# Profitability Analysis of Gree Electric Appliances

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Abstract: In the context of globalization, market competition continues to intensify, and a company's profitability has become a core indicator of whether it can stand firm in the market. In recent years, the household appliance industry has faced challenges such as rising raw material costs and intensified industry competition, and needs to actively seek new developments to enhance profitability. This study mainly explores the profitability of Gree Electric Appliances from 2019 to 2023, analyzing the trends and influencing factors of three core indicators: sales gross profit margin, sales net profit margin, and return on equity. The study used quantitative analysis and comparative analysis methods to compare it with Midea Group and Haier Smart Home, in order to evaluate its competitive advantages and disadvantages. The study has found that from 2019 to 2023, Gree's profitability was relatively stable. However, the company faces challenges such as high operating costs and a single business structure. To enhance profitability, Gree should accelerate its diversified layout and expand its business share in the fields of smart home and new energy. At the same time, through refined cost control, it should reduce redundant expenses and improve production efficiency.

Keywords: Profitability, Gree Electric Appliances, Household Appliance Industry

#### 1. Introduction

Profitability is an important indicator for measuring the operational status of a company. In the fiercely competitive and globalized modern market environment, the profitability of a company not only directly affects its survival and development, but also influences the final decisions of its stakeholders. The indicators for measuring profitability include: sales gross profit margin, sales net profit margin, return on assets, and return on equity. In academic research both domestically and internationally, the profitability of enterprises is mainly analyzed through analyzing their financial report data and industry development trends. Research has shown that a company's profitability is influenced by multiple factors, including cost control, asset operational efficiency, and industry competition. Although existing research has explored the profitability of the household appliance industry, there is still insufficient research on the changing trends and influencing factors of Gree Electric Appliances' profitability from 2019 to 2023. Therefore, this study aims to fill this gap through an in-depth analysis of Gree's financial data from 2019 to 2023.

This study mainly focuses on the profitability of Gree Electric Appliances, and explores the changing trends of three core financial indicators, namely sales gross profit margin, sales net profit margin, and return on equity, from 2019 to 2023, as well as the key factors affecting them, including operating revenue, operating costs, raw material prices, and product structure adjustments. In this

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study, the quantitative analysis method was mainly used to empirically analyze the profitability of Gree Electric Appliances based on its financial reports from 2019 to 2023. At the same time, using the comparative analysis method, the study compared its profitability with that of Midea Group and Haier Smart Home, so as to analyze its advantages and disadvantages. The purpose of this study is to analyze the profitability of Gree Electric Appliances, help it optimize costs, adjust business structure, improve market competitiveness, and provide inspiration and reference for other household appliance companies in the same industry to improve profitability.

## 2. Overview of related concepts and theories

# 2.1. Definition of profitability and related analysis indicators

Profitability, also known as earnings-generating capacity, refers to the ability of a company to earn profits through its business activities during a certain period of time. It is an important basis for measuring the level of a company's operational capability. Among the four major financial capabilities, profitability is the most important, and the operational status of a company can ultimately be reflected by its level of profitability. Regardless of what kind of stakeholders, the profitability of the company is highly valued [1].

#### 2.2. Relevant analysis indicators

Sales gross profit margin=gross profit margin/sales revenue x 100%.

Sales gross profit margin is a key indicator for measuring the profitability of a company's products. It represents the gross profit margin, which is the proportion of profit remaining after deducting costs from revenue, reflecting the level of revenue generated by the company's sales revenue [2].

Sales net profit margin=(net profit/sales revenue) x 100%.

The sales net profit margin reflects the net profit generated by one yuan of sales revenue for a company, and is used to measure the overall profitability of the company after deducting expenses. The higher the indicator, the stronger the company's profitability and the greater its development potential.

Return on equity (ROE)=net profit/average net assets x 100%.

Return on equity (ROE) is an important indicator for measuring a company's management ability and the degree of satisfaction with shareholder interests. It represents the company's ability to create net profits by utilizing shareholder equity. The higher the value, the stronger the profitability of the company.

