Analysis of Financial Indicators of Listed Companies ——A Case Study of Aonong Group

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Abstract. With the rapid development of China's economy, animal husbandry has become an indispensable industry in China's economic development. Both the number of poultry raised and the output of products have increased significantly compared to before. China's animal husbandry is gradually moving towards regionalization, industrialization, and scale. This requires the state's support for animal husbandry in terms of policy, financial guarantee, and personnel training. At present, China's livestock industry accounts for about 30% of the primary industry, and it has become an important pillar of the primary industry. Because of this, it is particularly important to analyze the financial statements of agricultural groups engaged in animal husbandry. This article takes the financial statements of Aonong Group listed on the Shanghai Stock Exchange from 2014 to 2018 as an example for financial analysis.

1. Introduction
Aonong Group, full name is Fujian Aonong Biotechnology Group Co., Ltd. Established in April 2011, it is a high-tech agricultural and animal husbandry company led by standardization, intensification, and industrialization. It has more than 4,500 employees and more than 100 subsidiaries, covering 31 provinces, municipalities and autonomous regions. Since the establishment of the company, it has always been aimed at becoming an industry leader.

At present, the company has further developed the agricultural Internet industry on the basis of existing pig raising, feed, animal health, raw material trade and other industries. In addition, Aonong Group is also actively seeking to make use of the advantages of market platforms to carry out multi-faceted industrial investment and mergers and acquisitions to enable enterprises to develop faster and better. However, analysis of the company's annual report data shows that compared with the previous period, Aonong Group's net profit attributable to shareholders of the parent company has decreased. Net profit from 2014 to 2018 decreased from 39.202 million yuan to 10.425 million yuan. Although the overall decline was not large, the net profit in 2018 decreased significantly from 2017, from 122 million yuan in 2017 to 10.425 million yuan in 2018. This article will analyze the relevant financial indicators of this phenomenon.
2. Accounting analysis

| Accounting Subject         | 2018 year | 2017 year | 2016 year | 2015 year | 2014 year |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
| Cash and cash equivalents  | 5.17      | 9.02      | 10.16     | 14.32     | 9.56      |
| Inventories                | 13.10     | 15.45     | 16.65     | 18.03     | 26.11     |
| Fixed Assets               | 36.61     | 28.33     | 29.94     | 24.55     | 17.37     |
| Intangible Assets          | 5.36      | 5.63      | 5.82      | 5.38      | 4.68      |
| Total                      | 60.24     | 58.43     | 62.57     | 62.28     | 57.72     |

2.1. Cash and cash equivalents

The large amount of monetary funds, on the one hand, means that the assets are highly liquid, which in turn increases the difficulty factor of management. On the other hand, enterprises hold monetary funds mainly for three reasons: transactional needs, preventive needs, and speculative needs. Holding large amounts of monetary funds indirectly explains to some extent that the company has not formulated a clear Investment plan, or no more suitable investment opportunities. The decentralization of funds will affect the future business plan of the enterprise, which will restrict its development. Strengthening the management of corporate funds and making better use of monetary funds are important to the long-term development of the enterprise. In 2018, the group's monetary funds as a percentage of total assets decreased from 14.32% to 9.56%, a decrease of 3.85%, which reflects the efficient use of funds to some extent. According to corporate announcements, it is located in Jiangsu Aonong and Ji'an Aonong woven bag bases. Waiting for the base to be put into operation has further increased the company's investment expenditure, supporting the previous speculation.

2.2. Inventories

Inventory is affected by many factors, and its liquidity is strong. As can be seen from Table 1, the inventory of Aonong Group accounts for a large proportion of total assets. Aonong Group is a large-scale aquaculture industry. If the inventory is too low, it will reduce the sales volume of the enterprise, which will affect sales and operating income. However, the accumulation of inventory will cause a series of problems, such as the slowdown of product sales, which may cause the interruption of the capital chain, which will endanger the normal operation and strategic planning of the enterprise. The total inventory cost decomposition model is shown in Figure 1.
Therefore, for Aonong Group, efficient inventory management is important and necessary. Not only to meet the needs for market share in its own strategic planning, but also to meet the normal operation of the enterprise itself. From Table 1, it can be seen that the proportion of inventory from 2014 to 2018 has decreased year by year, from 26.11% in 2014 to 13.10% in 2018, a decrease of 13.01%, which further illustrates the problems that Aonong Group has based on its own Real-time adjustments were made to strengthen the management and control of the Group's memory.

