Analysis of financial statements in the express delivery industry

Jiayi Tai¹, Qi Cao²

¹School of Accounting, Shanxi University of Finance and Economics, Taiyuan, China, Taiyuan, China

Keywords: express delivery industry; DuPont analysis; financial analysis

Abstract: In 2016, China Express Co., Ltd. was listed one after another. Among them, Shentong, Yuantong, and Yunda were listed on the domestic backdoor. SF also chose domestic backdoor listing and became the largest express delivery company in China. By studying the financial data of SF, Yunda, Yuantong, and Shentong in 2016-2018, this paper analyzes the four companies from the perspective of essential financial ability and DuPont analysis and combines the industry data with the horizontal comparative analysis method and the vertical comparative analysis method. Draw conclusions, point out the problems and propose corresponding countermeasures.

1. Introduction

Recently, the whole industry of express delivery has earnestly implemented the spirit of the General Secretary's instructions on the instructions of the postal industry. Following the principle of "consolidating, enhancing, upgrading, and smoothing," the company has deepened the supply-side structural reform as the mainline and benchmarked the national construction and well-off.

The socially appropriate modern postal industry and the construction of the postal healthy country goal, and continue to promote the high-quality development of the industry to achieve further results.

Due to the rapid development of China's economy, assisting poverty alleviation and rural revitalization, "postal cooperation, fixed-point assistance, agricultural products sales, sales channels", "communication to the countryside" and other substantial support for domestic demand policy and diversification of scientific and technological applications, China The express delivery industry has achieved rapid and steady growth.

According to the data of the State Post Bureau, in recent years, China's express delivery industry has continued to grow steadily. In 2016, China's express delivery industry achieved a business income of 397.44 billion yuan, and in 2018 it reached 603.84 billion yuan, a cumulative increase of 51.9%.

As the four giants in China's express delivery industry, SF's total market capitalization is the first in the logistics industry's domestic A-share superiors company, reaching 180.733 billion yuan. Yunda, Yuantong, and Shentong are located in the second, third and third respectively, with 77.953 billion, 37.416 billion, and 34.703 billion, respectively.

This paper compares the financial data of SF, Yunda, Yuantong and Shentong in 2016-2018 from the solvency, operational capability, profitability, and DuPont finance points out its advantages and disadvantages and proposes corresponding countermeasures for the defects.

2. SF, Yunda, Yuantong, Shentong fundamental financial ability analysis

2.1 Solvency analysis

2015-2018 SF, Yunda, Yuantong, Shentong, and logistics industry flow ratio, as shown in Table 1.

²School of Public Finance & Economics, Shanxi University of Finance and Economics, Taiyuan, China

Table 1 Comparison of current ratios of express delivery companies 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|---------------|------------------|------|------|------|
| Current ratio | SF | 1.16 | 1.42 | 1.21 |
| | Yunda | 1.10 | 1.16 | 1.57 |
| | Yuantong | 2.25 | 1.55 | 1.83 |
| | Shentong | 2.49 | 2.92 | 1.89 |
| | Industry average | 1.69 | 1.73 | 1.63 |

Source: Enterprise Annual Report, Sina Finance

Table 2 Comparison of current assets of express delivery enterprises 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|----------------|----------|-------|-------|-------|
| Current assets | SF | 213.3 | 314.9 | 319.2 |
| | Yunda | 32.2 | 47.58 | 101.7 |
| | Yuantong | 65.7 | 69.1 | 88.0 |
| | Shentong | 62.3 | 58.5 | 61.6 |

Source: Enterprise Annual Report, Sina Finance

Table 3 Comparison of quick-moving companies 2016-2018 quick-moving ratio (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|-------------|------------------|------|------|------|
| Quick ratio | SF | 1.14 | 1.40 | 1.18 |
| | Yunda | 1.10 | 1.15 | 1.56 |
| | Yuantong | 2.24 | 1.54 | 1.82 |
| | Shentong | 2.48 | 2.90 | 1.88 |
| | Industry average | 1.53 | 1.58 | 1.47 |
| | | | | |

