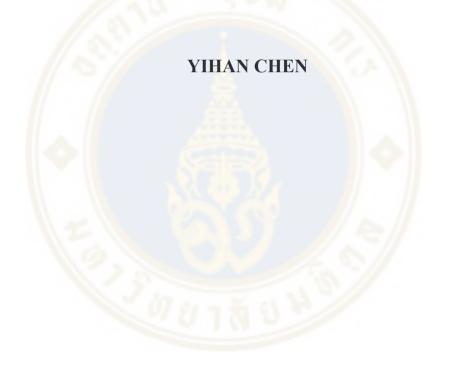
RELATIVE VALUATION OF MIDEA GROUP CO., LTD.



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RELATIVE VALUATION OF MIDEA

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M. M. (CORPORATE FINANCE)

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ABSTRACT

This thematic paper conducts a relative valuation analysis of Midea Group and compares it with peer corporations such as Gree Electric, Haier Smart Home, and LG Electronics. As of December 31, 2024, Midea's current was CNY 75.22 per share, while the calculated target price was 64.67 CNY, indicating that the stock is overvalued. At the same time, we analyze that investing in Midea Company will face economic risks, business risk, market risk, financial risk and regulatory risk. These risks will also affect the income of investing in Midea. Therefore, the recommendation is to "SELL"

KEYWORDS: MIDEA/ VALUATION/ RELATIVE VALUATION / INVESTMENT

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LIST OF ABBREVIATIONS

AI	Artificial Intelligence
AIOT	Artificial Intelligence of Things
CNY	Chinese Yuan
COVID-19	Coronavirus Disease Starting In 2019
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EV/EBITDA	Enterprise Value to EBITDA
GDP	Gross Domestic Product
HVAC	Heating, Ventilation and Air Conditioning
IMF	International Monetary Fund
IoT	Internet of Things
R&D	Research and Development
PBV	Price to Book Value
PE	Price to Earnings per Share
SD	Standard Deviation
TV	Terminal Value
USD	United States Dollar

CHAPTER 1 BUSINESS ANALYSIS

1.1 Macro Background of Midea

As a leading company in the home appliance industry, Midea has diversified businesses and a wide market, making it susceptible to various external influences. This chapter will analyze Midea's macro background through business environment, social trends and industry overview to fully understand the external environment.

1.1.1 Global Business Environment

1.1.1.1 Political

China has a stable political environment, the government supports technological innovation, provides subsidies for energy-saving industries, and encourages companies to develop overseas, creating a stable internal environment for the long-term development of companies. However, in recent years, the tense international situation and Sino-US trade frictions have led to exchange rate fluctuations and increased export costs, bringing major challenges to companies' overseas development.

1.1.1.2 Economic

In the past five years, the Gross Domestic Product of China has continued to grow, and the continuous improvement of residents' consumption capacity has brought positive prospects for the domestic market (National Bureau of Statistics of China, 2024).

In the global market, although the overall economic growth rate has slowed down, emerging markets and developing economies have shown a clear growth trend and still have great potential (IMF, 2025).

1.1.1.3 Legal

The operation of enterprises is strictly constrained by relevant laws such as intellectual property rights, labor contracts, and consumer rights. Enterprises must

ensure compliance and assume social responsibility while making profits. In addition, the international market has different certification standards for export commodities, which increases the cost and difficulty of enterprises entering overseas markets.

1.1.2 Market Development Trends

1.1.2.1 Social

Based on the changes in the global population structure, the aging problem has driven the demand for health management and the elderly care industry. At the same time, the decline in birth rates has led to a decrease in the labor supply. Enterprises should flexibly adjust their business strategies and accelerate the transformation to mechanized and automated production.

In addition, with the advancement of technology, Artificial Intelligence and cloud computing are constantly reshaping the industry landscape. In order to maintain competitive advantages, companies should increase investment in core areas, build industry technology barriers, and enhance market competitiveness.

1.1.2.2 Environmental

Global climate change and environmental problems are becoming increasingly serious. The high energy consumption and high pollution in the manufacturing industry directly impact the ecological environment. In order to cope with this problem, governments and organizations have formulated stricter production standards. Therefore, enterprises should achieve sustainable development through energy conservation and emission reduction, improving energy efficiency and reducing greenhouse gas emissions.

