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The Financial Analysis of Profitability of the Supermarket Industry—Take Yonghui Supermarket as an Example

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ABSTRACT
In recent years, due to the impact of the changes in the domestic and international economic environment, China's supermarket industry pressure has increased highly. In this situation, however, Yonghui Supermarket have showed superior profitability and kept it in a decent level. In this paper, the profitability of Yonghui supermarket was studied and analyzed based on financial statements, and its profitability was evaluated through financial index analysis. Finally, the analysis results were summarized and corresponding suggestions were given in accordance with its existing problems.

KEYWORDS
Financial statement; Industry analysis; Profitability; Dupont analysis

China's supermarket industry has a history of more than 30 years from its emergence to development, and the whole industry has gradually moved from the beginning of prosperity to the decline stage after maturity. This paper selects Yonghui Supermarket as the main analysis object, conducts vertical and horizontal analysis of the financial data of Yonghui Supermarket through general analysis of profitability and DuPont analysis method, studies and analyzes its profitability in combination with the supermarket industry environment and the company's business strategy, and finally sorts out the advantages and disadvantages of Yonghui supermarket in the operation process. Under the current economic situation, it is of practical significance for its development to provide some ideas for further improving its profitability.

1 Supermarket industry situation analysis

This section introduces the development process and development status of China's supermarket industry, and makes a preliminary analysis of the development prospects of the industry, paving the way for the next analysis of Yonghui supermarket's profitability.

1.1 Industry development status

At present, the scale of China's supermarket industry shows a growing trend, but there is still a large room for improvement in market concentration. The business super category relies on the efficient supply chain in the back office and the traffic in the front office to make its sales successful. Pure e-commerce model can obtain short-term flow through investment, but the efficient operation of supply chain and logistics system is on the contrary, and needs a longer time to improve; The logistics cost of some supermarket varieties is higher than the average level, such as beverages, grain and oil, washing and care daily necessities and other large and heavy quality products;

Conventional brands do not have an advantage in terms of efficiency in cross-region and cross-market sales through e-commerce.

1.2 Industry development prospect

With the development of new formats, the supermarket industry is accelerating its pace of reform. In China's supermarket industry, the proportion of pure offline physical supermarkets will continue to decline, while the proportion of supermarket enterprises using online-to-offline integration O2O model will continue to increase. It is predicted that in 2020, the proportion of physical supermarkets in China will fall to 86.40%. In the future, new formats such as Hema fresh, super species, and unmanned retail will flourish, and financial capital, new formats, and Internet of Things thinking and technology will accelerate the industry.

2 Yonghui supermarket case background overview

This part summarizes the basic information, development history and strategic layout of Yonghui supermarket to understand its basic information and main business scope.

2.1 The basic information of Yonghui supermarket

2.1.1 Introduction of Yonghui Supermarket

Yonghui Supermarket Co., LTD. (hereinafter referred to as "Yonghui Supermarket"), listed in Shanghai Stock Exchange in 2010, headquartered in Fuzhou City, Yonghui supermarket in China is one of the first batch of fresh products introduced into the supermarket industry of physical retail enterprises, its main business fresh, food and clothing products, enjoy the "livelihood supermarket, people Yonghui" reputation. Yonghui supermarket also owns four characteristic businesses - cloud creation plate, cloud super plate, cloud business plate and cloud gold plate.

2.1.2 Yonghui supermarket operating characteristics

First of all, the biggest business characteristics of Yonghui is the sale of fresh, complete variety, fruit, vegetables, fish, poultry and other commodity varieties, and its stores of fresh business area can reach more than 40%;The sales of fresh agricultural and sideline products can also account for more than 50% of the company's total sales [source: Daoke Baba]. Second, Yonghui supermarket's upstream supply chain is unique.Each store and community supermarket is the main business form of Yonghui supermarket, coupled with the joining of convenience stores, to build today's upstream and downstream industrial chain, that is, the upstream is modern agriculture, the downstream is food processing. Thirdly, Yonghui supermarket has achieved the advantages of purchasing types compared with other supermarkets and the price advantages compared with farmers' markets. Finally, frequent distribution has become a major feature of Yonghui supermarket. Yonghui will deliver about 3 times a day, due to frequent delivery, goods can be distributed to multiple stores at a time, and can be sold quickly, so it reduces its logistics costs.