Source: Enterprise Annual Report, Sina Finance

Table 4 Comparison of current liabilities of express delivery companies 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|---------------------|------------------|--------|--------|--------|
| Current liabilities | SF | 183.87 | 215.45 | 263.69 |
| | Yunda | 29.23 | 41.00 | 64.79 |
| | Yuantong | 29.21 | 44.64 | 48.15 |
| | Shentong | 25.01 | 20.07 | 32.62 |
| | Industry average | 69.97 | 87.10 | 97.32 |

Source: Enterprise Annual Report, Sina Finance

2.1.1 Short-term solvency analysis

The current ratio reflects the extent to which the current assets of the enterprise cover the current liabilities at the time of analysis. The quick ratio refers to the ratio of the company's quick assets to current liabilities, also known as the acid test ratio. Assets are assets after deducting inventory. From Table 1, it can be found that the current ratio of SF and Yunda is always lower than the industry average. Yuantong's significant decline in 2016-2017 was due to a 52.82% increase in current liabilities in 2017 and a rebound in 2018.

Shentong has maintained a high current ratio, which is related to its lower current assets ratio.

2.1.2 Analysis of long-term solvency

The asset-liability ratio is a measure of the state of the company's overall liabilities and reflects

the ability of the company to repay debt over a more extended period. The express delivery industry is in a growth period, so the asset-liability ratio fluctuates greatly. Yunda, Yuantong, and Shentong adopt the franchise model, in which Yunda and Yuantong adopt the transfer field and the service network to join the mode, while Shentong adopts the service network to join, the transfer field can also join the mode. The "light" asset model has made its asset-liability ratio in recent years always lower than the industry average. SF Express adopts the direct mode, and it needs to invest in service outlets, transit stations, transportation routes, and storage networks. Therefore, SF's asset-liability ratio is relatively high, but it has shown a downward trend in recent years. In 2016, it was higher than the industry average, and it was lower than the industry average in 17 and 18 years. Explain that SF Express uses the creditor's funds to conduct business activities to a higher degree, in contrast to higher debt pressure. However, its downward trend indicates that SF intends to reduce financial leverage and improve long-term solvency.

Table 5 Comparison of the asset-liability ratio of express delivery companies 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|-------------|------------------|--------|--------|--------|
| Assets and | SF | 53.4% | 46.2% | 48.4% |
| liabilities | Yunda | 44.1% | 44.1% | 36.2% |
| | Yuantong | 26.5% | 33.8% | 40.9% |
| | Shentong | 31.7% | 23.1% | 27.8% |
| | Industry average | 47.27% | 47.04% | 57.56% |

Source: Enterprise Annual Report, Sina Finance

2.2 Analysis of operational capability

The courier company produces inventory as a service company, and there is no factory. The transportation network is equivalent to the factory of the courier company. The transportation network determines the transportation capacity of the courier company, and the transportation capacity is equivalent to the production capacity of the manufacturing company. Therefore, the fixed asset turnover rate is used to measure the operational capacity of the company. SF's fixed assets include service outlets, transit sites, transportation routes, and warehousing networks. The core assets of "two links and one access" are the transfer field, including the land use rights, buildings, machinery, and equipment of the transfer site; the second is the transportation of the trunk line. The turnover rate of fixed assets is related to operating income and fixed assets. Rhyme's fixed asset turnover rate is low because its income does not include the cost of sending parts, and Shentong's fixed asset turnover rate is the highest related to his operating assets. The main reason for the decrease in the fixed asset turnover rate of Yuantong and Shentong in 2016-2018 is that it has increased its capital investment in recent years.

Table 6 Comparison of fixed assets turnover rate of express delivery enterprises 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|-------------|----------|-------|-------|------|
| Fixed asset | SF | 5.89 | 6.05 | 7.03 |
| turnover | Yunda | 4.33 | 3.88 | 3.68 |
| | Yuantong | 10.2 | 7.96 | 6.66 |
| | Shentong | 16.61 | 12.78 | 8.59 |

Source: Enterprise Annual Report, Sina Finance

Companies use a certain degree of credit sales policy to promote sales, but credit sales also cause companies to invest in accounts receivable. The higher the turnover rate of accounts receivable, the greater the voice of the company in the product market, the more cash sales can be used without affecting its market position. The turnover rate of accounts receivable of Yunda and Yuantong is significantly higher than the industry average. The turnover rate of Shentong accounts receivable has continued to increase in recent years, exceeding the industry average in 2017.