1.1.3 Industry Overview

1.1.3.1 Industry Development

The development of the home appliance industry began in the late 19th century and has undergone significant transformation from mechanical operation to electric power, and now to the application of cloud computing, AI and Internet of Things technology. Since 2015, the global market has continued to grow, with strong market prospects. Global home appliance shipments generally showed an upward trend from

2016 to 2023, and China is the world's largest market (Qianzhan Industry Research Institute, 2024).

In terms of the domestic market, China's home appliance industry started later but has now achieved a leading global position through technological innovation. In 2023, the domestic market revenue reached 715 billion yuan (about 100 billion US dollars), and it is expected to exceed 120 billion US dollars in 2029, with rapid development (Statista, 2024).

1.1.3.2 Market Structure

From the perspective of the consumer market, Asia is the largest market globally, while Africa has the fastest growth rate. Developed countries have higher per capita consumption and are the target market for high-end home appliances (Statista, 2024).

From the perspective of corporate competition, Midea ranks first in the global home appliance market in 2023 with revenue of \$41.41 billion, followed by Haier and LG. The world presents an oligopolistic market dominated by Asian companies. Old European and American companies are still competitive in the high-end market. On the other hand, the domestic market is highly saturated, and the competition among leading companies is very fierce. Companies must focus on clear market positioning and core advantages to succeed (Statista, 2024).

1.1.3.3 Future Trend

Smart Development: In the future, the home appliance industry will develop towards intelligence. Technology and innovation will be deeply integrated into home appliances. Smart home appliances will gradually replace manual operation through voice control and remote operation.

At the same time, internal enterprise management will also move towards intelligent upgrades. Through the Internet of Things, blockchain and big data analysis, to establish an integrated smart management system, optimizing cost control and efficiency.

Eco-Friendly: Environmental protection and energy conservation have always been hot topics in society. Driven by both the market and policies, the demand for energy-efficient home appliances will continue to grow and become the mainstream of society.

On the other hand, companies should also respond to sustainable development in the production process, use eco-friendly materials, reduce carbon emissions, and reduce overall energy consumption.

Consumer Driven: The home appliance market is affected by a variety of factors, such as technological progress, urban development, and economic growth. Consumer demand has shifted from single basic functions to diversified needs. Young consumer groups focus on appearance design and innovative functions, high-income groups prefer high-end customized products, and family consumers focus on practicality and cost-effectiveness. In addition, due to changes in shopping habits, companies need to strengthen social media operations and optimize online marketing strategies.

1.2 Midea Company's Overview

In the following subchapters, we provide the target company's business segments (1.2.1), business model (1.2.2), financial analysis (1.2.3), core competencies (1.2.4) and SWOT analysis (1.2.5).

1.2.1 Business Segments

In Midea, the business segment is divided into four parts, which is smart home, industrial technology, building technology, robotics & automation, and innovative businesses (Figure 1.1).



Figure 1.1 Midea's business segments

Source: Midea, 2024

The first segment is Smart Home. This is Midea's most important business department. It mainly provides customers with fully intelligent home appliances and facilities to enhance customers' smart living experience. The theme of Midea's smart home appliances has its own uniqueness, creating a safe, healthy, delicacy, convenient, and tailored intelligent system. Safe is mainly aimed at smart door locks, smart electronic eyes and other household security products. The function helps the customers build the various security through the product security. Healthy mainly targets white appliances such as washing machines and air conditioners. Midea is committed to creating a series of healthy appliances, focusing on healthy air and water quality, supplemented by a healthy living environment, to give customers a caring and healthy brand image. Delicacy mainly targets Midea's kitchen products, such as microwave ovens, refrigerators, exhaust fans, dishwashers, etc. Midea is committed to creating exquisite kitchen products, fully helping families to plan meals, store food, and assist in nutritious diets, successfully satisfying customers' pursuit of exquisite characteristics of kitchen products. Convenience is mainly aimed at ventilation equipment. Midea is committed to making ventilation equipment extremely convenient to reduce sound and noise in the home environment. Tailored mainly focuses on several various modes of household appliances, customized for the elderly mode, children mode and Midea's unique single mode. According to different user characteristics, the product can be more

in line with user needs, improve customer satisfaction, and achieve a one-to-one product experience (Midea, 2024).

The second segment is Industrial Technology. This part mainly provides green energy, core industrial component services for industrial enterprises, and system services for energy planning. From energy supply to energy distribution, to the formulation of energy rules, to strict control of energy consumption, and finally to effective configuration of energy management, the system helps enterprises reduce energy consumption and achieve the goal of industrial green energy conservation (Midea, 2024).