2.3. **Fixed assets**

From Table 1, it can be seen that Aonong Group has the largest proportion of fixed assets in total assets, and its importance is self-evident. As an important material condition for enterprises to carry out normal production activities, strengthening the management of fixed assets will help improve the company's own production capacity, and at the same time, it can improve the economic benefits of the company. Similarly, the proportion of an enterprise's fixed assets can reflect its production and operation status. As can be seen from the table, from 2014 to 2018, the proportion of fixed assets in enterprises increased year by year, from 17.37% in 2014 to 36.61% in 2018. Compared with similar enterprises in the same industry, the growth rate was larger. This is because during the past few years, four bases, such as the first stage project of Zhangzhou Science and Technology Park, have been put into production gradually, and most of the projects under construction have been gradually converted into fixed assets, which makes Aonong Group’s fixed assets increase significantly.\(^8\)

2.4. **Intangible assets**

From Table 1, from 2014 to 2018, the proportion of Aonong Group's intangible assets first increased and then decreased, increasing from 4.68% in 2014 to 5.82% in 2016 and then to 5.36% in 2018. As an animal husbandry enterprise, the intangible assets of Aonong Group are mainly reflected in land use rights, patent rights, and non-patent technologies. Aonong Group has continued to expand in the past five years. Land use rights have also been increased along with mergers and acquisitions. Therefore, it can be seen that the intangible assets have been increasing year by year. However, the proportion of intangible assets increased first and then decreased due to changes in research and development expenditures.
According to Table 2, it can be seen that in 2014, the research and development expenditure of Aonong Group was 86.003 million yuan; in 2016 it reached a peak of 111.292 million yuan; then it was reduced to 10.97334 million yuan in 2018. By considering the time value of money and inflation factors, we can know the reasons for the increase in the intangible assets of Aonong Group from 2014 to 2018 and then decrease.

3. Financial analysis

3.1. Analysis of solvency indicators

3.1.1. Short-term solvency analysis. Short-term solvency is analyzed through three indicators: quick ratio, current ratio and cash ratio.

1) Current Ratio

\[
\text{Current Ratio} = \frac{\text{Total of current assets}}{\text{Total of current liabilities}} \times 100\%
\]

Generally speaking, a company's short-term solvency is directly proportional to its current ratio. The higher the company's current ratio, the stronger its short-term solvency. According to the data in Table 4, from 2014 to 2018, the current ratios of Aonong Group were 0.794526, 0.862037, 0.842933, 0.958742, and 0.618567. The company's current ratio increased in 2015 and 2017 to a large extent, but in 2018 it showed a significant decline, from 0.958742 to 0.618567. The main reason is that Aonong Group's total current liabilities increased in 2018, and the current liabilities increased from 1.228 billion in 2017 to 1.982 billion in 2018, which caused Aonong Group's current ratio to drop significantly. Data research shows that only when the company's current ratio is controlled at 2 can short-term solvency be at a normal level. However, Aonong Group's current ratio did not exceed 1 from 2014 to 2018, and the highest ratio was only 0.958742, indicating that Aonong Group's short-term debt solvency is insufficient and further improvement is needed.

2) Quick Ratio

Quick ratio characteristics: As another indicator for analyzing the short-term solvency of an enterprise, it is a measure of the ability of an enterprise's current assets to be immediately realized for repayment of current liabilities.

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\text{Quick Ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}} \times 100\%
\]

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2 Data source: Aonong Group Annual Report 2014-2018
Quick Assets = Current assets - Inventory - Prepaid accounts

Generally, a company's short-term solvency is positively related to the quick ratio. From the data in Table 4, it can be found that the quick ratios from 2014 to 2018 were 0.447291, 0.583603, 0.542995, 0.639351, and 0.400116. In general, there is a tendency for the quick ratio to decrease. The big reason is that the continuous increase in current liabilities has affected the quick ratio of enterprises. According to historical research, for most companies, a quick ratio of 1 is most appropriate. However, the Aonong Group's quick ratio in the past five years has not reached or approached 1, especially in 2018, it was only 0.400116, which further illustrates that Aonong Group's short-term debt repayment ability needs to be improved. [6]

3) Cash Ratio

The cash ratio is also called the realization ratio. The ability to convert non-cash assets, marketable securities, etc. into cash reflects the short-term solvency of the company.