SF 2016-2018 growth is relatively stable, but below the industry average.

The reason for the gap is that the customers of the two links are mainly their franchisees, and the proportion of accounts receivable is relatively low by adopting the method of prepayment. Among them, Shentong's accounts receivable are more due to the relatively loose credit policy. The SF high-end customers account for a large proportion, and the bargaining power is low. The above analysis shows that Yunda and Yuantong have better control over the accounts receivable in the whole industry, and at the same time, the upstream suppliers have strong investment capacity, which can make full use of the capital advantages in the supply chain, and the cash circulation speed is breakneck. The continuous optimization of future cash flows provides conditions.

Table 7 Comparison of the turnover rate of accounts receivable 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|------------|------------------|-------|-------|-------|
| Accounts | SF | 13.1 | 13.8 | 13.8 |
| receivable | Yunda | 36.8 | 34.0 | 32.0 |
| turnover | Yuantong | 93.7 | 30.7 | 21.9 |
| | Shentong | 14.4 | 18.5 | 19.5 |
| | Industry average | 14.49 | 16.98 | 15.88 |
| | | | | |

Source: Enterprise Annual Report, Sina Finance

2.3 Profitability

The gross profit of sales is the amount of operating income exceeding the operating cost. The gross profit margin of sales reflects the ability of enterprises to generate revenue due to the profit characteristics of products. It is found from the table that the gross profit margin of Yunda, Shentong, and SF has declined in recent years, but it is still higher than the industry average. The gross profit margin of Yuantong's sales is always lower than the industry average.

For Yunda, Yuantong, Shentong, the votes are 1.74, 3.62, 3.23, respectively, and the industry votes are 12.43 yuan. The main reason is that the average price of the industry is the total cost from the piece to the transfer to the dispatch, and the three companies make money.

Only the face and transfer costs. The lowest price of rhyme and the highest gross profit margin is because, in the rhyming system, the income of the franchisees is directly borne by the franchisees. The rhyme is a middleman role, so the income of the pieces is not included in the rhyme income. However, SF is significantly more expensive than other companies because of its business model and emphasis on core technology research and development. In terms of horizontal view, Yunda, Yuantong, and Shentong have all experienced a decline in gross profit margins due to price wars in recent years. Yuantong was down due to the 18-year operating cost, in which the single-ticket transportation cost decreased by 14.5%, and the operating cost decreased by 7%, which caused the gross profit margin to rebound. In the 18 years since SF Express's expansion of new business, transportation costs, labor costs, and site leasing have affected short-term performance.

Table 8 Comparison of the gross profit margin of express delivery enterprises 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|--------------|------------------|-------|-------|-------|
| Gross profit | SF | 19.7% | 20.2% | 17.9% |
| margin | Yunda | 31.2% | 29.0% | 28.0% |
| | Yuantong | 13.6% | 11.8% | 13.2% |
| | Shentong | 19.9% | 18.4% | 16.2% |
| | Industry average | 18.6% | 16.5% | 15.6% |
| | | | | |

Source: Enterprise Annual Report, Sina Finance

3. DuPont Analysis

3.1 Return on Net Assets

In the framework of DuPont's financial analysis system, the return on net assets is broken down into three interrelated primary ratios: net sales margin, total asset turnover, and equity multiplier. The return on net assets has been reduced in recent years. In recent years, the return on net assets and the net profit margin of sales have been much higher than those of other companies, indicating that Yunda's profitability and operational capacity are stronger than other companies. SF's equity multiplier is the highest, indicating that SF is more solvable, but it also faces more significant financial risks.