2.1.3 Yonghui supermarket profit model

The profit model of Yonghui supermarket is the new business format + chain model, which changes the traditional supermarket business model based on daily necessities, sporting goods, shoes and hats textiles, and develops a new model of Yonghui - "agriculture to super" model.

3 General analysis of profitability of Yonghui supermarket

This part will conduct an in-depth analysis of the stability, durability and some important financial data of Yonghui Supermarket's profitability from 2016 to the first three quarters of 2019, and make an auxiliary horizontal comparative analysis by combining the relevant financial data of other two supermarket enterprises - Xinhuadu and Zhongbai Group.

3.1 Analysis of stability and durability of profitability

From Table 1 and Table 2, it can be comprehensively seen that except 2018, the operating profit of Yonghui Supermarket accounted for more than 90% of the total profit in the remaining years, indicating that Yonghui supermarket earned a large proportion of profits from its main business, which directly reflects the profitability stability of Yonghui supermarket from 2016 to the first three quarters of 2019.

Table 1 Comparative table of income, cost and profit of Yonghui supermarket

Unit: 100 million yuan

Item	2016	2017	2018	2019 (First quarter)	2019 (Semi-annual)	2019 (First three quarters)
Operating income	492.32	585.91	705.17	222.36	411.76	635.43
Operating cost	392.92	463.83	548.99	171.85	321.84	496.39
Selling expense	71.65	84.52	115.60	31.58	62.56	99.87
Administrative expenses	12.89	17.81	30.07	4.78	10.94	18.33
Financial expense	-0.74	-0.83	1.48	0.61	1.51	2.37
Operating profit	14.47	19.41	12.64	13.25	14.83	16.64
Non-operating income - non-operating expenses	1.09	0.92	1.85	0.45	1.05	1.45
Gross profit	15.56	20.33	14.49	13.70	15.88	18.09
Gross profit margin	20.19%	20.84%	22.15%	22.71%	21.84%	21.88%

Source: China Financial Network

Table 2 Proportion of operating profit to total profit

Index	2016	2017	2018	The first three seasons of 2019
Operating profit/total profit	92.95%	95.48%	87.26%	91.97%

Source: China Financial Network

From 2016 to the first three quarters of 2019, the total profit of Yonghui Supermarket has been rising, falling and then rising, and all are positive, indicating that the company has been in a profitable state, but the profit level has declined in 2018, mainly because Yonghui Supermarket signed investment contracts with Parshop (China) Investment Co., LTD and Tencent Enterprises in 2018.The company has a large-scale investment and financing activities.

3.2 Analysis of profitability index of Yonghui supermarket

3.2.1 operating income profit rate related indicators

As can be seen from Table 3, the after-tax profit margin of Yonghui Supermarket's operating income rose slightly in the first three quarters of 2019 compared with that of 2018, which was partly due to the investment contract signed by Yonghui Supermarket with Parknshop China Investment Co., LTD. (hereinafter referred to as "Parknshop China") and Tencent Enterprises in October 2018.Cofounded Guangdong Parbest Yonghui Supermarket Co., LTD. (" Parbest Yonghui "), which holds 50% of the shares and is effectively controlled by it. As a result, Parknshop Yonghui was included in the consolidated statements of the Company from May 1, 2019.Although the main reason is the change in the data caused by the participation and investment of Yonghui Supermarket, to a certain extent, it can also show that the ability of Yonghui supermarket is constantly increasing, and there is sufficient ability to expand the facade, which makes full preparation for bringing higher returns in the future.