The third segment is Building Technology. This part mainly provides comprehensive solutions for buildings. The goal is to establish an artificial intelligence environment with sustainable development. The facilities mainly provide elevators, intelligent control and ventilation systems. The system mainly controls the environment and management platform, thereby reducing carbon emissions, integrating energy use, flexibly saving resources, and achieving an intelligent experience with comprehensive optimization of building top-level design (Midea, 2024).

The fourth segment is Robotics & Automation. This part mainly provides four services: industrial intelligence, health detection, intelligent robots and intelligent distribution. Midea's main belief is to use intelligent manufacturing as the cornerstone of industry and use intelligent robots to solve the automation problems. At the same time, in this part, it also strengthens strong cooperation with automation companies, such as Kuka, Swisslog, etc., to achieve a full range of intelligent experience (Midea, 2024).

The last part is Innovative Business. Midea has been making continuous breakthroughs and developments in the field of innovation. This part mainly focuses on digital transmission and launches end-to-end digital supply chain solutions such as Midea cloud. This part has also been making continuous breakthroughs and developments year by year (Midea, 2024).

In total, Midea's uniqueness is mainly in creating energy-saving, intelligent, environmentally friendly, green, and technological products. In addition, Midea focuses on enhancing customer customization and the intelligent user experience.

1.2.2 Business Model Canvas

The business model canvas chart shows that the Midea's business model, which includes nine different parts. That are Key Partners, Key Activities, Key Resources, Value Proposition, Customer Relationship, Channel, Customer Segments, Cost Structure and Revenue Structure (Figure 1.2).



Figure 1.2 Midea's business model canvas

Source: Midea, 2024

1.2.2.1 Key Partners

Firstly, Midea mainly cooperates with fully automated companies, such as KUKA, to help manufacturing companies complete the construction of automation and finally to achieve supply chain cooperation (Midea, 2024). This is mainly reflected in Midea's industrial technology business, building technology business, and robotics & automation business. Close cooperation with downstream industrial enterprises not only helps Midea expand its downstream links, but also further enhances Midea's vertical integration strategic layout.

Secondly, Midea's ecological industry chain cooperation involves enterprise services. Liru has terminal cooperation with Apple, platform cooperation with Alibaba and Huawei, terminal service cooperation with Meituan and JD.com, content marketing cooperation with Himalaya and 58 Daojia, and intelligent cooperation with iFlytek (Midea, 2024).

Finally, Midea has also signed a brand partnership with Manchester City Football Club (Midea, 2020). The two parties will jointly plan digital marketing activities and expand Midea's influence through social media and video advertising. Erling Haaland will also act as a Midea influence spokesman to strengthen the cooperation between the two parties.

1.2.2.2 Key Activities

Midea attaches great importance to research and development activities. In addition, Midea organizes events such as Science and Technology Month every year to improve the science and technology system, establish an R&D system, separate technology research and product development, and build a technology platform conducive to the development of new products. For example, at the 29th Midea Group Technology Month Conference held on October 16, 2024, the talents in R&D and product development were honored under the theme of innovation, globalization, and transformation (Midea, 2024). The highest project award is Chinese Yuan 5 million, the highest individual award is over 1 million CNY, and the cumulative award is over 450 million CNY.

In addition, Midea attaches great importance to brand building and has invested in a variety of brand-building-related activities, such as partnering with international sports to carry out influence activities, partnering with Manchester City Football Club to carry out digital marketing activities, and partnering with Greek suppliers to design a new subway and introduce the brand into the transportation system (Midea, 2020).

Finally, Midea has also made every effort to promote digital transformation and carried out a variety of related activities. For example, they have set up a digital production base in Guangzhou and held a digital transformation event to discuss and share digital transformation experiences with experts.

1.2.2.3 Key Resources

Midea has abundant R&D resources. Midea provides R&D services that can connect people around the world. Midea has 35 R&D departments around the world. In addition, a research center was established at Midea's headquarters, bringing together cutting-edge engineers worldwide to carry out product design and research.

Midea has strong human resources. Midea has attracted relevant talent through a rigorous management system. By improving the organizational structure, they have achieved a flat management model. Firstly, Midea needs to strengthen talent development, then provide continuous follow-up suggestions on recruitment, training, promotion, etc., and finally help employees realize their career planning.

Midea has been named the world's most valuable home appliance brand in 2023 (Midea, 2023). This event opened up new markets for Midea and improved market structure and layout. Diverse perspectives and global visions strengthened marketing channels and helped Midea obtain rich marketing resources.