#### 3. Current profitability status of Gree Electric Appliances Inc.

#### 3.1. Company introduction

Gree Electric Appliances, Inc. of Zhuhai was founded in 1991 and listed on the Shenzhen Stock Exchange in November 1996. At the beginning of its foundation, the company mainly relied on assembling and producing household air conditioners. It has now developed into a diversified and technology-based global industrial manufacturing group, covering two major fields: household consumer goods and industrial equipment. Its products are exported to more than 190 countries and regions.

#### 3.2. Analysis of the profitability status of Gree Electric Appliances

Profitability is an important indicator for measuring the operational performance of enterprises, reflecting their earnings-generating capacity in market competition. As a well-known household

appliance enterprise in China, Gree's profitability has also received much attention. Table 1 presents the profitability related data of Gree from 2019 to 2023, including key indicators such as sales gross profit margin, sales net profit margin, return on equity, and earnings per share. These data can provide a more intuitive understanding of the company's profit performance and trends in different years, providing a basis for further analysis of its influencing factors.

Table 1: Profitability indicators of Gree from 2019 to 2023

Year	2023	2022	2021	2020	2019
Sales gross profit margin	30.50%	26.00%	24.20%	26.10%	27.50%
Sales net profit margin	13.50%	12.18%	12.15%	13.25%	12.53%
Return on equity	26.53%	24.19%	21.34%	18.88%	25.72%
Earnings per share	5.22%	4.43%	4.04%	3.71%	4.11%

## 3.2.1. Sales gross profit margin

Table 2: Gross profit margin details of Gree (unit: 100 million)

Year	2023	2022	2021	2020	2019
Operating revenue	2040	1890	1879	1682	1982
Operating costs	1416	1398	1423	1242	1435
Sales gross profit margin	30.59%	26.03%	24.27%	26.16%	27.60%

The high or low sales gross profit margin indicator directly reflects the profitability of a company's products or services. Generally speaking, companies with high gross profit margins have products or services with higher added value. According to Table 2, the operating revenue from 2019 to 2023 was 198.2 billion yuan, 168.2 billion yuan, 189 billion yuan, and 204 billion yuan, respectively. There was a significant decline in operating revenue from 2020 to 2021, mainly due to the impact of the global economic downturn. With economic downturn and the decline in the size of the air conditioner market, the short-term operation of the enterprise also showed a downward trend, and the rise in raw material costs also had a certain negative impact on the gross profit margin. In 2022, there was a significant rebound in operating revenue. The company has launched a comprehensive "waste and old air conditioner recycling" and "trade in" campaign this year, providing high-quality services. Through management reforms and promotions, the company's performance had increased with its unique advantage as a domestic brand. The increase or decrease in operating revenue was basically consistent with the increase or decrease in operating costs. The sales gross profit margins from 2019 to 2021 were 27.60%, 26.16%, and 24.27%, respectively, showing a downward trend, indicating that Gree's operating efficiency and contract bargaining power are weak. At the same time, the competition in the air conditioner market was fierce, and its products lacked sufficient competitiveness. But after 2022, the company has improved, with increased operating revenue and continued to maintain high gross profit, exceeding 30% [3-5].

#### 3.2.2. Sales net profit margin

Table 3: Sales net profit margin of Gree from 2019 to 2023

Year	2023	2022	2021	2020	2019
Operating revenue	2040	1890	1879	1682	1982
Net profit	277	230	228	223	248
Sales net profit margin	13.58%	12.17%	12.13%	13.26%	12.51%

According to Table 3, in 2020, due to the impact of the global economic downturn and a decrease in market demand, Gree's operating revenue decreased by 30 billion yuan compared to 2019. Although net profit also decreased, due to proper cost control, the sales net profit margin slightly increased to 13.26% in 2020. As can be seen from the above, in 2021, due to the impact of rising raw material costs such as copper and aluminum, production costs increased. Although revenue increased, the sales net profit margin declined to 12.13% due to a decrease in gross profit margin. From 2019 to 2023, although Gree's sales net profit margin fluctuated, it remained at a stable level, consistent with the changes in operating revenue, indicating a steady improvement in its sales acquisition ability in the past five years.

