The Motivation and Performance Analysis of A-share Domestic Spin-Off Listing

-- A Case Study of Shengyi Technology's Spin-off of Shengyi Electronics

Shuangshuang Jiang, Xinrong Zeng
School of Management, Sichuan University of Science & Engineering, Zigong 643002, China

Abstract: With the continuous development of China's capital market, more and more companies choose the way of equity spin-off listing for financing. On February 25, 2021, the A-share listed company Shengyi Technology spun off its subsidiary Shengyi Electronics on the Science and Technology Innovation Board, becoming the first successful case of "A spin-off A" in China. This paper mainly analyzes the motivation for the spin-off listing of Shengyi Technology and its performance after the spin-off.

Keywords: Shengyi Technology, Shengyi Electronics, Spin-off listing, Motivation, Performance analysis.

1. Introduction

Spin-off and listing is an enterprise financing and operation mode and an important enterprise development strategy. It can help companies diversify risks, expand the business, improve capital efficiency, and enhance corporate image. It usually refers to the division of a company's different business lines or assets into multiple independent entities and listing them independently on the stock market. Spin-off listing can bring many benefits, such as improving stock liquidity, promoting business expansion, diversifying risks, and improving market competitiveness. In recent years, with the gradual improvement of the regulation of the A-share market and the comprehensive promotion of the registration system, more and more enterprises choose to achieve their business and financial goals through spin-offs and listing.

In the past, Chinese demerger listings were mainly divided into overseas listed companies demerging their subsidiaries on the A-share market and A-share listed companies demerging their subsidiaries on the Hong Kong stock market. But in the future, there will be more and more cases of Chinese listed companies spinning off their subsidiaries to list on A shares. Shengyi Electronics, as the first company in China to be successfully listed on the Science and Technology Innovation Board after being spun off from the main board, is also the first successful spin-off listing in the A-share market. This paper chooses Shengyi Technology as the research object, analyzes its financial situation after listing, and provides a reference for listed companies to choose domestic spin-off listing in the future.

2. Case Introduction

2.1. Introduction to the parent-subsidiary company

Guangdong Shengyi Technology Co., LTD. (hereinafter referred to as "Shengyi Technology") was founded in June 1985 and successfully listed on the main board of the Shanghai Stock Exchange in October 1998, becoming the first company in the capital market to successfully list in the copper clad plate industry. The main business of the company is the design, production, sales of copper-clad sheets, and adhesive sheets, and provides product services, technical services, and consulting services.

Shengyi Electronics Co., LTD. (hereinafter referred to as "Shengyi Electronics"), a subsidiary of Shengyi Technology, was established in August 1985 and listed on the Shanghai Stock Exchange in February 2021. It is a company that adheres to various types of printed circuit boards (Referred to as "PCB") and is a pioneer enterprise in the field of PCB research and development, manufacturing, and sales. In terms of business, Shengyi Electronics and Shengyi Technology have an upstream and downstream supply relationship, and there is no competition between them in terms of main business and product composition.

2.2. Overview of the spin-off listing process

On February 27, 2020, after deliberation and approval by the Board of Directors and the Board of Supervisors, Shengyi Technology issued the spin-off Plan.

On May 7 and 8, 2020, Sunyi Technology and Sunyi Electronics held extraordinary general meetings of shareholders respectively. At both meetings, various motions on the spin-off and listing plan were passed, and the completeness of legal procedures was considered.

On May 28, 2020, Shengyi Electronics' application for initial public offering and listing on the Science and Technology Innovation Board was accepted by Shanghai Stock Exchange.

On December 9, 2020, Shengyi Electronics submitted the registration application to China Securities Regulatory Commission for the initial public offering of shares on the Science and Technology Innovation Board.

On January 5, 2021, China Securities Regulatory Commission approved Shengyi Electronics' application for registration of the initial public offering of shares on the Science and Technology Innovation Board.

