leading power battery and energy storage battery enterprise. Power battery systems were the main source of revenue in the CATL, with revenue fluctuating from 85 per cent to 70 per cent between 2018 and 2022, jumping from 24.5 billion to 236.6 billion. By 2022, the global power battery usage market accounted for the first in the world for six years in a row, and the global market share of energy storage batteries accounted for the first in the world for two years in a row. From the point of view of supply chain, CATL in the cooperation level to cooperate with leading enterprises in various fields or cultivate their own quasi-factory way, the main customers include Tesla, NIO, Geely Group, FAW-Volkswagen and so on.

3.2. Financial Analysis

3.2.1. Comparative Analysis of Balance Sheets

First of all, in terms of asset scale, the assets of CATL and GOTION HIGH-TECH are both increasing year by year, but the asset scale of GOTION HIGH-TECH is always lower than that of CATL, and the growth rate is lower than that of CATL. The total asset growth rate of CATL is 96.44% in 2021, and the average growth rate in four years is 62.72%. However, the highest growth rate of GOTION HIGH-TECH from 2018 to 2021 was only 56.69%, which was lower than the average growth rate of total assets in CATL in four years, indicating the rapid expansion of assets in CATL. In 2022, the total assets of CATL reached 600 billion yuan, with a year-on-year growth of 95.33%.

Similarly, the debt of both companies is on the rise, and the debt belongs to foreign capital and can play a leveraged role. The non-current liability of GOTION HIGH-TECH also maintained a low growth rate, the current growth rate grew rapidly in 2021, and the ratio of current debt to non-current liability increased directly from 2.4-2.6 in previous business cycles to 3.07, indicating that the current liability of GOTION HIGH-TECH accounts for a large proportion, mainly due to project expansion, shortage of funds and increase in short-term financing. Current liabilities in CATL grew slowly in 2018-2020, but suddenly increased by 2.72 times as much in 2021 as in the previous business cycle, and non-current liabilities in CATL have been growing at a high rate, mainly due to the rapid expansion of the business.
Table 1. Comparative analysis of CATL and GOTION HIGH-TECH 2018-2022 Balance sheet (simplified)

<table>
<thead>
<tr>
<th>Project</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td>38,773,486</td>
<td>17,773,493</td>
<td>2,528,044</td>
<td>11,286,499</td>
<td>1,561,951</td>
</tr>
<tr>
<td>Total Non-current Assets</td>
<td>21,321,749</td>
<td>12,993,192</td>
<td>1,833,297</td>
<td>4,375,344</td>
<td>1,221,511</td>
</tr>
<tr>
<td>Total Assets</td>
<td>60,095,235</td>
<td>30,766,686</td>
<td>4,361,341</td>
<td>15,661,843</td>
<td>2,783,461</td>
</tr>
<tr>
<td>Total Current Liabilities</td>
<td>29,576,142</td>
<td>14,934,483</td>
<td>1,828,227</td>
<td>5,497,719</td>
<td>1,189,375</td>
</tr>
<tr>
<td>Total Non-current Liabilities</td>
<td>12,828,177</td>
<td>6,569,985</td>
<td>595,674</td>
<td>486,554</td>
<td>471,746</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>42,404,319</td>
<td>21,504,469</td>
<td>2,423,901</td>
<td>6,755,299</td>
<td>1,611,162</td>
</tr>
<tr>
<td>Total Owners’ Equity</td>
<td>17,690,916</td>
<td>9,262,217</td>
<td>1,937,440</td>
<td>4,218,788</td>
<td>905,582</td>
</tr>
<tr>
<td>Total Liabilities and Owners’ Equity</td>
<td>60,095,235</td>
<td>30,766,686</td>
<td>4,361,341</td>
<td>15,661,843</td>
<td>2,783,461</td>
</tr>
</tbody>
</table>

Table 2. Comparative analysis of 2018-2022 income statements of CATL and GOTION HIGH-TECH

