

Analysis of Luckin Company Based on DuPont Analysis Framework

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Abstract. This article conducts a comprehensive analysis of Luckin Coffee Company based on the DuPont analysis framework. The DuPont Analytical Framework is a method of measuring a company's performance and financial health by correlating four key indicators: net sales margin, total asset turnover, equity multiplier, and return on equity to assess a company's profitability and debt servicing ability. This article first introduces the industry overview and Luckin company overview. Next, the financial status and profitability of Luckin Coffee were analyzed through the four key indicators of the DuPont analysis framework. Then, combined with actual data, a specific analysis of factors affecting profitability and business strategies of Luckin Coffee Company was conducted. Finally, through the research of this article, it is found that Luckin Coffee Company has achieved good performance in terms of net sales profit margin and return on equity in 2022, but there is still room for improvement in capital structure. It is recommended that Luckin Coffee Company pays attention to market competition, industry development trends, business strategies, management capabilities and financial management to help Luckin Coffee increase profitability and improve financial status.

Keywords: DuPont analysis framework; financial analysis; Luckin Coffee; marketing strategy; financial fraud; brand cooperation.

1. Introduction

As a Chinese chain coffee giant, Luckin has attracted much attention in recent years. However, due to the exposure of financial fraud in 2020, the company's profitability and business strategy have been questioned. Therefore, by applying the DuPont analysis framework, in-depth analysis of Luckin's profitability and study of its business strategies are of great significance to understand the company's true strength and future development.

2. Research Background

2.1. Industry Overview

2.1.1 Growth of the coffee consumption market

The current income level of Chinese residents has increased significantly compared with the past, the consumption structure is gradually upgrading, and people's quality of life is also constantly improving. China's coffee consumption market is experiencing rapid growth, with the annual market growth rate of approximately 10%-15% [1], the penetration rate of freshly ground coffee is also continuing to increase. As young people's recognition of coffee gradually increases, coffee consumption has become a fashion and lifestyle, and the coffee consumption market still has huge room for development and potential. At the same time, more international coffee brands have entered the Chinese market, coupled with the rapid expansion of local coffee chain stores, both driving the growth of the coffee market.

2.1.2 Popularization of coffee culture

China's coffee culture is rapidly spreading, especially among young people. More and more people are paying attention to the quality and taste of coffee and are willing to go to coffee shops to taste

various types of coffee. The popularity of this coffee culture also provides huge development opportunities for coffee chain companies.

2.1.3 Promotion of Internet and mobile payments

The popularity of the Internet and mobile payments has also had a positive impact on China's coffee market. Luckin Coffee meets the personalized needs of consumers through online ordering and delivery services, as well as the convenience of mobile payment. This business model that combines online and offline services has effectively attracted more consumers and promoted the development of the coffee market.

2.1.4 Improvement of the coffee supply chain and industrial chain

With the rapid development of the coffee market, China's coffee supply chain and industrial chain are also constantly improving. From the procurement of coffee beans to roasting, processing and distribution, the entire coffee industry chain is becoming more and more complete. At the same time, China is actively promoting the development of its own coffee industry and encouraging the improvement of coffee planting and coffee processing technology to achieve sustainable development of the coffee industry.

2.2. Luckin Company Overview

2.2.1 Company background

Founded in 2017, Luckin Coffee is a chain coffee brand headquartered in China. Its goal is to become the leader in the Chinese coffee market. The company was founded by Qian Zhiya, who is known for providing high-quality, convenient and affordable coffee. Luckin Coffee quickly expanded its chain store network in China by providing coffee reservation, delivery and takeout services through online platforms and mobile applications. It is positioned to provide a fast, convenient and high-quality coffee consumption experience to meet the growing demand in China. coffee demand. In just a few years, Luckin has risen to prominence with its strong financing capabilities and precise strategic positioning, almost reaching the same level as Starbucks, a famous brand in the coffee industry.