On February 25, 2021, Shengyi Electronics officially listed on the Science and Innovation Board of the Shanghai Stock Exchange and issued 166,3640 shares at the price of 12.42 yuan per share, raising a total of 2.066 billion yuan.
3. Motivation for Spin-off listing

3.1. Enhance the competitiveness of core industries

Shengyi Technology, as a leading enterprise in the domestic copper industry, mainly engages in the design, production, and sales of coppers, bonded sheets, and printed circuit boards. Shengyi Electronics is mainly engaged in the production, research, and marketing of various printed circuit boards. Its products are mainly used in the fields of industrial control, medical treatment, consumer electronics, network equipment, communication equipment and so on. The parent company Shengyi Technology is mainly engaged in the business related to the copper clad plate and bonded sheet, and its printed circuit board and other related businesses are all from Shengyi Electronics.

Although the products produced by the two companies are in the upper and lower reaches of the same industrial chain, there are still big differences in business. In recent years, with the rapid development of our printed circuit industry, electronic information products update and iterate quickly, accordingly, the enterprises in the same industry chain should also respond to the change in the market environment. In order to make the main business structure of Shengyi Technology and Shengyi Electronics clearer and the parent and subsidiary companies focus on the main business respectively, it is particularly important to split and list Shengyi Electronics, which has independent business and operation. On the other hand, Shengyi Technology is a leading enterprise in the copper-clad industry. The spin-off of Shengyi Electronics will further expand its leading edge in the copper-clad industry and enable Shengyi Electronics to occupy a position in the printed circuit board industry. The parent-subsidiary company avoids the problem of industry competition and can pool resources to invent new technologies and produce new products according to the characteristics of their respective industries, thus improving the core competitiveness of the parent-subsidiary company in their respective fields.

3.2. Expand financing channels

In this spin-off listing, Shengyi Electronics raised 2.066 billion yuan by issuing shares on the Science and Technology Innovation Board platform of the Shanghai Stock Exchange. Shengyi Electronics no longer needs to rely on Shengyi Technology to obtain the funds needed for the company’s operation and development. In the future, Shengyi Electronics can also obtain sufficient financial support through equity refinancing or debt financing directly through the Science and Technology Innovation Board platform, so as to increase R&D investment. It can also issue shares through the science and Technology innovation board platform to purchase high-quality assets, mergers, and reorganization in the way of export-oriented development, so as to promote the rapid development of enterprises, improve their business performance, expand the scale of production and consolidate their position in the industry.

3.3. Give play to the role of equity incentive

The management team of Shengyi Electronics subscribes to equity holding through the shareholding platform, but the stock cannot be transferred in circulation and its value cannot be reflected when it is not listed, and the incentive effect is weak. Independent listed operations of subsidiaries will face the supervision of regulators and market investors, which will help the management to enhance their sense of responsibility. The parent company can mobilize the enthusiasm of the management of subsidiaries through the implementation of equity incentive and market value management plans, attract and retain outstanding talents in the field, which is more conducive to the improvement of operating efficiency, steady growth of performance, and improvement of shareholders' income. In addition, the independent management of Shengyi Electronics, which is managed separately from the management of the parent company, helps to reduce the company's internal management costs, and the management of the subsidiary company obtains independent decision-making rights, reduces the reporting process, and is more conducive to seizing market opportunities.

4. Financial Performance Analysis of The Spin-off Listing of Shengyi Technology

4.1. Financial performance analysis based on the perspective of parent company

Shengyi Electronics was listed on the Science Innovation Board of the Shanghai Stock Exchange on February 25, 2021. Based on the financial data of Shengyi Technology and Shengyi Electronics from 2017 to 2021, this paper conducts a vertical analysis to judge the impact of spin-off listing on the operating performance of the parent and subsidiary companies.

4.1.1. Profitability analysis

Profitability refers to the ability of an enterprise to gain profits in the competition. It reflects the business situation of an enterprise and is the main indicator to measure the success of an enterprise. This paper mainly analyzes the profitability of Shengyi Technology before and after the spin-off and listing by collecting its gross profit rate on sales, net profit rate on sales and return on equity from 2017 to 2020. As shown in Table 1.