<table>
<thead>
<tr>
<th>Project</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
</tr>
<tr>
<td>Gross Operating Income</td>
<td>32,859,399</td>
<td>13,035,580</td>
<td>1,035,608</td>
<td>5,031,949</td>
<td>4,578,802</td>
</tr>
<tr>
<td>Total Operating Cost</td>
<td>29,374,563</td>
<td>11,136,729</td>
<td>1,038,326</td>
<td>4,348,584</td>
<td>495,890</td>
</tr>
<tr>
<td>Operating Profit</td>
<td>3,682,198</td>
<td>1,982,373</td>
<td>3,916</td>
<td>695,949</td>
<td>575,879</td>
</tr>
<tr>
<td>Net Profit</td>
<td>3,345,714</td>
<td>1,786,073</td>
<td>7,693</td>
<td>610,392</td>
<td>501,267</td>
</tr>
<tr>
<td>Total Profit</td>
<td>3,667,286</td>
<td>1,988,713</td>
<td>4,783</td>
<td>698,255</td>
<td>576,076</td>
</tr>
<tr>
<td>Selling Expenses</td>
<td>1,109,940</td>
<td>436,787</td>
<td>33,022</td>
<td>221,671</td>
<td>215,655</td>
</tr>
</tbody>
</table>

3.2.2. Comparative Analysis of Profit Statements

Unit: ten thousand Yuan
Administrative Expenses | 697,867 | 336,894 | 56,941 | 176,812 | 39,783 | 183,267 | 39,794 | 159,066 | 34,362
---|---|---|---|---|---|---|---|---|---
Financial Expenses | -279,999 | -64,120 | 33,525 | -71,264 | 31,192 | -78,162 | 29,086 | -27,973 | 10,763

The profit statement reflects the operating results of the enterprise. The total operating income of GOTION HIGH-TECH in 2021 is less than the total operating cost. The operating profit and net profit fluctuated greatly from 2018 to 2021, while the net profit and operating profit of CATL are steadily increasing, among which the growth rate is the fastest from 2020 to 2021. With the expansion of business scale, the total profit of CATL has been far away from GOTION HIGH-TECH, and the total profit of CATL in 2021 is 415.79 times of that of GOTION HIGH-TECH. The changing trend of sales cost and management cost and total profit in CATL is the same, and the financial cost is negative all the year round, which indicates that interest income is much higher than the sum of interest expenditure, bank charge and other items, the production needs funds are abundant, the difficulty of raising is low, and the supply chain management ability is excellent. On the other hand, the financial cost is rising year by year, and the difficulty of raising funds. The two years with the highest sales cost and management cost are the two years with the lowest total profit in four years. The operating situation of GOTION HIGH-TECH is not optimistic.

### 3.2.3. Analysis of Operational Capacity

The turnover rate of accounts receivable is an important financial index to assess the liquidity and realization ability of accounts receivable. The more the turnover times of accounts receivable or the shorter the turnover days, the faster the collection speed of accounts receivable and the smaller the probability of bad debts. In 2019, the highest turnover rate of accounts receivable in CATL was 6.69 times of that of GOTION HIGH-TECH. The decrease of accounts receivable turnover rate in 2018-2019 was mainly affected by the subsidy of new energy automobile policy, and the payment of vehicle manufacturers was delayed.