On May 17, 2019, Luckin was listed on Nasdaq, setting a record for the fastest listing in the United States in 18 months. However, in 2020, Luckin was exposed to financial fraud, with 2.2 billion in forged transactions, and the stock price closed plummeting 75.5%. This made Luckin the target of public criticism for a time, fell to the bottom, and even faced the risk of bankruptcy. After the financial fraud incident broke out, many people believed that Luckin's comeback was basically hopeless, and Smart declared bankruptcy. However, Luckin did not sit still and waited for death, but embarked on an active road of self-rescue. In July of the same year, former senior vice president Guo Jinyi succeeded Lu Zhengyao as the company's new chairman and CEO. In order to deal with the impact of the financial fraud incident, Luckin Coffee adopted a series of internal reforms and rectification measures. The company has made management adjustments and strengthened its internal control and financial audit systems. In addition, Luckin Coffee also cooperated with regulatory agencies to conduct a comprehensive review and rectification of the company's operations and financial conditions. Secondly, Luckin has resumed business and brand building, strengthened supervision of product quality and services, and launched a series of new products and promotions to attract consumers to return. Although the financial fraud incident has brought serious challenges to Luckin Coffee, the company's marketing strategies of market expansion and rebranding have successfully achieved a recovery in performance to a certain extent. On June 5, 2023, Luckin's 10,000th store nationwide opened in Xiamen, Fujian Province. This also means that Luckin Coffee became the first chain coffee brand in China to exceed 10,000 stores, and on August 2, Luckin opened Revenue surpassed Starbucks for the first time. In the process of "resurrection", Luckin has frequently cooperated with various brands, such as Kweichow Moutai, Doraemon, Victoria's Secret and other brands, which has expanded its customer base and brand influence, attracting many potential consumers.

2.2.2 Latest status of cooperation with Kweichow Moutai

The cooperation with Moutai is a strategic cooperation agreement reached between Luckin and the Chinese liquor giant Maotai Group. Luckin combined the values of the two brands, integrated the sauce flavor of Moutai into latte coffee, and created a unique coffee called "Sauce-flavored Latte", which achieved great success. Once the product was launched, it was enthusiastically sought after by consumers, and sales were booming. At one time, supply exceeded demand, and there were even queues to buy. This cooperation is one of Luckin's initiatives to further expand its product portfolio and attract more consumers.

The successful launch of the Maotai Latte co-branded by Luckin Coffee and Kweichow Moutai is not only the success of the product itself, but more importantly, it improves the influence and market competitiveness of the two brands. This cooperation has allowed Luckin Coffee to further consolidate its leading position in the coffee market, while also enhancing Kweichow Moutai's influence outside the liquor market, opening up new areas of cooperation for the further development of China's coffee and liquor industries. In the future, it is foreseeable that the cooperation between Luckin Coffee and Kweichow Moutai and other brands will continue to deepen, bringing more innovative and unique product experiences to consumers.

2.2.3 Main competitor

Currently, Luckin's main competitor is Starbucks.

From a marketing perspective, Luckin focuses on convenient online ordering and delivery services and attracts consumers through mobile applications and online promotion activities. They actively promote a unique brand image and high-quality coffee products in the Chinese market. However, Starbucks has established a huge store network around the world to attract consumers by providing a comfortable coffee shop environment and personalized customer experience. They focus on social media and traditional media marketing, while also cooperating with other brands for joint ventures. Marketing activities.

In terms of scale and development history, Luckin was founded in 2017 and currently has a large number of stores in China. Luckin has achieved rapid development in just a few years, attracting a large number of consumers through the combination of online and offline and price advantages. Although it has experienced some challenges and adjustments in recent years, it remains an important force in the Chinese coffee market. Founded in 1971, Starbucks has a long history of development and is one of the world's largest coffee chain brands. It has thousands of stores all over the world and enjoys widespread popularity and customer loyalty worldwide [2]. After years of development, Starbucks has become a leader in the global coffee market. They continue to innovate coffee products and services, actively expand into new markets, and are committed to sustainable development and social responsibility.