<table>
<thead>
<tr>
<th>Financial index</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenue (billion yuan)</td>
<td>10.75</td>
<td>11.98</td>
<td>13.24</td>
<td>14.69</td>
<td>20.27</td>
</tr>
<tr>
<td>Gross profit margin on sales (%)</td>
<td>21.47</td>
<td>22.18</td>
<td>26.65</td>
<td>26.78</td>
<td>26.82</td>
</tr>
<tr>
<td>Net interest rate on sales (%)</td>
<td>10.36</td>
<td>8.89</td>
<td>11.81</td>
<td>12.26</td>
<td>14.43</td>
</tr>
<tr>
<td>Return on equity (%)</td>
<td>20.12</td>
<td>16.39</td>
<td>19.67</td>
<td>18.28</td>
<td>24.34</td>
</tr>
</tbody>
</table>

As can be seen from Table 1, the profitability of Shengyi Technology is constantly strengthening. The operating revenue increased from 10.75 billion yuan in 2017 to 20.27 billion yuan in 2021, and the return on equity also reached 24.34%. At the same time, due to the improvement of production and operation efficiency, the company's sales expenses, administrative expenses, and other production costs are constantly reduced, and the gross profit rate and net profit are continuously improving.
rate of sales also reach 26.82% and 14.43% in 2021. This is mainly due to the following reasons: First, Shengyi Technology made full use of the new production capacity, vigorously explored the market, and strengthened the production organization and management, which led to the improvement of the profit level; Second, the company has been closely following the pace of market development, technical cooperation with advanced terminal customers, self-developed products are recognized by the market, widely used by downstream printed circuit board enterprises; Third, the spin-off and listing of subsidiaries will help Shengyi Technology focus on its main business, straighten out its business structure and clarify its strategic layout. Shengyi Technology's overall profitability has improved significantly, and the company's overall performance continues to improve, with good development prospects.

### 4.1.2 Analysis of solvency

Solvency is used to analyze the ability to repay the debt owed by an enterprise. It is an important symbol to measure whether an enterprise can withstand financial risks. This paper analyzes the solvency of Shengyi Technology by collecting its current ratio, quick ratio, and asset-liability ratio from 2017 to 2020. As shown in Table 2.

#### Table 2. Debt paying ability of Shengyi Technology before and after the spin-off

<table>
<thead>
<tr>
<th>Financial index</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio (%)</td>
<td>1.61</td>
<td>1.95</td>
<td>1.66</td>
<td>1.43</td>
<td>2.03</td>
</tr>
<tr>
<td>Quick ratio (%)</td>
<td>1.20</td>
<td>1.46</td>
<td>1.26</td>
<td>1.06</td>
<td>1.41</td>
</tr>
<tr>
<td>Asset-liability ratio (%)</td>
<td>50.02</td>
<td>46.85</td>
<td>39.79</td>
<td>41.99</td>
<td>39.13</td>
</tr>
</tbody>
</table>

From Table 2, it can be seen that the asset-liability ratio of Shengyi Technology decreased from 50.02% in 2017 to 39.13% in 2021, and the proportion of liabilities in total assets decreased. This is mainly due to the rapid development of the copper-clad plate industry due to the development of industries such as 5G communication and automobile. As a high-quality enterprise, equity financing is smooth, attracting investment and sufficient funds; At the same time, Shengyi Electronics was split up and listed, obtaining corresponding cash flow. From the perspective of solvency, both the current ratio and the quick ratio remained at a stable level before the split listing. After the split and listing, the debt-paying ability of Shengyi Technology further improved, with the current ratio increasing by 42% from 1.43 to 2.03, and the quick ratio increasing by 33% from 1.06 to 1.41. Based on the above three indicators, it can be seen that the spin-off of Shengyi Electronics by Shengyi Technology has brought corresponding cash flows to the parent company, optimized the company's capital structure, significantly enhanced the company's debt-paying ability, effectively controlled financial risks, and maintained stable and normal operations.

### 4.1.3 Analysis of growth ability

Enterprise growth ability refers to the enterprise's future development trend and development speed, which reflects the enterprise's future sustainable development ability. This paper collected the growth rate of revenue and net profit of Shengyi Technology from 2017 to 2020 to analyze its growth ability. As shown in Table 3.