### Table 3. Operating capacity indicators of CATL and GOTION HIGH-TECH in 2018-2022

<table>
<thead>
<tr>
<th>Project</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Receivable Turnover Ratio (times)</td>
<td>CATL 8.04</td>
<td>CATL 7.44</td>
<td>GOTION HIGH-TECH 1.56</td>
<td>CATL 5.13</td>
<td>GOTION HIGH-TECH 1.10</td>
</tr>
<tr>
<td>Inventory Turnover Rate (times)</td>
<td>CATL 4.49</td>
<td>CATL 3.60</td>
<td>GOTION HIGH-TECH 2.19</td>
<td>CATL 2.94</td>
<td>GOTION HIGH-TECH 1.40</td>
</tr>
<tr>
<td>Current Asset Turnover (times)</td>
<td>CATL 1.16</td>
<td>CATL 0.90</td>
<td>GOTION HIGH-TECH 0.51</td>
<td>CATL 0.55</td>
<td>GOTION HIGH-TECH 0.44</td>
</tr>
<tr>
<td>Fixed Asset Turnover (times)</td>
<td>CATL 5.04</td>
<td>CATL 4.28</td>
<td>GOTION HIGH-TECH 1.30</td>
<td>CATL 2.72</td>
<td>GOTION HIGH-TECH 1.06</td>
</tr>
<tr>
<td>Total Asset Turnover (times)</td>
<td>CATL 0.72</td>
<td>CATL 0.56</td>
<td>GOTION HIGH-TECH 0.29</td>
<td>CATL 0.39</td>
<td>GOTION HIGH-TECH 0.25</td>
</tr>
</tbody>
</table>
Inventory turnover rate refers to the number of capital circulation times or the number of days required for a certain amount of inventory to be recycled in a certain period of time. In 2019, the highest inventory turnover rate in CATL was 3.27 times of that in GOTION HIGH-TECH, which indicated that the sales efficiency was high and the inventory overstock was low in CATL. The decline in inventory turnover in both companies comes from the expansion of production scale and the increase of production base.

The current turnover rate reflects a certain number of turnover times of current assets or the number of days needed to complete a turnover in a certain financial period. The shorter the turnover days, the higher the interest rate of current assets. In 2019, the turnover rate of current assets in CATL was 2.03 times higher than that of GOTION HIGH-TECH.

The turnover rate of total assets refers to the number of days required for the circulation of funds occupied by all assets of an enterprise in a certain financial period. In 2019, the turnover rate of total assets in CATL was 2.36 times higher than that in GOTION HIGH-TECH. To sum up, 2019 is the year with the biggest difference in operating capacity between CATL and GOTION HIGH-TECH. CATL’s operating capacity is far superior to GOTION HIGH-TECH’s.

### 3.2.4. Analysis of Solvency

The solvency index of an enterprise is an important index to reflect the financial situation of an enterprise. The higher the debt ratio of an enterprise, the higher the possibility that the debt cannot be repaid at maturity, and the greater the financial risk that the enterprise has to bear. By analyzing the solvency of the enterprise, we can see the level of financial risk borne by the enterprise.

#### Table 4. Comparative analysis of 2018-2022 debt repayment ability of CATL and GOTION HIGH-TECH

| Solvency indicators of CATL and GOTION HIGH-TECH in 2018-2022 |
|-----------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Project | CATL | CATL | GOTION HIGH-TECH | CATL | GOTION HIGH-TECH | CATL | GOTION HIGH-TECH | CATL | GOTION HIGH-TECH | CATL | GOTION HIGH-TECH |
| Current Ratio | 1.31 | 1.19 | 1.38 | 2.05 | 1.31 | 1.57 | 1.29 | 1.73 | 1.43 |
| Quick Ratio | 1.05 | 0.92 | 1.14 | 1.81 | 1.04 | 1.32 | 0.95 | 1.51 | 1.17 |
| Cash Ratio (%) | 64.73 | 59.78 | 62.97 | 124.61 | 28.82 | 70.76 | 32.08 | 89.21 | 36.28 |
| Asset-liability Ratio (%) | 70.56 | 69.89 | 55.58 | 55.82 | 60.21 | 58.38 | 64.02 | 52.36 | 58.47 |
| Equity Ratio (%) | 200.59 | 185.12 | 116.96 | 88.22 | 130.74 | 119.91 | 133.84 | 98.23 | 112.84 |

The higher the index is, the stronger the solvency of the enterprise is and the smaller the short-term current risk is. It is generally considered that it is more reasonable to maintain the index at 2. From 2018 to 2021, the highest current ratio in CATL in 2020 is 2.05, which indicates that the current assets in CATL are more and the short-term debt repayment capacity is high, and the minimum is 1.19 in 2021, which indicates that the current assets in CATL in that year are only 1.19 times of current liabilities and face a higher repayment risk, mainly due to the large inventory, which is 2.04 times of 2020 inventory in 2021. The current ratio of GOTION HIGH-TECH is maintained at 1.29-1.43, which indicates that GOTION HIGH-TECH continues to be in a state of insufficient liquidity.
Quick-moving ratio refers to the ability of assets that can be realized immediately in the short term to repay current liabilities, which is generally considered to be more reasonable to maintain at 1. The index is less than 1 in 2019 and 2021 in CATL, which may be due to the large inventory and prepaid accounts of enterprises in that year.