Cash Ratio = (Cash and cash equivalents + Cash equivalents) / Current liabilities × 100%

The model of target cash balance is shown in Figure 2. Generally speaking, within a certain range, a company's high cash ratio means that the company has a strong ability to realize cash. If the cash ratio is too high, it means that the company's current asset utilization rate is low, and the use of funds is unreasonable; on the contrary, if the cash ratio is too low, it will increase the debt risk of the enterprise. The enterprise should reduce the total cost to the sum of opportunity cost and transaction cost to the minimum.

From Table 4, the cash ratios of Aonong Group from 2014 to 2018 are 0.126926, 1.221330, 0.182965, 0.186482, and 0.086276, respectively. The cash ratio is usually 0.2. The cash ratio of Aonong Group from 2014 to 2017 was around 0.2, but the cash ratio in 2018 was only 0.086276, indicating that the short-term debt repayment ability of the company is relatively low.

To sum up, it can be considered that the short-term debt repayment ability of Aonong Group is insufficient, and the capital composition is mainly based on liabilities. It is difficult for liquidity to be used to repay the short-term debt of the company outside of its daily operating activities. Therefore, enterprises need to formulate strategies as soon as possible, adjust the status quo, and increase control over corporate costs. [5]

3.1.2. Long-term solvency analysis. The long-term solvency of an enterprise is directly linked to the rights and interests of creditors. The stronger the company's long-term solvency means that the creditor's creditor's rights can be guaranteed and the less risk the creditor bears.
Table 5 Long-term solvency indicators

|                      | 2018 year | 2017 year | 2016 year | 2015 year | 2014 year |
|----------------------|-----------|-----------|-----------|-----------|-----------|
| Debt to asset ratio  | 0.694728  | 0.619575  | 0.653124  | 0.669651  | 0.768097  |
| Net assets debts ratio| 2.28      | 1.63      | 1.88      | 2.03      | 3.31      |

1) Debt to asset ratio

The long-term solvency of an enterprise can be reflected by its asset-liability ratio, and its ability to operate can also be reflected by its asset-liability ratio.

\[
\text{Debt to Asset Ratio} = \frac{\text{Total of liabilities}}{\text{Total of assets}} \times 100\%
\]

For creditors, a low asset-liability ratio of an enterprise means that the company is able to repay debts; for a business owner, a high debt to asset ratio means that the company has more liquid funds, which is conducive to a better operation of the enterprise.\(^2\) According to historical research, the debt to asset ratio of enterprises should be controlled between 0.4 and 0.6. As can be seen from Table 5, the debt to asset ratios of Aonong Group from 2014 to 2018 were 0.768097, 0.669651, 0.653124, 0.619575, and 0.694728. The debt to asset ratios of enterprises in 2014 and 2018 were close to 0.7, which is a relatively high level. Insufficient long-term debt-paying capacity of an enterprise needs to be adjusted in a timely manner to avoid inadequate long-term debt-paying capacity and thereby affecting the strategic planning and normal operation of the enterprise.

2) Net assets debts ratio

The net assets debts ratio of an enterprise can also reflect the long-term solvency of the enterprise. By analyzing the asset structure of the enterprise, it can reflect the relative relationship between the creditors and the capital provided by the shareholders, and reflect whether the basic financial structure of the securities operating institution is stable.

\[
\text{Net Assets Debts Ratio} = \frac{\text{Total debt}}{\text{Total owner's equity}} \times 100\%
\]

According to historical research, it is advisable to control the net assets debts ratio at 1.2. From 2014 to 2018, the net assets debts ratios of Aonong Group were 3.31, 2.03, 1.88, 1.63, 2.28. Among them, the ratio of corporate net assets debts in 2014 to 2018, 2017, and 2014 is relatively high, which indicates that the long-term debt-paying capacity of enterprises needs to be improved, and timely and corresponding changes should be made.