Table 9 Comparison of the return on net assets of express delivery companies 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|-------|------------------|--------|--------|-------|
| Roe | SF | 24.4% | 17.9% | 13.1% |
| | Yunda | 43.3% | 35.5% | 32.4% |
| | Yuantong | 23.6% | 16.6% | 19.0% |
| | Shentong | 40.6% | 24.4% | 26.9% |
| | Industry average | 15.28% | 12.09% | 3.36% |
| | | | | |

Table 10 Comparison of Equity Multipliers of Express Enterprises 2016-2018 (Unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|-------------------|------------------|------|------|------|
| Equity Multiplier | SF | 2.2 | 1.90 | 1.90 |
| | Yunda | 1.79 | 1.79 | 1.57 |
| | Yuantong | 1.36 | 1.51 | 1.69 |
| | Shentong | 1.73 | 1.37 | 1.35 |
| | Industry average | 2.54 | 2.39 | 2.47 |

Table 11 Comparison of Net Profit Rate of Express Enterprises 2016-2018 (Unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|--------------|------------------|-------|-------|-------|
| Sales margin | SF | 7.2% | 6.7% | 4.9% |
| | Yunda | 16.1% | 15.9% | 18.8% |
| | Yuantong | 8.2% | 7.2% | 7.0% |
| | Shentong | 12.8% | 11.8% | 12.1% |
| | Industry average | 8.18% | 6.43% | 0.39% |

Table 12 Comparison of total asset turnover ratio of express delivery companies 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|-------------|------------------|------|------|------|
| Total asset | SF | 1.46 | 1.35 | 1.37 |
| turnover | Yunda | 1.41 | 1.24 | 1.01 |
| | Yuantong | 1.94 | 1.58 | 1.61 |
| | Shentong | 1.83 | 1.51 | 1.65 |
| | Industry average | 1.27 | 1.51 | 1.42 |

3.2 Net profit margin of sales

The net profit margin of sales reflects the ability of an enterprise to obtain final profit through activities and reflects the ability to operate activities to obtain profit after tax for shareholders. As can be seen from the figure, the net profit margin of SF Express and Yuantong is significantly lower than that of Yunda and Shentong. The main reason is that the cost of SF and Yuantong is higher than

that of Yunda and Shentong. SF is because of the direct mode; the original value of fixed assets has exceeded 20 billion, making the depreciation accounted for 47.6% of the net interest rate is much higher than other companies. In recent years, Yuantong's asset scale expansion has been accelerating, and the increase in infrastructure investment has led to a significant increase in costs. In 2012, Rhyme achieved a profit of 588 million yuan through the sale of equity in Fengchao, achieving growth in net profit margin.

Table 13 Comparison of operating costs of express delivery companies 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|-----------------|------------------|------|------|------|
| Operating costs | SF | 1.46 | 1.35 | 1.37 |
| | Yunda | 1.41 | 1.24 | 1.01 |
| | Yuantong | 1.94 | 1.58 | 1.61 |
| | Shentong | 1.83 | 1.51 | 1.65 |
| | Industry average | 1.27 | 1.51 | 1.42 |

3.3 Total Asset Turnover

The total asset turnover rate is the efficiency with which the company uses all assets to generate operating income. It can be seen that the total asset turnover rate of Yuantong and Shentong is higher than that of SF and Yunda. In particular, rhyme fell to 1.01 times per year in 2018. Shentong is due to its "light" asset management model, and Yuantong is due to its substantial increase in operating income in recent years. Rhyme increased its total assets by 20% in 2018, causing its total asset turnover to drop significantly.

Table 14 Comparison of operating income of express delivery companies 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|------------------|----------|--------|--------|--------|
| Operating income | SF | 574.83 | 710.94 | 909.43 |
| | Yunda | 73.50 | 99.86 | 138.56 |
| | Yuantong | 168.18 | 199.82 | 274.65 |
| | Shentong | 98.81 | 126.57 | 170.13 |

Table 15 Comparison of total assets of express delivery companies 2016-2018 (unit: 100 million yuan)

| Index | Company | 2016 | 2017 | 2018 |
|--------------|----------|--------|--------|--------|
| Total assets | SF | 441.35 | 576.6 | 716.15 |
| | Yunda | 67.09 | 94 | 180.81 |
| | Yuantong | 111.68 | 141.43 | 199.69 |
| | Shentong | 79.64 | 88.09 | 118.66 |

3.4 Equity Multiplier

SF's equity multiplier in this past year is significantly higher than that of Yunda, Yuantong, and Shentong, indicating that SF is better at using leverage to create revenue for itself than other companies. However, the liabilities of the express delivery industry are mainly based on operating liabilities, and the risk is less than financial liabilities.