From 2018 to 2020, the cash ratio of CATL is obviously better than that of GOTION HIGH-TECH, but the opposite is 2021, which shows that the cash ratio of CATL is stronger than that of GOTION HIGH-TECH from 2018 to 2020, and the cash realization ability of CATL decreased sharply in 2021, and the same trend change of current ratio and quick moving ratio also shows this.

The long-term solvency index reflects the ability of the enterprise to repay the long-term debt, and the assets are the protection of the long-term solvency of the enterprise. In addition, the total debt and the owner’s equity will also be affected. The asset-liability ratio reflects the part of the total assets of the enterprise through borrowing through the comparison of the total assets and the total liabilities. The greater the debt ratio, the higher the risk of enterprise debt service. Obviously, the index should not exceed 1. Generally, the ratio is about 0.5 except the manufacturing enterprises. The asset-liability ratio of GOTION HIGH-TECH and CATL was generally within the range of 50%-60%. Among them, GOTION HIGH-TECH’s asset-liability ratio reached 64.02% in 2019, 6989% in 2021, 70.56% in 2022, 145.98% in 2021 and 264.51% in 2021 compared with 2020. Long-term borrowing as a proportion of total assets increased from 3.87 per cent at the beginning of 2021 to 9.83 per cent at the end of 2022, mainly due to the need for the expansion of project construction and production, which increased long-term borrowing. Generally speaking, the long-term debt ability of the two enterprises is good from the asset-liability ratio, but CATL is now facing debt service risk.

The property right ratio is the ratio of the total liability to the total owner’s equity, which can reflect the relative relationship between creditors and investors. The lower the property right ratio, the higher the proportion of the enterprise’s own capital to the total assets, the stronger the long-term solvency. The property right ratio of the two enterprises is close to or greater than 1 from 2018 to 2021, among which the property right ratio is as high as 200.59% in 2022, which belongs to the financial structure of high risk and high reward, and can also draw the conclusion that its long-term solvency is weak.

3.2.5. Profitability Analysis

Profitability is the ability of enterprises to obtain profits in a certain period of time, mainly from three aspects: asset profitability, operating profitability and shareholder profitability.

In terms of asset profitability, CATL’s profit rate on total assets and return on equity both far exceeded that of GOTION HIGH-TECH. The asset profitability of GOTION HIGH-TECH fell sharply after 2018, mainly due to the large increase of bad debt reserve and inventory depreciation reserve, which resulted in a serious decline in company performance and a sharp decline in net profit. The net profit of GOTION HIGH-TECH in 2019 was 48.33 million yuan. It was only 8.31% of the net profit in 2018. Of course, the increase in total assets was also part of the reason. In 2019, the total assets of GOTION HIGH-TECH increased by 22.26% compared to 2018.

In terms of operating profitability, the operating profit margin and cost profit margin of GOTION HIGH-TECH also showed a precipitous downward trend from 2018 to 2019, mainly due to the decline of operating profit and the increase of period expenses. In 2019, the operating profit of GOTION HIGH-TECH was only 9.21% of 2018, while the sales cost increased 18.52%, the management cost increased 15.81%, and the financial cost increased by 170.24%. The increase in financial costs was mainly due to increased interest expenditure on current bank borrowing and green bonds. CATL has been stable for four years. In 2021, the operating profit
margin and cost profit margin of CATL were 40.03 times and 39.14 times of those of GOTION HIGH-TECH, respectively.