#### Table 3. Growth ability of Shengyi Technology before and after the spin-off

<table>
<thead>
<tr>
<th>Financial index</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue growth rate (%)</td>
<td>25.92</td>
<td>11.45</td>
<td>10.52</td>
<td>10.92</td>
<td>38.04</td>
</tr>
<tr>
<td>Net profit growth rate (%)</td>
<td>43.63</td>
<td>-6.90</td>
<td>44.81</td>
<td>16.00</td>
<td>68.38</td>
</tr>
</tbody>
</table>

As can be seen from Table 3, before the spin-off and listing, the growth rate of Shengyi Technology's operating revenue declined year by year, but was still positive, indicating that Shengyi Technology's operating revenue was growing year by year. After the spin-off listing, Shengyi Technology operating revenue growth rate and net profit growth rate increased significantly. The overall change trend of the net profit growth rate is consistent with the growth rate of operating income, which showed a downward trend before the spin-off, while the growth rate of net profit of the company increased significantly after the spin-off. The main reason is that the company timely adjusted the product structure, made full use of the new capacity, reduced the unit product cost, and the self-developed products were recognized by the market. It can be seen that the spin-off of the subsidiary Shengyi Electronics to go public has certain positive effects on the parent company. The growth rate of operating revenue and net profit has been greatly improved, and the growth capacity of Shengyi Technology has been improved.

### 4.2 Analysis of financial performance from the perspective of subsidiaries

#### 4.2.1 Profitability analysis

This paper analyzes the profitability of its subsidiary Shengyi Electronics by collecting its gross profit margin, net profit margin and return on equity from 2017 to 2020. As shown in Table 4.

#### Table 4. Profitability of Shengyi Electronics before and after the spin-off

<table>
<thead>
<tr>
<th>Financial index</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenue (billion yuan)</td>
<td>1.71</td>
<td>2.08</td>
<td>3.10</td>
<td>3.63</td>
<td>3.65</td>
</tr>
<tr>
<td>Gross profit margin on sales (%)</td>
<td>23.70</td>
<td>26.10</td>
<td>29.76</td>
<td>27.30</td>
<td>20.29</td>
</tr>
<tr>
<td>Net interest rate on sales (%)</td>
<td>8.09</td>
<td>10.38</td>
<td>14.25</td>
<td>12.09</td>
<td>7.25</td>
</tr>
<tr>
<td>Return on equity (%)</td>
<td>11.93</td>
<td>16.11</td>
<td>28.62</td>
<td>24.72</td>
<td>7.48</td>
</tr>
</tbody>
</table>

As can be seen from Table 4, before the spin-off and listing, Shengyi Electronic's gross profit rate on sales was consistent
with its net profit rate on sales, showing an overall rising trend and decline in 2020. After the spin-off and listing, the net profit rate on sales of Shengyi Electronics has experienced a precipice decline, which is mainly due to the slowdown in the growth rate of communication electronics and automotive electronics industries due to the impact of the global epidemic in the past two years, as well as the increase in the price of upstream raw materials copper cladding, which increased the operating cost of Shengyi Electronics. In 2021, the return on equity of Shengyi Electronics was only 7.48%, down by 14.24 percentage points compared with the previous year. This is because Shengyi Electronics was successfully spun off and listed in 2021, raising 2.066 billion yuan of capital, resulting in a rapid increase in the company's net assets, resulting in a precipitous decline in the return on equity. However, this does not mean that the profitability of Shengyi Electronics has declined significantly and the overall development trend of the company is unclear. On the contrary, the company's profitability has steadily increased in recent years and is at the leading level in the industry.

### 4.2.2. Analysis of solvency

Debt-paying ability can be subdivided into short-term debt-paying ability and long-term debt-paying ability. In this paper, the current ratio, quick ratio, asset-liability ratio, and other indicators are used for analysis, as shown in Table 5.

<table>
<thead>
<tr>
<th>Financial index</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio (%)</td>
<td>1.15</td>
<td>1.37</td>
<td>1.00</td>
<td>0.68</td>
<td>1.47</td>
</tr>
<tr>
<td>Quick ratio (%)</td>
<td>0.84</td>
<td>0.96</td>
<td>0.71</td>
<td>0.46</td>
<td>1.14</td>
</tr>
<tr>
<td>Asset-liability ratio (%)</td>
<td>40.63</td>
<td>39.23</td>
<td>54.09</td>
<td>57.52</td>
<td>39.27</td>
</tr>
</tbody>
</table>

As can be seen from Table 5, the current ratio and quick ratio of Shengyi Electronics were maintained at a low level before the spin-off and listing. After the spin-off and listing, the current ratio and quick ratio have improved, reaching 1.47 and 1.14 respectively, and the short-term solvency of Shengyi Electronics has been greatly improved. The asset-liability ratio represents the long-term solvency of the company. Before the spin-off and listing, the asset-liability ratio of the company increased year by year and reached 57.52 in 2020.