From the perspective of development prospects, although Ruixing is currently facing huge challenges, it still has opportunities to rebuild trust and profitability by repositioning and improving management issues. It can further develop digital services, expand brand influence, and provide more diverse products and services. Starbucks' markets around the world are still strong. They continue to innovate and expand product lines, and actively expand into emerging markets. They are also committed to sustainable development, which also provides them with broader opportunities for future development.

3. Analysis of Luckin Company Based on DuPont Analysis Framework

3.1. Research method

DuPont Analysis is a financial analysis tool designed to help investors and analysts understand a company's profitability. This framework decomposes profitability into four indicators: net sales interest rate, total asset turnover rate, equity multiplier and return on net assets to more comprehensively assess the company's operating conditions and further interpret the company's debt

repayment, operations and profitability [3]. The following will use the financial statements published by Luckin from 2020 to 2022 as the data source and use the DuPont analysis method as the basis to conduct specific calculations and analysis of its four important indicators. Luckin's balance sheet and income statement are shown in Table 1 and Table 2 below respectively.

Table 1. Luckin's balance sheet from 2019 to 2022 (RMB, Unit: Yuan)

Balance Sheet (RMB, Unit: Yuan)				
Time	2022	2021	2020	2019
Total assets	10,480,397	12,312,490	9,322,399	9,762,261
Total liabilities	3,853,110	7,166,693	6,597,515	4,619,734
Total liabilities, mezzanine equity and shareholders' equity	6,627,287	5,145,797	2,724,884	5,142,527

Table 2. Luckin's income statement from 2010 to 2022 (RMB, Unit: Yuan)

Income Statement (RMB, Unit: Yuan)			
Time	2022	2021	2020
Total net revenues	13,292,982	7,965,323	4,033,418
Total operating expenses	12,136,803	8,504,377	6,620,686
operating income/operating loss	1,156,179	-539,054	-2,587,268
Net income/Net loss	488,246	686,378	-5,602,990

3.2. Research Method

3.2.1 Analysis of net sales profit margin

Table 3. Luckin's net sales profit margin from 2020 to 2022

Time	2022	2021	2020
Net sales profit margin	3.67%	8.62%	-138.91%

As can be seen from Table 3, due to the huge impact of the epidemic and corporate financial fraud in 2020, Luckin's net sales profit margin was hugely negative, which shows that the company suffered serious losses and faced major operating risks, but it has experienced corporate restructuring and marketing strategies. After the change, the value turned from negative to positive in the next two years and continued to rise. Profitability was strengthened and profitability was achieved [4].

3.2.2 Total asset turnover analysis

Table 4. Luckin's total asset turnover rate from 2020 to 2022

Time	2022	2021	2020
Total asset turnover rate	1.17	0.74	0.42

The total asset turnover rate is the ratio of the company's net sales revenue to the average total assets in a certain period. The more total asset turnover times, the faster the turnover speed and the stronger the company's operating capabilities [5]. The total asset turnover rate of a company is generally between 0.8 and 1. Data from Table 4 shows that its total asset turnover rate in 2020 is significantly lower than this normal range, indicating that the company has redundant and idle assets. Sales ability is weak, asset investment returns are poor, and asset utilization efficiency is low. In 2021, it will be close to the normal value, and its value will gradually increase until it returns to the normal value range in 2022. The total asset turnover rate has increased rapidly in one year, mainly due to the increase in current assets, most of which were raised from IPOs. The company is in during this period, it rapidly expanded its store scale [6], continuously strengthened its sales capabilities, increased the

inflow of funds, accelerated capital turnover, higher utilization efficiency, and enhanced its ability to operate assets.

3.2.3 Equity multiplier analysis

Table 5. Luckin's equity multiplier from 2020 to 2022

Time	2022	2021	2020
Equity multiplier	1.58	2.39	3.42

Equity multiplier is an important indicator to evaluate the strength of a company's debt repayment ability [7]. Table 5's data demonstrates that Luckin's equity multiplier is higher than 3 in 2020, which means that the company has a lot of debt, a high financial leverage ratio, and huge financial risks. However, the equity multiplier dropped to 1.58 in 2022, which shows that the proportion of Luckin's shareholders' equity in assets has become larger in the past three years, the company's debt level has become lower [8], and there are more sufficient funds to repay debts, financial risks are also reduced [7].