Table 3 Related indicators of operating income profit rate of Yonghui supermarket

Unit: 100 million yuan

Index	2016	2017	2018	The first three seasons of 2019
Net profit	12.14	16.85	9.97	14.90
Profit margin after tax on operating income	2.52%	2.88%	1.41%	2.34%

Source: Financial statements of Yonghui Supermarket from 2016 to 2019

Through the above analysis of operating income profitability indicators from 2016 to the first three quarters of 2019, it can be seen that the profitability of Yonghui supermarket has been at a good level, and its profitability has been increasing.

3.2.2 Asset profitability related indicators

3.2.2.1 Index of return on total assets

Table 4 Relevant data of profitability of total assets of Yonghui Supermarket

Index	2016	2017	2018	The first three seasons of 2019
Income tax expense	3.43	3.48	4.52	3.19
Net profit	12.14	16.85	9.97	14.90
Total assets	294.38	328.70	396.27	452.41
Average balance of total assets	248.71	311.54	362.49	439.03
Pre-tax profit rate on total assets	5.65%	5.88%	4.10%	4.82%
After-tax rate of return on total assets	4.88%	5.41%	2.75%	3.51%

Source: Financial statements of Yonghui Supermarket from 2016 to 2019

Yonghui Supermarket's pre-tax profit margin on total assets was on the rise from 2016 to 2017, while it showed a downward trend from 2017 to 2018, falling from 5.88% to 4.10%, a decrease of 1.78%. It can be seen from Table 4 that the average balance of total assets increases year by year. From 2016 to 2017, Yonghui's interest income was greater than its interest expense, resulting in negative financial expenses and relatively high total profits. Therefore, the pre-tax profit rate of total assets showed an upward trend from 2016 to 2017.However, from 2017 to 2018, interest expenses increased, exceeding interest income, resulting in an increase in finance expenses. Sales expenses have increased significantly over the previous year, up about 3.1 billion yuan, and administrative expenses have also increased.Operating costs increased significantly, so the total profit fell to more than 1.4 billion, down nearly 600 million from last year, resulting in a sharp decline in the pre-tax profit margin on total assets.As can be seen from Table 4, the corporate income tax expense in 2018 was relatively high, partly due to the tax policy of this year, which increased the deferred income tax liabilities for the newly added fixed assets of less than 5 million yuan as a one-time deduction. Therefore, we can see that the difference between the pre-tax profit rate of total assets and the post-tax profit rate of total assets in 2018 was large.

3.2.2.2 Return on current assets

As can be seen from Table 5, the return on current assets of Yonghui Supermarket increased slightly from 2016 to 2017, and decreased in 2018. According to the calculation of financial statement data, it can be found that compared with 2017, the net profit of Yonghui Supermarket in 2018 decreased by about 688 million yuan, and the average balance of current assets increased by 910 million yuan. It can be seen that the increase of current assets is the main reason for the decrease in the return on current assets, and the increase of current assets is mainly due to the substantial increase in accounts receivable in 2018. At the same time, the operating income increased from 58.6 billion yuan in 2017 to 70.5 billion yuan, and the sales expenses increased from 8.45 billion yuan to 11.56 billion yuan, which to a certain extent indicates that the sales orders of Yonghui Supermarket adopted the method of credit sales increased in 2018.

Table 5 Returns on current assets of Yonghui Supermarket

Unit: 100 million yuan

Index	2016	2017	2018	The first three seasons of 2019
Average balance of current assets	170.31	212.34	221.45	235.02
Return on current assets	7.47%	8.30%	4.59%	6.34%

Source: Financial statements of Yonghui Supermarket from 2016 to 2019

3.2.3 Summary of general analysis of profitability

Based on the above analysis results, Yonghui's profitability stability and durability during the period from 2016 to the third quarter of 2019 are very good, but there is still room for improvement. Although the main profit indicators have fluctuated during the selected period, the overall growth is still upward, and it is not difficult to see that the profit level of Yonghui supermarket is relatively good.