1.2.2.4 Value Propositions

Midea is centric, which adheres to aspiration, dedication, cooperation and innovation as the organization's value proposition (Midea, 2024). Midea's corporate culture considers customer needs as the principle and condition for the company's development, and it considers dedication to customers to be the company's main ambition. They actively work with other partners, continuously update and iterate the products, transform the organization model, and build their own organizational system based on digital applications.

1.2.2.5 Customer Relationship

Midea attaches great importance to customer experience in building relationships with customers and uses it as the core of ongoing customer service activities. Midea's customized functions can meet different user needs, such as single mode, children mode and elderly mode, etc. Through questionnaire design and market user surveys to whole-home AI, they can collect various user needs and provide customers with a perfect user experience (Midea, 2024).

At the same time, they have also introduced a membership system to maintain relationships with customers. Building customer loyalty, providing relevant benefits and exceptions to customers during holiday periods to strengthen customer relationships.

Finally, strong after-sales service is also key to maintaining customer relationships. Their 24/7 intelligent customer service can answer customers' questions about usage anytime and anywhere (Midea, 2024). At the same time, one-on-one installation and maintenance services also provide a guarantee for customer use.

1.2.2.6 Channel

Midea has completed the construction of online and offline sales channels. Offline, it has integrated its own stores and direct sales channels of electronics retailers and distributors. Online, it has mainly integrated mainstream e-commerce channels such as Tmall, JD.com, and Pinduoduo (Midea, 2024). Meanwhile, it also gained momentum on social platforms and short videos during the sales periods, and integrated official accounts on Douyin, Kuaishou, and WeChat for further sales promotion. When facing the international market, the company focuses on establishing independent offices. They mainly cooperated with the local suppliers to strengthen international trade and build the sales network.

1.2.2.7 Customer Segments

Midea's customer groups are separated into family and corporate users. Individual users are divided into three types. The first group is mid-to-high-end family consumers. This type of user has a high income. And they demand high-quality products, advanced technology, and immersive user experience. This type of user does not care much about the price. But their requirements for the product quality are very high. The second type is general family consumers. This type of user tends to focus on costeffective products. They mainly focus on the price of the product. The third group is Generation Z consumers. This user group is relatively young, and they value fashion, customization, innovation, and uniqueness. And they also have a high demand for customization (Midea, 2024). For example, Dyson's multi-color customized hair dryers (Dyson Limited, 2023), Samsung's The Frame art with replaceable frames (Samsung, 2024), and smart home devices provided by brands such as Xiaomi and Huawei can be freely adjusted and personalized controlled through APP to meet their needs for customization and innovation.

For corporate users, they mainly include individual residential real estate developers and commercial building developers (Midea, 2024). Residential real estate developers care about the quality of the product and whether it can meet the needs of the residents. Commercial building developers focus on energy efficiency and cost reduction according to the needs of users. They are looking for products that can save energy, reduce emissions, and effectively reduce noise.

1.2.2.8 Cost Structure

The cost structure chart shows that product and service costs still dominate the cost structure, accounting for almost all the costs from 2017 to 2023 (Figure 1.3).

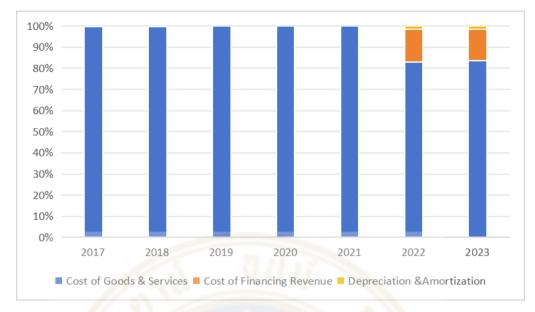


Figure 1.3 Midea's cost structure between 2014 and 2023

Source: Own Calculation

The cost structure chart shows that product and service costs still dominate the cost structure, accounting for almost all the costs from 2017 to 2021. Since 2021, Midea has been implementing a strategic transformation from a traditional manufacturing organization to a digital intelligent organization, which requires the expansion of new businesses, such as fully automatic robot business, increased investment in fixed assets, and financing, resulting in 20% increase in financing costs and depreciation (Figure 1.3).

1.2.2.9 Revenue Structure

The revenue structure chart shows that product and service revenue still dominate the revenue structure, accounting for almost all the revenues from 2017 to 2023 (Figure 1.4).