In terms of shareholder profitability, GOTION HIGH-TECH’s net assets per share steadily improved, while earnings per share fluctuated greatly. Earnings per share and net assets per share in CATL showed an upward trend, especially in 2020-2022, when shareholder profitability indicators exploded and the company had strong assets. After-tax profits per share and the value of assets per share owned by shareholders in CATL were significantly higher than those of GOTION HIGH-TECH.

**Table 5. Comparative analysis on 2018-2022 profitability of CATL and GOTION HIGH-TECH**

<table>
<thead>
<tr>
<th>Project</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
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<th>2018</th>
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<tbody>
<tr>
<td></td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
</tr>
<tr>
<td>Operating Margin (%)</td>
<td>11.21</td>
<td>15.21</td>
<td>0.38</td>
<td>13.83</td>
<td>2.49</td>
</tr>
<tr>
<td>Cost Expense Margin (%)</td>
<td>13.18</td>
<td>19.18</td>
<td>0.49</td>
<td>17.49</td>
<td>2.75</td>
</tr>
<tr>
<td>Return on Total Assets (%)</td>
<td>5.57</td>
<td>5.81</td>
<td>0.18</td>
<td>3.90</td>
<td>0.53</td>
</tr>
<tr>
<td>Return on Equity (%)</td>
<td>18.68</td>
<td>18.85</td>
<td>0.54</td>
<td>8.70</td>
<td>1.37</td>
</tr>
<tr>
<td>Earnings Per Share (yuan)</td>
<td>12.92</td>
<td>6.88</td>
<td>0.08</td>
<td>2.49</td>
<td>0.13</td>
</tr>
<tr>
<td>Net Asset Value Per Share (yuan)</td>
<td>67.34</td>
<td>36.26</td>
<td>11.28</td>
<td>27.56</td>
<td>8.52</td>
</tr>
</tbody>
</table>

**3.2.6. Analysis of Capacity Development**

**Table 6. Comparative analysis on 2018-2022 development ability of CATL and GOTION HIGH-TECH**

<table>
<thead>
<tr>
<th>Project</th>
<th>2022</th>
<th>2021</th>
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<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
<td>CATL</td>
</tr>
<tr>
<td>Revenue Growth Rate (%)</td>
<td>152.07</td>
<td>159.06</td>
<td>54.01</td>
<td>9.90</td>
<td>35.60</td>
</tr>
<tr>
<td>Growth Rate of Total Assets (%)</td>
<td>95.33</td>
<td>96.44</td>
<td>56.69</td>
<td>54.53</td>
<td>10.58</td>
</tr>
<tr>
<td>Operating Profit Growth Rate (%)</td>
<td>85.75</td>
<td>184.84</td>
<td>-76.63</td>
<td>20.85</td>
<td>184.78</td>
</tr>
<tr>
<td>Net Profit Growth Rate (%)</td>
<td>92.89</td>
<td>185.34</td>
<td>-31.93</td>
<td>22.43</td>
<td>192.02</td>
</tr>
<tr>
<td>Growth Rate of Net Assets (%)</td>
<td>94.62</td>
<td>31.63</td>
<td>72.18</td>
<td>68.37</td>
<td>22.48</td>
</tr>
</tbody>
</table>

The development ability analysis is to analyze the development trend and development potential of the future production and management activities of the enterprise. The
The development trend and development potential of the enterprise determine the change of the stock price of the enterprise, and the development ability is the comprehensive embodiment of solvency, operation ability and profitability.

The growth rate of operating income reflects the overall sales growth of an enterprise in a certain period. In 2018-2021, the growth rate of operating income in CATL has been positive and from 2020 to 2021 showed blowout growth, the maximum value reached 159.06%, indicating that the sales scale increased and the sales performance was good in CATL from 2020 to 2021. From 2020 to 2021, the operating income of power battery system increased by 132.06%, that of lithium battery material products increased by 350.74%, and that of energy storage system products increased by 601.01% from the same period last year. On the other hand, the operating income of GOTION HIGH-TECH in 2018-2019 was poor, and the growth rate of operating income in 2019 was negative, mainly due to the decrease of 5.24% in power lithium battery industry, 2.84% in Chinese mainland area and 51.99% in overseas region (including Hong Kong, Macao and Taiwan) compared with the same period last year.