## 3.2.3. Return on equity

Table 4: Comparison of return on equity of Gree, Midea Group, and Haier Smart Home from 2019 to 2023

Year	2023	2022	2021	2020	2019
Gree	26.53%	24.19%	21.34%	18.88%	25.72%
Midea Group	22.23%	22.21%	24.09%	24.95%	26.43%
Haier Smart Home	16.85%	14.90%	16.20%	15.80%	17.50%

Due to the similarity between Midea Group and Haier Smart Home in terms of business operations, target audience, product features, etc., and Gree Electric Appliances, this paper selects their data from 2019 to 2023 for comparison. According to Table 4, Midea Group has shown outstanding performance in terms of return on equity. From 2019 to 2021, although both parties had experienced declines, Midea Group was significantly higher than Gree, and Gree's ROE fluctuated, especially in 2022 when there was a significant decline. In the following two years, the ROE rapidly increased and exceeded 25.72% in 2019, far surpassing Midea Group. Generally speaking, the return on equity of enterprises should be maintained at 15%--30%, so the return on equity of Gree is relatively normal and has a positive trend, but the significant changes that have occurred cannot be ignored. Overall, compared to Midea Group and Haier Smart Home, Gree Electric Appliances has outstanding performance in terms of return on equity due to its efficient capital management, stable products with high gross profit, and dominant market position in the air conditioner field, reflecting its strong profitability. At the same time, the growth rate of Gree's return on equity indicates that the present value of shareholders' stock assets is increasing. This is positive news for both business managers and investors, as this upward trend will enhance investors' confidence in Gree's future development.

# 4. Problems and business suggestions

# 4.1. Problems of Gree's profitability

#### 4.1.1. High operating costs

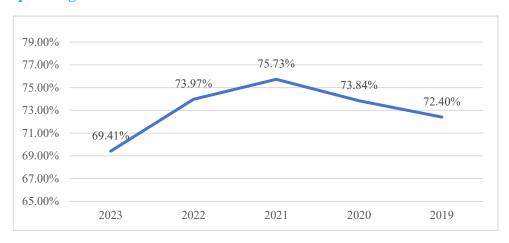


Figure 1: Proportion of operating costs of Gree from 2019 to 2023

From 2019 to 2023, Gree's operating costs have continued to rise. As shown in the figure, the proportion of operating costs to operating revenue has shown an overall upward trend, especially from 72.4% to 73.97% from 2019 to 2022. (See Figure 1)

As a household appliance manufacturing industry, Gree Electric Appliances is highly sensitive to changes in raw material prices. From 2019 to 2023, the prices of copper, aluminum, and plastic fluctuated significantly, directly affecting the company's production costs and increasing the proportion of operating costs to operating revenue. At the same time, Gree's main business revenue increased but other business revenue decreased. The company reported a reduction in its financial results, which is primarily attributed to the restructuring of its business operations. Therefore, the release of new products or the upgrading of existing products may lead to a large initial investment in production and an increase in operating costs, thereby affecting the proportion of operating costs to operating revenue.

# 4.1.2. Single business structure

Table 5: Proportion of Gree's air conditioner business from 2019 to 2023

Year	2023	2022	2021	2020	2019
Air conditioner business revenue	1512.17	1345.29	1381.72	1178.29	1382.49
Total revenue	2039.79	1838.97	1878.73	1704.97	1981.53
Proportion	74.13%	73.15%	73.55%	69.11%	69.77%

Gree's main products consist of air conditioners, industrial products, green energy, household appliances, intelligent equipment, etc. According to Table 5, Gree mainly relies on the air conditioner business, and its business structure is relatively simple. According to the financial data for 2023, the air conditioner business accounted for 74.13% of the total revenue, while in 2019 it only accounted for 69.77%, demonstrating a high dependence on a single business. Although Gree has attempted to diversify its operations by expanding new businesses in recent years, such as exploring new energy vehicles and smart home appliances, its 2023 financial report shows that green energy only accounts for 3% of total revenue, and the company's expansion in non air conditioner areas is relatively slow.