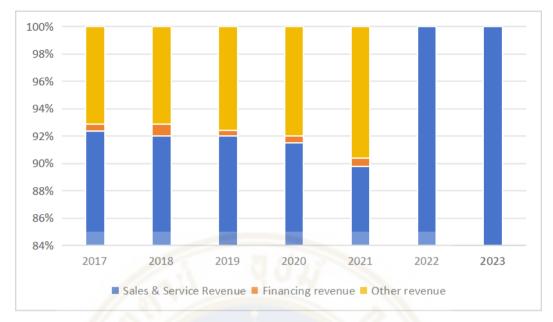


Figure 1.4 Midea's revenue between 2017 and 2023

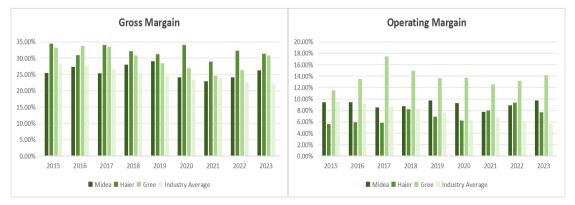
Source: Own Calculation

From the revenue structure chart, revenue will increase gradually and is stable, focusing on products and services. Until 2022, financial income and other income will still account for a certain proportion. However, after the change in strategy, in order to develop new businesses and the success of transformation, the company's financial cost has increased and financial income has decreased. In the future, when the profit pattern stabilizes, it will also bring positive benefits to the company (Figure 1.4).

1.2.3 Financial Analysis

1.2.3.1Profitability

The margain ratio chart shows that Midea's gross margain, operating margain, EBITDA margain and net profit margain from 2015 to 2023 (Figure 1.5).



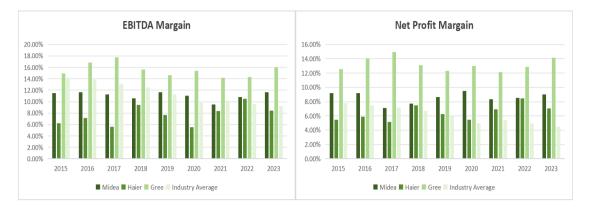


Figure 1.5 Midea's margin ratios between 2015 and 2023

Source: Own Calculation

Media's gross margin and EBITDA margin were slightly lower than the industry average before 2022 but exceeded the industry average in 2022 and 2023. However, overall, Midea's gross margin and EBITDA margin from 2015 to 2023 still have a certain gap compared with the main benchmarks (Haier and Gree). In the future, Midea needs to consider how to reduce unit costs and increase gross profit margins.

Midea's operating margin and net profit margin from 2015 to 2023 generally exceeded the industry average. At the same time, it also exceeded the competing brand Haier during this period. However, it still has a huge gap compared with Gree.

The figures show that Midea's cost control method needs to be improved. It can adopt diversified methods to increase operating efficiency to control costs. For example, it can adopt more refined supply chain management and use artificial intelligence and smart factories to reduce labor costs, thereby improving its operating efficiency. In addition, it can transition from a cost-oriented business strategy to a differentiation strategy, using this method to increase the room for product price increases, thereby increasing unit product revenue and profits (Figure 1.5).

Midea	2015	2016	2017	2018	2019	2020	2021	2022	2023
Operating Margain	9.42%	9.40%	8.52%	8.72%	9.77%	9.27%	7.73%	8.92%	9.70%
Asset Turnover	1.1	1.07	1.16	1.02	0.99	0.86	0.92	0.85	0.82
Leverage Ratio	2.81	2.71	3.1	3.26	3.06	3.02	3.09	3.03	2.97
ROE	29.12%	27.26%	30.64%	29.00%	29.60%	24.08%	21.97%	22.97%	23.62%
Haier	2015	2016	2017	2018	2019	2020	2021	2022	2023
Operating Margain	5.61%	5.93%	5.80%	8.18%	6.93%	6.20%	7.99%	9.39%	7.69%
Asset Turnover	1.08	1.09	1.07	1.07	1.08	1.07	1.07	1.04	1.06
Leverage Ratio	2.73	2.56	2.51	2.50	2.50	2.45	2.43	2.44	2.41
ROE	16.53%	16.65%	15.67%	21.94%	18.74%	16.22%	20.75%	23.92%	19.63%
Gree	2015	2016	2017	2018	2019	2020	2021	2022	2023
Operating Margain	11.51%	13.51%	17.44%	14.97%	13.67%	13.72%	12.60%	13.14%	14.20%
Asset Turnover	0.63	0.64	0.76	0.86	0.75	0.61	0.63	0.56	0.57
Leverage Ratio	3.47	3.39	3.32	2.97	2.65	2.49	2.74	3.37	3.39
ROE	25.07%	29.32%	43.75%	38.16%	27.20%	20.76%	21.84%	24.94%	27.27%
Industry Average	2015	2016	2017	2018	2019	2020	2021	2022	2023
Operating Margain	9.50%	9.10%	8.70%	8.20%	7.60%	6.30%	6.80%	6.10%	5.70%
Asset Turnover	1.20	1.80	1.15	1.12	1.08	1.02	1.05	1.00	0.98
Leverage Ratio	2.25	2.30	2.35	2.40	2.45	2.55	2.50	2.60	2.65
ROE	25.65%	37.67%	23.51%	22.04%	20.11%	16.39%	17.85%	15. 86%	14.80%