Therefore, Gree high leverage does not necessarily mean high risk but reflects SF's ability to control financial leverage.

4. Conclusion

SF insists on the layout of substantial assets. Compared with other affiliated express delivery, the labor costs and equipment depreciation expenses are higher. Full self-operated and total assets are

SF's competitive barriers, but they also bring certain operational risks and financial pressures to the company. Besides, in recent years, rhyme, Yuantong, Shentong's new depreciation, and amortization, and potential capital expenditures have been discovered. Their assets are more and more prominent, and they are gradually entering the "quality service - rapid development of business volume - technology investment and innovation - quality The virtuous circle of development of services is conducive to the development of market share in the process of the express delivery industry gradually shifting from price war to quality war.

Yuantong should moderately improve the operating efficiency of total assets. The fixed asset turnover rate and total asset turnover rate of Yuantong in the past three years are lower than other companies as a whole.

It shows that Yuantong is not efficient enough for asset management, and its assets are not fully utilized.

At the same time, it is necessary to appropriately reduce the asset-liability ratio, reduce financial risks, and enhance the confidence of stakeholders in the solvency of Yuantong.

In recent years, SF Express's gross profit margin and net interest rate are lower than other companies. In addition to the impact of price wars, SF should strengthen cost management, establish a strict cost control system for depreciation and workers' compensation, improve management efficiency and reduce costs.

At the same time, SF Express and Shentong should appropriately increase the turnover rate of accounts receivable, reduce the capital occupation time, and increase the capital turnover rate.

At the same time, Shentong should make rational use of financial leverage to create higher value for shareholders. Yunda's operational capability and profitability are among the leading levels in the industry. However, in terms of solvency, the performance should be moderate. The flow and quick ratio should be moderately improved by optimizing the asset structure and formulating a reasonable debt repayment plan.

References

- [1] Zhang Yanjun, Yang Xiaodong, Liu Yi, Zheng Dayuan, Bi Shujun. Research on the Frame of Intelligent Inspection Platform Based on Spatio-temporal Data. Computer & Digital Engineering [J], 2019, 47(03): 616-619+637.
- [2] Yi Liu, Jiawen Peng, and Zhihao Yu. 2018. Big Data Platform Architecture under The Background of Financial Technology: In The Insurance Industry As An Example. In Proceedings of the 2018 International Conference on Big Data Engineering and Technology (BDET 2018). ACM, New York, NY, USA, 31-35.
- [3] Aziz, Nisar Ahmed, Sparrow, John. Exploring the potential of mass-customisation as an innovation in the express parcel delivery industry[J]. International Journal of Business Innovation & Research, 3(6):634.
- [4] Patil, Dilip, Mohanthy, J.N. Analysis of Financial Statements in the Sugar Industry[J]. Social Science Electronic Publishing, 2017.
- [5] Emma Ik Okoye. Distress Signal in Selected Commercial Banks: Trend Analysis of Published Financial Statements[J]. SSRN Electronic Journal, 2011.
- [6] Trigueiros, Duarte. Incorporating complementary ratios in the analysis of financial statements[J]. Accounting, Management and Information Technologies, 4(3):149-162.
- [7] LOU Qing, ZHANG Shao-zhong, Zhejiang Wanli University. Combination of Evaluation Methods for Assessing the Quality of Service for Express Delivery Industry[J]. Journal of Zhejiang Wanli University, 2015.
- [8] Z. Zhao, J. Wang and Y. Liu, "User Electricity Behavior Analysis Based on K-Means Plus Clustering Algorithm," 2017 International Conference on Computer Technology, Electronics and Communication (ICCTEC), Dalian, China, 2017, pp. 484-487. doi: 10.1109/ICCTEC.2017.00111