4 Analysis of profitability of Yonghui supermarket based on DuPont analysis system

The DuPont analysis method aims to make a relatively comprehensive study and analysis of the economic activities of enterprises by using the relationship between several major financial indicators such as return on equity, net interest rate on total assets and equity multiplier.

4.1 Return on equity

The return on equity of Yonghui Supermarket increased from 7.90% to 9.27% in 2016, an increase of 1.37%, indicating that its profitability is good, which is partly due to the further expansion of Yonghui's online channels.In 2017, the index decreased from 9.27% to 7.52%, a decrease of 1.75%. It can be found that both net assets and after-tax profits have declined, but the decline rate of after-tax profits far exceeds that of net assets, which is the main reason for the decline of return on equity. In addition, the return on equity is equal to the net interest rate on total assets multiplied by the equity multiplier, so further analysis should be carried out through these two indicators.

4.2 Net interest rate on total assets

The net interest rate of total assets of Yonghui Supermarket decreased from 5.41% in 2017 to 2.75% in 2018, with a large decline. The net interest rate of total assets was equal to the net interest rate of sales multiplied by the turnover rate of total assets. The decline in the net interest rate of total assets was mainly due to the decline in the net interest rate of sales in 2018. In addition, the net interest rate of total assets is also equal to the net profit/average total assets. In 2018, the net profit of Yonghui decreased greatly, and the average total assets also increased relatively, so this is also one of the reasons for the decline in the net interest rate of total assets in 2018.

Table 6 Financial indicators of Yonghui Supermarket

Unit: 100 million yuan

Index	2016	2017	2018	The first three seasons of 2019
Net profit	12.14	16.85	9.97	14.90
Operating income	492.32	585.91	705.17	635.43
Total shareholders' equity (net assets)	182.82	184.83	171.02	207.18
Total assets	208.36	328.70	396.27	452.41

Source: China Financial Network

Table 7 DuPont analysis data of Yonghui Supermarket

Unit: 100 million yuan

Index	2016	2017	2018	The first three seasons of 2019
Return on equity	7.90%	9.27%	7.52%	7.72%
Average total assets	248.711	311.54	362.49	427.69
Net interest rate on total assets	4.88%	5.41%	2.75%	3.51%
Net profit margin on sales	2.47%	2.88%	1.41%	2.34%
Total assets turnover	1.98	1.88	1.95	1.50
Inventory turnover	8.16	8.46	8.01	6.25
Accounts receivable turnover	167.33	79.88	46.01	23.76
Equity multiplier	1.53	1.61	2.04	2.18
Asset-liability ratio	34.64%	37.91%	50.96%	54.20%

Source: China Financial Network

4.3 Net profit margin on sales

From 2016 to 2017, the net profit rate on sales of Yonghui Supermarket was in an upward trend, rising from 2.47% to 2.88%, and in 2017, the net profit rate on sales was at the peak in recent years, and then dropped from 2.88% to 1.41% in 2018.In combination with Table 8, it can be seen that the ratio of various expenses to operating income was on the rise from 2017 to 2018, which was one of the reasons for the decline in the net profit rate of sales of Yonghui Supermarket, among which the total operating cost of Yonghui Supermarket (including operating cost + tax and additional + sales expense + management expense + financial expense + asset impairment loss) accounted for the largest proportion.Therefore, Yonghui should strengthen the control of business costs.

Table 8 Percentage of Yonghui supermarket's costs to operating income

Index	2016	2017	2018	The first three seasons of 2019
Operating income	100% 97.31%	100% 96.88%	100% 99.16%	100% 97.44%
Total operating cost	14.55%	14.42%	16.39%	15.72%
Selling expense	2.62%	3.04%	4.26%	2.88%
Administrative expenses	-0.15%	-0.14%	0.21%	0.37%

Source: China Financial Network

4.4 Turnover of total assets

First of all, the operating income of Yonghui Supermarket increased from 49.232 billion in 2016 to 70.517 billion in 2018, and the operating income was growing year by year. The total assets increased from 20.836 billion in 2016 to 45.241 billion in the first three quarters of 2019, which was also growing year by year.The growth rate of total assets in the remaining years has been smaller year by year. From 2016 to 2018, the total asset turnover has a small fluctuation range and is relatively stable as a whole. From the following analysis, it can be seen that the accounts receivable turnover rate of Yonghui Supermarket has a large decline in the two years from 2017 to 2018, which shows that it has little impact on the total asset turnover data.Therefore, through the analysis of the total asset turnover rate, it can be seen that the operation capacity of Yonghui supermarket is not bad.