3.2. Analysis of profitability indicators

Profitability is the ability of an enterprise to obtain operating profit. Profitability reflects the company’s profitability and operating results in a certain period of time. Strong profitability means that the higher the profits a company can obtain, the more likely it is that the company will continue to operate. Generally, we use Gross Profit Margin, Net Profit Margin on Sale, and Return on Equity as important indicators for analyzing corporate profitability.\(^1\)
Table 6 Aonong Group's income statement related data from 2014 to 2018 (Unit: 100 million yuan)

| Subject                  | 2018 year | 2017 year | 2016 year | 2015 year | 2014 year |
|--------------------------|-----------|-----------|-----------|-----------|-----------|
| Sales from operations    | 57.63     | 49.04     | 49.78     | 40.13     | 41.84     |
| Operating costs          | 49.73     | 39.78     | 41.07     | 32.60     | 35.09     |
| Net Income               | 0.102425  | 1.22      | 1.08      | 0.386894  | 0.392208  |
| Selling expenses         | 4.03      | 4.51      | 4.65      | 4.41      | 4.45      |
| General and administrative expense | 1.53 | 2.73 | 2.54 | 2.60 | 1.79 |
| Financial expense        | 0.703710  | 0.402737  | 0.2544.15 | 0.191195  | 0.112833  |
| Losses on the asset impairment | 0.335336 | 0.157176 | 0.057130 | 0.077873 | 0.062661 |
| Non-operating income     | 0.065161  | 0.044441  | 0.112390  | 0.057853  | 0.127479  |
| Non-operating expense    | 0.0822.52 | 0.046000  | 0.058826  | 0.025022  | 0.002932  |
| Income tax               | 0.096380  | 0.266857  | 0.121527  | 0.161589  | 0.056720  |

1) Gross Profit Margin, Net Profit Margin on Sale

As an important indicator of corporate profitability, gross profit margin and net profit margin on sale can predict the future development of the company and measure the future growth of the company, which is the source of corporate profits.

Gross Profit Margin = (Sales from operation - Operating costs) / Sales from operation × 100%

Net Profit Margin on Sale = Net income / Sales from operation × 100%

As shown in Table 6, from 2014 to 2018, sales from operation of Aonong Group has continued to increase, from 4.184 billion yuan in 2014 to 5.763 billion yuan in 2018, but the gross profit margin has shown a downward trend. This is due to the substantial increase in operating costs, which increased from 3.509 billion yuan in 2014 to 4.973 billion yuan in 2018. Although the operating margin has increased significantly in the past five years, the net income has declined. In particular, the net income in 2018 has dropped by nearly 110 million compared with the previous year, which has led to a significant decline in the net profit margin on sale in 2018. Based on the analysis of the income statement data, it is inferred that the reason may be the increase in non-operating expenses and the impact of losses on the asset impairment.

2) Return on Equity

It reflects the level of returns of shareholders' equity, can measure the efficiency of a company's use of its own capital, and measures the ability of investors to invest capital to obtain profit.

Return on Equity = Net income / Average net assets × 100%

It is known from Table 7 that the return on equity of Aonong Group from 2014 to 2018 decreased from 32.49% in 2014 to 4.97% in 2018, and there was a significant decline. The downward trend in 2015 and 2018 is obvious. The analysis of the data in the table shows that the profitability of Aonong Group has decreased in the past five years. In summary, it can be seen that the profitability of Aonong Group has continued to decline in the past five years, and of course, it cannot be separated from the impact of the international market and the external environment. The author believes that, while expanding the size of the company, the company should also focus on improving the profitability of the company. On the one hand, it can protect the rights of shareholders and creditors, and on the other hand, it can also improve the company's reputation.