3.2.4 Rate of return on common stock holders' equity analysis

Table 6. Luckin's rate of return on common stock holders' equity from 2020 to 2022

Time	2022	2021	2020
ROE	6.78%	15.18%	-200.88%

Rate of return on common stock holders' equity reflects the income level of shareholders' equity and measures the efficiency of a company's use of its own capital. The higher the rate of return on net assets, it indicates that the company's ability to obtain income from its own capital is stronger, the better the operating efficiency, and the higher the income from investment. On the contrary, the lower the ratio, the lower the investment income [8].

As can be seen from Table 6, Luckin's rate of return on common stock holders' equity was close to -200% in 2020. The company was insolvent, had huge liabilities, and had low profitability. However, in the following two years, Luckin achieved a huge reversal from losses to profits and "reorganized and started again." The profitability of net assets has been rapidly improved and shareholders' equity has been increased.

4. Analysis of Luckin's Business Strategy

4.1. Analysis of Factors Affecting Profitability

4.1.1 External factors

External factors mainly include market competition and industry development trends. In the Chinese coffee market, competition is fierce and there are many domestic and foreign coffee brands. Market competition has a direct impact on Luckin's profitability, because an increase in market share may require more investment and adjustments to pricing strategies. In addition, industry development trends will also have an impact on profitability, such as changes in coffee consumption habits and consumers' increasing requirements for coffee quality.

4.1.2 Internal factors

Internal factors include the company's own business strategies and management capabilities. Luckin's business strategies include product positioning, pricing strategies, channel expansion, and marketing strategies, while its management capabilities include human resources management, supply chain management, financial management, and risk management. Excellent management capabilities help improve efficiency, reduce costs, and manage risks, thereby enhancing the company's profitability.

4.2. Business Strategy Analysis

4.2.1 Market positioning strategy

Luckin has quickly attracted young consumers by positioning itself as a young, fashionable, high-quality and relatively low-priced coffee brand. Through this market positioning, Luckin was able to compete differentially with traditional coffee chains and quickly gain market share.

4.2.2 Product and service strategy

Luckin is committed to providing high-quality coffee and excellent service experience. The company pays attention to the selection and roasting technology of coffee beans to ensure the taste and quality of its products. In addition, Luckin provides fast and convenient coffee ordering and delivery services through a combined online and offline model to meet the personalized needs of consumers.

4.2.3 Channels and marketing strategies

Luckin uses a variety of channels and marketing strategies to promote its brand and products. In addition to offline stores, Luckin also interacts with consumers through online channels, such as mobile applications and social media platforms. In addition, Luckin has launched membership programs and promotions to attract customers and increase customer loyalty.

4.2.4 Cost control strategy

With the relatively low price positioning, Luckin has adopted a series of cost control strategies. For example, by establishing long-term partnerships with suppliers to obtain better procurement prices; optimizing supply chain and logistics systems to improve efficiency and reduce costs; and improving production efficiency through technological innovation and automation. These strategies help Luckin reduce costs and improve profitability while maintaining product quality.

5. Suggestions for Improving Luckin's Profitability

5.1. Market Competition

5.1.1 Establish a unique brand image

Luckin can differentiate itself from competitors by focusing on brand differentiation. For example, Luckin can be highlighted as a brand that provides high-quality coffee and emphasize its difference from other coffee brands.

5.1.2 Provide personalized products and services

Understand consumer needs and preferences, and develop products and services with personalized characteristics to meet the needs of different consumer groups. For example, provide special-flavored coffee, customized drinks, and so on.

5.2. Industry Development Trends

Pay attention to industry development trends, especially the application of digital technology. Luckin can improve customer experience and convenience by strengthening digital services such as mobile payments, online orders and delivery.

Invest in R&D, develop new products and services, and launch healthy and organic foods: As consumer demand for healthy and organic foods increases, Luckin can expand its product lines of healthy foods and organic foods. For example, launch drinks made with organic coffee beans and natural ingredients, using high-quality coffee beans and skimmed milk.