## 4.2. Countermeasures and suggestions

## 4.2.1. Optimization of diversified layout

Based on the analysis of the above issues, Gree currently relies mainly on its air conditioner business. Although it has attempted to expand into other fields such as household appliances and new energy in recent years, the revenue share of these areas is very small and has not become an effective source of support for the company's interests. In order to better adapt to market changes, Gree should accelerate the diversification of its business layout. The company should focus on diversified development in new energy, industrial products, and intelligent equipment in the future, in order to reduce its dependence on the air conditioner business.

In the field of smart furniture, Gree can rely on its existing air conditioner technology foundation to expand to smart home appliances and other products, strengthen research and development investment, actively promote the construction of smart home ecosystems, and establish cooperation with other smart furniture brands such as Xiaomi and Huawei to promote interconnection between devices of different brands, which is also conducive to customers' diversified choices. At the same time, Gree should also focus on product design and user interaction experience, enhancing the aesthetics and usability of the products. Gree can also maintain interaction with users through social media, collect suggestions and needs from time to time, and continuously improve products, which will also enhance customers' sense of brand identity and loyalty.

In the field of green energy, Gree should invest in new energy related technologies and develop new energy related products. In the 2023 financial report, it can be seen that Gree has invested in research and development in the new energy vehicle sector and achieved certain results, mainly in the public transportation sector. It has reached strategic cooperation with high-end customers and has already delivered products in bulk.

#### 4.2.2. Refinement of cost control

At present, Gree Electric Appliances has a relatively stable customer base and market share, which means that there is limited room for revenue growth. At this point, further controlling its costs will significantly increase operating profits. Due to the high raw material and production costs of Gree Electric Appliances, it is possible to reduce costs by strengthening internal management and implementing more refined cost control. Firstly, due to Gree's dominant position in the air conditioner market, the company can leverage this advantage in the procurement process to enhance its bargaining power, select the most advantageous suppliers, and thereby reduce procurement costs. In addition, it is necessary to establish a sound cost control system within the company, conduct detailed analysis of each link in the production process through big data analysis, identify potential cost issues, adjust production strategies in a timely manner, reduce redundant expenses, and avoid overproduction and resource waste. And it is necessary to establish performance evaluations related to cost control to motivate departments to strengthen cost management.

As Gree mainly relies on air conditioner business revenue, the company should strengthen technological innovation and focus on controlling the production cost of components, such as developing more energy-efficient air conditioner compressors, improving resource utilization efficiency, and reducing operating costs. Therefore, the company can improve profitability and maintain a prominent competitive advantage in the ever-changing market.

## 5. Conclusion

This paper mainly explores the profitability of Gree Electric Appliances. Based on financial data from 2019 to 2023, it analyzes its core indicators, including sales gross profit margin, sales net profit

margin, and return on equity, and analyzes their changing trends and influencing factors. The research results indicate that Gree's overall profitability remains stable and will improve in 2023, but it still faces the problems of high operating costs and a single business structure. The sales gross profit margin of Gree Electric Appliances has shown a significant rebound after 2022, and the overall trend of sales net profit margin has improved. The return on net assets has also rebounded in 2023. Overall, Gree Electric Appliances has strong profit stability. However, this paper did not delve into the impact of other home appliance brands on Gree's profitability, and mainly relied on financial data for analysis. Regression analysis or other models were not used to verify the driving factors of profitability, which is also an improvement direction for future research. Future research can also focus on: firstly, further exploring Gree's layout in emerging fields such as new energy and smart homes, and its impact on the company's overall profitability; secondly, by combining the industry average level and market competition, how Gree maintains its competitive advantage in a changing market can be analyzed; thirdly, analytical methods such as DuPont analysis can be introduced to deeply analyze the key factors affecting profitability and provide more targeted development suggestions.

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