Table 1.1 Midea's DuPont ROE analysis between 2015 and 2023

Source: Own Calculation

Midea's operating margin remained stable at around 9% from 2015 to 2023. During this period, Midea's performance exceeded the industry average and Haier. However, Midea's operating margin is still a certain distance away from Gree's value. This shows that although Midea's product profitability is higher than most companies in the industry, it can still be optimized. Midea can refer to Gree's operating methods, increase the proportion of high-end products, create a market layout for high-end products, and continuously improve product revenue. At the same time, in terms of cost control, it can achieve refined management, improve the efficient combination with artificial intelligence to reduce product costs and management expenses.

Overall, Midea's asset turnover rate from 2015 to 2023 is roughly the same as the industry average and Haier's performance and far exceeds Gree's performance. This shows that Midea has high operational efficiency and can effectively utilize assets. In addition, Midea's digital-driven supply chain management is relatively effective and can well balance the demand and supply of assets.

Midea's leverage ratio is stable from 2015 to 2023, maintaining at around 3, indicating a good financial situation. Therefore, in the future Midea can continue to maintain its leverage ratio to reasonably balance financial leverage and profitability.

Midea's ROE ratio from 2015 to 2023 is strong, and relatively stable compared to the competitors. Midea's ROE is higher than the industry average overall. However, its performance in 2017, 2018, 2022 and 2023 is much lower than that of Gree. The reason for this is the low operating margin. Therefore, Midea can effectively

increase its operating margin and ROE by transforming its products into high-end products (Table 1.1).

1.2.3.2 Growth

The growth ratio chart shows that Midea's revenue growth, net profit growth, fixed asset growth and total asset growth from 2015 to 2023 (Figure 1.6).



Figure 1.6 Midea's growth ratios between 2015 and 2023

Source: Own Calculation

Overall, Midea's revenue growth rate in 2015-2023 fluctuates more than Gree, Haier and the average of the same industry. It fluctuated greatly in 2015-2018, flattened in 2018-2020, and experienced a second large volatility after 2020. The reason for the revenue growth in 2015-2018 was that Midea's market expansion and business expansion had significant effects, while the situation after 2020 was mainly due to the recovery of revenue after Coronavirus Disease Starting In 2019.

However, Midea's net profit growth rate in 2015-2023 was weak, which shows that Midea still needs to improve its cost control and expense control. Midea needs to control expenses in product promotion to balance revenue and costs. Midea's fixed asset growth was relatively stable compared with its peers in 2015-2023, stable at 10%, which illustrates that Midea's planning of fixed assets are relatively reasonable and can effectively match asset support. In addition, the growth of Midea's total assets gradually stabilized during this period, which also indicates that Midea can gradually stabilize its asset investment and improve its operational efficiency during the business expansion (Figure 1.6).

1.2.3.3 Liquidity

The liquidity ratio chart shows that Midea's current ratio, quick ratio, total debt/equity ratio and altman's z score from 2015 to 2023 (Figure 1.7).

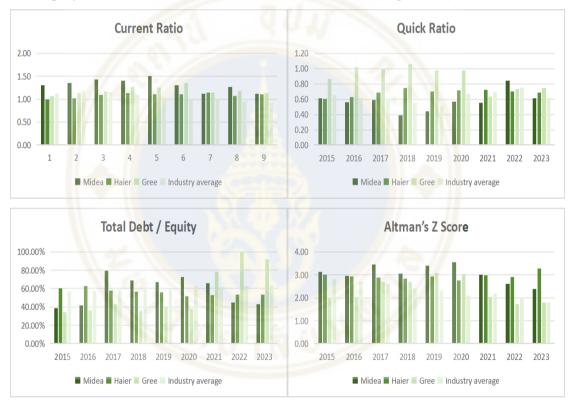


Figure 1.7 Midea's liquidity between 2015 and 2023

Source: Own Calculation

Midea's current ratio was high in 2015-2023, much higher than the industry average and competitors in the same industry, which shows that Midea has strong shortterm debt repayment ability. Midea can continue to maintain its current liquidity management and optimize the efficiency of capital use.