Secondly, the inventory turnover rate of Yonghui supermarket has been at a relatively stable level in recent years, and reached the peak value in the first three quarters of 2016 to 2019 in 2017. On the whole, its sales are good and its liquidity is strong.

Finally, Yonghui supermarket's accounts receivable turnover rate dropped from 167.33 times to 23.76 times, indicating that a large number of receivables through credit sales have occurred in the past three years, which may affect the company's future turnover and operating capacity.

4.5 Equity multiplier

The equity multiplier of Yonghui Supermarket showed an increasing trend year by year from 2016 to the third quarter of 2019, and its asset-liability ratio also increased year by year during this period. Specifically, from 2016 to 2017, the equity multiplier of Yonghui Supermarket is small, indicating that in the total assets, its own capital accounts for a relatively high proportion, the enterprise's debt degree is low, the financial risk is small, and the rights and interests of creditors can be better protected.From 2017 to 2018, the equity multiplier increased significantly, indicating that Yonghui Supermarket increased its debt financing during this period, the corresponding financial risks it undertook increased, and the degree of protection of creditors' rights and interests decreased. On the whole, from 2016 to the third quarter of 2019, Yonghui Supermarket's capital structure was relatively stable and its debt repayment ability was good.

From 2016 to the third quarter of 2019, the equity multiplier of Yonghui Supermarket increased year by year, rising from 1.58 in 2016 to 2.13 in the first three quarters of 2019.The equity multiplier of Yonghui Supermarket continued to rise during the analysis period, indicating that it was constantly increasing the use of financial leverage.

4.6 Summary of profitability analysis of Yonghui supermarket

Based on the above analysis, we can find that there are three major factors that determine the profitability of Yonghui supermarket, which are cost control ability, financial financing ability and asset use efficiency.

First of all, Yonghui Supermarket has always been a big investment and expense in terms of cost. In 2018, Yonghui Supermarket carried out a large amount of investment and financing, resulting in an increase in the proportion of operating costs, an increase in cost costs, a change in financial expenses from negative to positive, and an increase in interest expenses, so that the net profit rate of sales showed a downward trend after 2017.It shows that Yonghui supermarket needs to improve its cost control ability.

Secondly, from 2016 to 2017, the asset turnover rate of Yonghui Supermarket showed a small decline, because the increase of operating income was less than the increase of total assets, which was mainly caused by the slowing down of inventory turnover caused by the expansion of offline stores.However, in general, the turnover rate of the total assets of Yonghui supermarket is relatively stable, and the operating quality and utilization efficiency of all assets of the enterprise are still good.

Finally, since 2016, the equity multiplier of Yonghui Supermarket has been rising year by year, indicating that Yonghui Supermarket's liabilities may be increasing year by year, which leads to a high financial leverage ratio of the company and an increase in financial risk year by year.However, due to the optimistic operating situation of Yonghui, even if there is a high equity multiplier, the company will generate a good profit.

5 Yonghui supermarket operating performance and problem analysis

Through the analysis of Yonghui supermarket's profitability index and its horizontal and vertical comparative analysis, it can be seen that Yonghui supermarket's profitability is in the leading level in the same industry. But there are still many shortcomings in Yonghui supermarket. This section will analyze and summarize the performance and existing problems of Yonghui supermarket in the process of operation.