Pay attention to the advantages and disadvantages of other brands in the industry and customer feedback during the development process, and promptly improve products according to customer needs. For example, according to customer needs, reduce the proportion of ice cubes, reduce the proportion of water added, and improve the purity of coffee.

5.3. Business strategy

Optimize supply chain management and reduce procurement costs and inventory risks. Establish close cooperative relationships with suppliers and reduce logistics and warehousing costs through reasonable ordering and inventory management. For example, sign long-term contracts with reliable coffee bean suppliers to obtain more competitive prices.

Improve store operation efficiency, including personnel deployment, queue management, order processing, and so on. Use technological means, such as self-service ice machines, food delivery robots, vending machines, and so on, to improve service efficiency and customer satisfaction.

Strengthen brand publicity, cooperation and marketing. Increase brand awareness and market share through channels such as advertising, promotions and social media. Capture consumers' curiosity, cooperate with well-known brands in joint marketing, and develop new products. For example, you can cooperate with traditional Chinese medicine companies to develop a coffee with healthy ingredients and high nutritional elements that caters to the "pursuit of health" trend.

Optimize product packaging design and add uses that can facilitate people's daily lives. For example, each cup can be equipped with a blind box. When you open the package, you will have the opportunity to draw discounts and benefits for your next purchase. This enriches the form of activities, satisfies people's curiosity, and stimulates the desire to buy. Or design a recyclable strap for the cup, and give it different patterns and colors, which not only meets people's preferences, but also makes it easier to carry when traveling.

5.4. Management Ability

5.4.1 Strengthen talent training and team building

Through training and incentive mechanisms, we improve employees' professionalism and work motivation and establish efficient teamwork. For example, barista training and team activities are regularly organized to improve employees' coffee-making skills and teamwork spirit.

5.4.2 Strengthen financial management and risk control

Strengthen financial analysis, forecasting and internal control, strengthen the sense of responsibility and integrity of the company's management, promptly discover and resolve financial risks, and ensure the company's stable operations. Auditing and financial personnel need to improve their professionalism and professional ethics [9], adhere to an honest and rigorous work attitude in the work process, and avoid financial fraud again. For example, establish an effective budgeting and reporting system to monitor the company's financial health and performance.

5.5. Financial Indicators

5.5.1 Improve asset utilization

Luckin can improve asset utilization efficiency by optimizing asset allocation. For example, strengthen supply chain management, reduce inventory turnover time, and increase inventory turnover rate. In addition, you can consider optimizing asset utilization through a reasonable capital structure to minimize capital costs.

5.5.2 Increase net profit margin

Luckin can increase net profit margin by reducing costs and increasing sales prices. For example, optimize operating processes and reduce operating costs; increase product prices by increasing product added value.

5.5.3 Increase financial leverage

Luckin can increase financial leverage through moderate debt financing to increase return on equity, and adjust its capital structure to improve debt solvency [10]. However, attention needs to be paid to risk control to ensure that the debt burden is sustainable.

5.5.4 Increase return on shareholders' equity

Luckin can increase return on shareholders' equity by increasing profitability and return on capital, which can be achieved by increasing net profit margin and capital profit rate.

To sum up, by establishing a unique brand image, providing personalized products and services, strengthening the application of digital technology, optimizing supply chain management, strengthening online channel promotion, strengthening training and team building, and establishing effective financial management and risk By controlling the system, controlling and adjusting various financial indicators, Luckin can effectively improve profitability and stand out in the fiercely competitive market.

6. Conclusion

In short, although Luckin has experienced some twists and turns, it still leads the industry and occupies a vast consumer market. Analyze it using the DuPont analysis framework, by responding to market competition and seizing industry development opportunities, as well as optimizing business strategies and improving management capabilities, differentiated market positioning, high-quality products and services, multi-channel sales and marketing, and effective In terms of cost control, Luckin gained a new lease of life by drawing lessons from the financial fraud scandal. In the future, Luckin should further improve its profitability in the target industries and achieve long-term and stable development.

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