For the quick ratio, it can be seen that Midea was lower than Gree before 2021 but gradually exceeded Gree after 2021. The quick ratio reflects the ability of a company to repay short-term liabilities with quick assets. Midea's quick ratio was lower

than Gree's before 2021, indicating that Midea's liquidity and short-term debt repayment ability were relatively weak at that time. However, after 2021, it gradually surpassed Gree, which means that Midea has optimized its asset structure or liability management, which has enhanced its short-term debt repayment ability, strengthened corporate liquidity, and improved financial stability.

Midea's leveraged debt is higher than the industry average and Haier, but lower than Gree, which indicates that Midea can optimize its debt structure and reduce financing costs while maintaining its current financing structure. In addition, Midea's Zscore is relatively stable overall, which is around 3, and higher than the industry average, which illustrates that its financial risk is low and its financial operation is effective (Figure 1.7).

1.2.3.4 Operational Capacity

The operational capacity table shows that Midea and its competitive company's days sales outstanding, days inventory outstanding, account payable outstanding and cash conversion cycle from 2015 to 2023 (Table 1.2).

Midea	2015	2016	2017	2018	2019	2020	2021	2022	2023
Days sales outstanding	66	51	37	42	41	47	44	46	48
Days inventory outstanding	45	41	46	57	57	54	53	64	62
Account payable turnover days	70	65	57	72	72	82	78	91	90
Cash conversion cycle	41	27	26	27	26	18	18	19	20
Haier	2015	2016	2017	2018	2019	2020	2 <mark>021</mark>	2022	2023
Days sales outstanding	47	45	40	42	43	38	41	43	43
Days inventory outstanding	81	82	89	84	82	83	82	79	79
Account payable turnover days	86	86	91	91	89	92	97	95	95
Cash conversion cycle	42	41	38	35	36	29	26	28	27
Gree	2015	2016	2017	2018	2019	2020	2 <mark>021</mark>	2022	2023
Days sales outstanding	130	84	86	75	73	71	67	79	62
Days inventory outstanding	49	46	47	48	56	76	90	106	91
Account payable turnover days	139	137	109	95	100	104	78	93	99
Cash conversion cycle	40	-7	24	28	30	43	79	93	54
Industry Average	2015	2016	2017	2018	2019	2020	2021	2022	2023
Days sales outstanding	45	47	49	51	53	56	55	57	58
Days inventory outstanding	85	82	78	74	70	67	65	63	62
Account payable turnover days	65	66	68	70	72	74	73	75	76
Cash conversion cycle	65	63	59	55	51	49	47	45	44

 Table 1.2 Midea's operational capacity between 2015 and 2023

Source: Own Calculation

Overall, Midea's operating capacity has gradually improved from 2015 to 2023, and its cash conversion days have also gradually decreased, from 41 days in 2015 to 20 days in 2023. The main reason for the decrease is that the turnover of accounts receivable has increased, with the turnover days decreasing from 66 days to 48 days; the turnover days of accounts payable have gradually increased, from 70 days to 90 days,

which indicates that Midea's bargaining power with suppliers has become stronger and it has a more significant market position in the home appliance industry.

Midea's operating capacity is higher than the industry average and that of its competitors in 2015-2023. This shows that Midea has strong cash management capabilities and is good at balancing its relationship with suppliers to ensure long-term and stable cooperation with them. However, Midea's only shortcoming is inventory management. The inventory turnover days are relatively long, and it is difficult to balance the supply and demand of the inventory. Therefore, Midea needs to optimize inventory management and speed up inventory turnover in the future (Table 1.2).

1.2.4 Core Competencies

Midea's core competitiveness is reflected in three major aspects: Firstly, Midea has cutting-edge innovative technology. Midea's main strategic goal is to become a leading technology company. After the strategic transformation, Midea continues to conduct R&D in this field, integrating smart home and the Artificial Intelligence of Things. At the same time, they have partnered with Huawei to integrate into Hongmeng's ecosystem to further advance the design and development of smart appliances and digital products. While exploring new areas, the company continues to maintain its competitive advantage in green energy conservation. The promotion of variable frequency air conditioning technology has built an environmentally friendly brand image. The product's energy saving and efficiency is deeply rooted in people's minds (Midea, 2024).