5.1 Unique management mode

Yonghui supermarket takes fresh food as the key category of sales, and adopts the business mode of fresh direct selection, which is very unique in the industry and has seized the advantage.In addition, the direct purchasing mode adopted by Yonghui supermarket reduces the procurement cost by reducing the circulation link of fresh food, while preventing the loss of fresh food in the long-term circulation process.

5.1.1 effective control of logistics distribution costs

Yonghui Supermarket has established a warehouse and cold chain logistics center, reducing unnecessary circulation costs, and improving the freshness of agricultural products.In the logistics distribution process, Yonghui supermarket adopts the method of unified procurement from multiple stores in the same area and then optimizing the distribution route, thus effectively reducing the logistics distribution and transportation costs.

5.1.2 Strong inventory turnover

Yonghui supermarket uses the means of information technology to carry out batch and inventory management of goods through the system to realize automatic early warning of inventory and automatic replenishment.For the goods on or out of date, return them to the supplier or discount them according to the agreement;At the same time, strengthen the tracking mechanism of unsalable goods to speed up inventory turnover.

5.2 Problems in the operation of Yonghui supermarket

Through the analysis, it can be seen that Yonghui supermarket has certain advantages in the white-hot market competition, and its profitability is superior. However, Yonghui supermarket still has the following deficiencies.

5.2.1 Not using enough financial leverage

As can be seen from the previous analysis, the equity multiplier of Yonghui supermarket showed an increasing trend from 2016 to 2018, but it still appeared low compared with Zhongbai Group and Xinhuadu in the same industry. This shows that Yonghui supermarket is more cautious in debt financing, does not make full use of the financial leverage generated by debt operation, and relies too much on the enterprise's own capital, which is not conducive to the long-term development of the enterprise.

5.2.2 the store expansion is too fast, resulting in increased operating costs

The comparison of the cost of Yonghui supermarket shows that the store expansion led to the increase of the company's sales expenses and personnel costs, which led to the decline of Yonghui supermarket's operating profit in 2018, from 1.94 billion yuan in 2017 to 1.26 billion yuan. This is because if the company's store expansion is too fast, it will lead to an increase in operating costs, and in the case of the previous store has not begun to make a profit, the new store has opened up, which will cause the company to fall into an unbalanced state of profit and loss.

5.2.3 Under the impact of Internet e-commerce, the profitability of traditional retail of Yonghui Supermarket is challenged

Yonghui supermarket takes the route of a large shopping mall supermarket. The advantage of large shopping malls and supermarkets is that they can reduce the cost of enterprises through economies of scale, maintain favorable competitive prices, and attract customers to shop and consume.However, the rise of Internet e-commerce will cause the traditional offline retail of Yonghui supermarket to face greater market pressure.

6 Put forward measures and suggestions for existing problems

This part will synthesize the above analysis results, aiming at Yonghui supermarket in the profitability of the possible problems, put forward the corresponding improvement suggestions.

6.1 Make full use of financial leverage to maximize profits

Making full use of financial leverage and rational allocation of capital structure can maximize profits. Under the premise of controllable financial risks, Yonghui Supermarket can appropriately expand the use of financial leverage, rationally allocate debt funds and own funds, further improve the overall profitability of the enterprise, and enable the enterprise to maximize profits on the basis of taking into account risks and rewards.

6.2 Strengthen the awareness of cost control and do a good job in cost control

Reducing the cost can increase the profits of enterprises and improve the profitability of enterprises.In order to further expand the scale effect, Yonghui Supermarket adopted a high-speed expansion strategy, which led to a significant increase in expenses during the reporting period, which in turn affected the operating profit. Therefore, if Yonghui supermarket wants to further improve its profitability, it also needs to strengthen cost management and control.

6.3 Promote online development and improve the application of information technology

The integration of online and offline business models is the general trend. Offline retail is irreplaceable, and online is more about improving the line and serving the line. Therefore, through the online platform, Yonghui supermarket can make full use of the information flow and capital flow of the network to expand new online markets, while improving and serving offline physical stores to better meet consumer needs and gain competitive advantages.

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