2021 was the highest growth rate of total assets of the two companies in four years. The total asset growth rate of CATL reached 96.44%, which may be due to the construction of energy storage power station and the production of Yibin production base. GOTION HIGH-TECH had the largest growth rate between 2020 and 2021, which may come from the base projects of Liuzhou and Tangshan. Generally speaking, the annual total asset growth rate and net asset growth rate of the two enterprises are positive, indicating that asset investment has been growing, which comes from the expansion of the business scale of the company, the purchase of fixed assets and the increase of production capacity, and the total asset growth rate of GOTION HIGH-TECH is lower than that of CATL, indicating that the expansion rate of asset scale in CATL is higher than that of GOTION HIGH-TECH.

The growth rate of net profit of the two companies fluctuates greatly, especially GOTION HIGH-TECH, the change of net profit growth rate in two years has reached 283.19%. The reason is that 2019-2020 is mainly the increase of main business income and the increase of investment income, and 2020-2021 is mainly the sharp increase of expenses and the decrease of operating profit. From 2019 to 2020, the revenue of power lithium battery, which is the main business product of GOTION HIGH-TECH, increased by 45.27%, 35.60% and 85.34 million yuan, respectively. From 2020 to 2021, the management expenses and R & D expenses of GOTION HIGH-TECH increased by 43.13% and 29.22%, respectively. At the same time, the operating profit decreased from 167.6 million yuan to 39.16 million yuan, resulting in a sharp decline in the growth rate of net profit. In CATL, the growth rate of net profit showed an upward trend, but the growth rate of net profit decreased sharply in 2022, with the biggest increase in 2020-2021. The operating income increased by 159.06% in 2021 compared with 2020, and the net profit increased by 192.61% compared with the same period last year.

According to several indexes of comprehensive development ability, the growth ability of CATL is strong, and the total assets and income are on the rise as a whole. 2021 is a year of rapid development in CATL. In this year, Yibin port production base in CATL went into production, participated in the construction of Europe’s largest power grid side single body electricity, and the business continued to expand. The development level of GOTION HIGH-TECH is relatively unstable. Although the operating income and total assets are rising on the whole, the decline of net profit mainly comes from the sharp decline of the net profit of continuous operation.

3.3. Prospects and Risk Projections

3.3.1. Risk of Macroeconomic Fluctuations and Industrial Policy Changes

In recent years, the global new energy automobile industry has developed rapidly as a whole. As the core component of new energy vehicles, the market of power batteries is also developing rapidly. With the decrease of lithium battery cost and the improvement of cycle life, the
acceleration of power cleaning has led to the sustained growth of energy storage demand, and the energy storage market has ushered in a rapid development stage. If domestic and foreign subsidies, carbon emissions, renewable energy applications and other related industrial policies have a negative change, it may have an impact on the operating performance of the company. At present, the global economy is still in the recovery period. If the macro-economy and market demand rise in the future, it will affect the development of the whole new energy, power battery and energy storage industry, and thus have a positive impact on the company's operating performance and financial condition.

3.3.2. Increased Risk of Market Competition

With the rapid development of lithium-ion battery market, new entrants are constantly attracted to participate in the competition through direct investment, industrial transformation or acquisition and merger. At the same time, the existing lithium-ion battery enterprises have also expanded production capacity one after another, the market competition is becoming increasingly fierce, the future business development of the company will face a certain risk of increased market competition.

4. Conclusion

CATL, as the leading enterprise in the power battery market, is far ahead in production scale, market share, profit situation and so on. The profitability, operation ability and development ability are generally good, so we should pay attention to the debt service risk. As the world's leading new energy innovation technology company, CATL should closely around the established annual business plan to carry out all kinds of work, increase product development and marketing efforts, promote material system, system structure, extreme manufacturing, business model innovation, the application of professional, diversified, international management team, will continue to invest in R & D as an important measure to maintain the core competitiveness of the company. Through the continuous improvement of product performance and product quality to maintain the company's product competitiveness.

References