After the spin-off and listing, the company raised a lot of capital and broadened equity financing channels, which directly decreased to 39.27%. The spin-off and listing of Shengyi Electronics have brought a large amount of equity financing, supplemented the working capital, enhanced the company's ability to resist financial risks, and improved the solvency level.

### 4.2.3. Analysis of growth ability

As can be seen from Table 6, the growth rate of operating income fluctuates greatly. Before the spin-off and listing of Shengyi Electronics, the growth rate of operating income is still positive despite the overall downward trend, which indicates that the operating income of Shengyi Electronics is in a stable growth state. After the spin-off and listing, the growth rate of operating revenue decreased to 0.38%, because after the spin-off and listing, the company's Ji'an and Dongcheng plant project capacity adjustment did not reach the expected level, the company's shipment growth was small, and the average unit price of printed circuit board decreased, resulting in a decline in operating revenue instead of an increase. Net profit growth rate and operating income growth rate roughly maintain the same trend, the overall range of change is also large. Due to the impact of COVID-19 and the macro-economy, the price of upstream raw materials of the copper-clad plate keeps rising, and the cost of production procedures such as transportation, storage, and management also faces the risk of suspension at any time. In addition, the price of printed circuit boards drops sharply, resulting in negative net profit growth for the company.

As can be seen from Table 6, before and after the spin-off of Shengyi Electronics, the growth rate of operating income fluctuates greatly. Before the spin-off and listing, the company's operating revenue and net profit increased significantly, and its growth ability was significantly enhanced. However, as the project construction process of Shengyi Electronics is not as expected, the production capacity is not fully released, coupled with the increase of printed circuit board raw materials and the decrease in sales price, the company's operating revenue and net profit decrease simultaneously, and the company's growth ability is negatively affected in the short term.

5. **Research Conclusions and Implications**

In order to improve the competitiveness of its core industry, expand financing channels, and play the role of equity incentive, Shengyi Technology splits its subsidiary, Shengyi Electronics, into the Science and Technology Innovation Board for listing. Through the analysis of the financial performance of Shengyi Technology and Shengyi Electronics before and after the split, we can see that: First of all, the spin-off listing enables Shengyi Technology and Shengyi Electronics to focus on their own main business, focus on their familiar fields to grow bigger and stronger and improve the profitability and competitiveness of the parent and subsidiary companies. Secondly, the spin-off listing enables Shengyi Electronics to directly raise funds from the Science and Innovation Board platform of the Shanghai Stock Exchange to meet the capital needs of existing business operations and future business expansion, which improves the solvency of both the parent-subsidiary company and the subsidiary, and more significantly improves the solvency of the subsidiary. Finally, the spin-off and listing made Shengyi Technology more focused on improving the production capacity and product quality of copper-clad plates. The company's operating revenue and net profit increased significantly, and its growth ability was significantly enhanced. However, as the project construction process of Shengyi Electronics is not as expected, the production capacity is not fully released, coupled with the increase of printed circuit board raw materials and the decrease in sales price, the company's operating revenue and net profit decrease simultaneously, and the company’s growth ability is negatively affected in the short term.

The following lessons can be drawn from this case. First, enterprises should pay attention to the long-term performance after the spin-off and listing. Spin-off and listing bring more
long-term development opportunities to the enterprise. Both Shengyi Technology and Shengyi Electronics should not only focus on short-term benefits, but should make reasonable decisions based on their own development status and future development plan, vigorously cultivate technical talents, expand international territory and market share, improve the competitiveness of the enterprise, and achieve long-term development of the enterprise. Second, enterprises should improve the utilization efficiency of raised funds. Spin-off listing provides an independent financing platform for subsidiaries. Enterprises should make full use of the raised funds and allocate them reasonably. Meanwhile, they should also improve the ability to refinance to ensure the healthy operation of the capital chain.

References


[2] Zhao Huifen, Lu Jike. Thinking about the path of Listing Listed companies by splitting their subsidiaries—Based on the case analysis of Liaoning Chengda Splitting into Big Biology [J]. Journal of Henan University of Technology (Social Science Edition), 201, 37(05): 26-34+120.