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3 Data source: Aonong Group's income statement for 2014-2018
4 Data source: Aonong Group Annual Report 2014-2018
3.3. Analysis of operational capacity indicators

The operating capacity of an enterprise is the ability to provide value to the enterprise through the operation of assets and the use of funds, which can reflect the turnover of the company's capital operations. The operating capacity directly affects the company's debt-paying ability and has an impact on the profitability of the enterprise to a certain extent. The total asset turnover ratio and inventory turnover ratio are often used as analysis indicators of the company's operating capability.\[3\]

|                      | 2018 year | 2017 year | 2016 year | 2015 year | 2014 year |
|----------------------|-----------|-----------|-----------|-----------|-----------|
| Total Asset Turnover Ratio | 1.972199  | 2.307248  | 3.253968  | 3.527510  | 5.111365  |
| Inventory Turnover Ratio          | 12.051957 | 11.746673 | 15.559656 | 13.441361 | 14.747119 |
| Receivables Turnover Ratio       | 13.775787 | 15.992917 | 18.423118 | 18.285349 | 31.192038 |

1) Total Asset Turnover Ratio

Total Asset Turnover Ratio = Net operating income / Average total assets × 100%

According to historical research, the standard limit of the total asset turnover ratio of most enterprises is 0.8. If the total asset turnover ratio of the enterprise is lower than 0.8, it means that the company's operating capacity is poor; and the total asset turnover rate above 0.8 means that the company's operating capacity is strong. The total asset turnover ratio of Aonong Group from 2014 to 2018 is higher than 0.8, and it can remain above 1. Especially, the total asset turnover ratio of the company in 2014 reached 5.111365, indicating that the sales capacity of Aonong Group is in the industry. High standards, fast turnover of total assets and strong operating capacity.\[7\]

2) Receivables Turnover Ratio

Receivables Turnover Ratio = Net sales revenue/ average receivables × 100%

Receivables turnover ratio can reflect the level of business operations. The greater the number of turnovers, it means that the account receivables have a higher realizing ability, which indicates that the company has better management of the receivables; on the contrary, the low receivables turnover ratio means that the receivables have a lower realizing ability. The management level of the company's accounts receivable is low, and further improvement of this management is needed. It can be seen from the above table that the receivables turnover ratio of Aonong Group from 2014 to 2018 has shown a downward trend, but it is still roughly at the middle and upper levels. Among them, the receivables turnover ratio was the highest in 2014, which indicates that the company's operating capacity is at a relatively high level in 2014, and the company has a strong ability to realize cash. Management, such as strengthening the daily management of corporate receivables, strengthening the collection management of accounts receivable, and implementing a more stringent credit approval system, so as to improve the company's operating capabilities.

3) Inventory Turnover Ratio

Inventory Turnover Ratio = Cost of sales / Average inventory balance × 100%

Inventory turnover ratio is an important indicator of inventory operation efficiency, and it can also reflect an enterprise's sales ability and inventory management ability. Aonong Group's inventory turnover ratio remained basically in the range of 10.00 ~ 15.00, with little change. It reached 15.559656 in 2015, which indicates that Aonong Group has strengthened its inventory management, which has improved the company's ability to realize cash, and its capital turnover rate has also been strengthened.

In summary, although the overall operating capacity of Aonong Group has declined in 2018, it does not affect that it is still above the industry average. Although the decline in operating capacity in 2018 was small and the operating situation was at a normal level, considering the long-term development of the company, the company still needs to further improve its operating capacity in accordance with its own needs.

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\({}^5\) Data source: Aonong Group's 2014-2018 annual report calculation
4. Conclusion
This paper mainly collects various data and selects the financial data of Aonong Group from 2014 to 2018 for corresponding analysis. Some problems are found in the analysis of the data, and corresponding suggestions are put forward. The author believes that Aonong Group is relatively good in terms of inventory management and other aspects, but the company's debt repayment ability needs to be improved. If it can better improve the company's debt repayment ability, it will be more conducive to the company's future long-term development. At the same time, it can also bring more good reputation to the company. Although the company's profitability has decreased compared to the previous period, a large part of this is due to changes in the international market and the external environment, rather than problems in the management decisions of the company's management. Although the company's operating capacity has declined, the decline is not large, and the company's operating capacity is still at the upstream level in the industry.

With the influence of the international environment and the pressure of enterprise development, whether Aonong Group can stand out from the competition can not be solved only by expansion. It should also be based on its own development, understand its actual situation and the actual application of the industry. In addition, there should be more in-depth investigations and studies, paying attention to national policies, keeping pace with the times, and formulating good strategic plans to promote the further development of enterprises.

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