Secondly, Midea has a strong supply chain network. The supply chain network has expanded to 35 countries around the world, with independent offices in different countries. Strengthening relationships with local suppliers can improve production efficiency and adapt to different market demands. In addition, the optimization of the digital supply chain also enables Midea to integrate big data and intelligent AI into sales channels. It will also improve the efficiency of content marketing and digital marketing.

Thirdly, Midea has a systematic market structure. For example, they have Achieved continuous growth in the market share in the Southeast Asian region; launched a high-end household brand in Europe; increased brand partnerships in North America; improved the establishment of the import and export channels in Latin America.

1.2.5 SWOT Analysis

The SWOT analysis chart shows that Midea's strengths, weaknesses, opportunities and threatens (Figure 1.8).

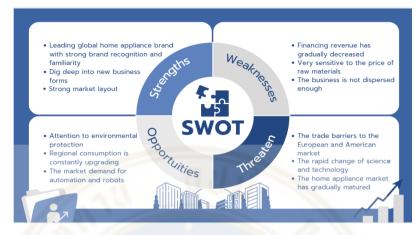


Figure 1.8 Midea's SWOT analysis

Source: Midea, 2024

Strengths: Firstly, Midea is a leading global home appliance brand with strong brand recognition and familiarity which occupies a large global market share (SWOT & PESTLE, 2023). Secondly, Midea continues to dig deep into new business forms. After the strategic transformation, it has strengthened the connection between the IOT and smart homes and opened up new paths. Thirdly, Midea has a strong market layout, offices in many countries worldwide, and relatively complete supply chain management (Midea, 2024).

Weaknesses: Firstly, Midea's financing revenue has gradually decreased since 2022, and sales have stagnated and solidified in some markets. Secondly, it is very sensitive to the price of raw materials. For example, in the cost structure, most of the costs are concentrated on the cost of products and services. Thirdly, even if new businesses are continuously developed, the business is not dispersed enough and the concentration is too high, so there are still certain risks (Midea, 2024).

Opportunities: Firstly, consumers' attention to environmental protection is gradually increasing, and the demand for the smart home appliances and the environmentally friendly home appliances are gradually increasing (Midea, 2024). Secondly, the Southeast Asian and Latin American markets where Midea is deployed are also booming, and regional consumption is also constantly upgrading. Thirdly, the

market demand for automation and robots is also rising, which gives Midea the opportunity to develop new businesses (Midea, 2024).

Threats: Firstly, the trade friction between China and the United States has brought the trade barriers to the European and American market (SWOT & PESTLE, 2023). Secondly, the rapid change of science and technology has brought new challenges to companies in the home appliance industry. Thirdly, the home appliance market has gradually matured, and consumers' demands for product quality have become more diversified (Midea, 2024).

1.3 Benchmark Introduction

1.3.1 Benchmark Selection Criteria

To ensure a comprehensive assessment of Midea's corporate value and market performance, this chapter will select benchmarks based on the following four criteria:

Industry category: Midea belongs to the home appliance manufacturing industry. Therefore, the benchmark companies are selected in the same industry.

Enterprise scale: As a world-leading home appliance company, Midea has a wide range of businesses, and other companies need to have similar enterprise scale or corporate structure.

Business scope: Midea's business covers consumer appliances, smart home appliances, HVAC. The core business structure of other companies should be similar to Midea.

Time dimension: Benchmark companies should be at the same development stage as Midea or have similar growth experiences.

1.3.2 Introduction of the Benchmark

Gree Electric: A leading enterprise in China's home appliance industry, specializing in HVAC. As one of the world's largest air conditioner manufacturers, it operates in multiple countries and has a market value of approximately 34 billion USD (Gree, 2024).

Haier Smart Home: Founded in Qingdao, China in 1984, its core business is home appliances, it owns multiple multinational brands, and occupies an important position in the global market, with a market value of approximately 36.5 billion USD (Haier, 2024).

LG Electronics: Founded in Seoul, South Korea in 1958, its business scope covers the world, involving businesses in multiple electronic fields, of which home appliances account for approximately 36% of revenue, the highest proportion of all revenue, and a market value of approximately 10 billion USD (LG, 2024).

Daikin Industries: A large multinational enterprise with a long history founded in Japan in 1924, its core business HVAC accounts for 89.7% of total revenue, and its current market value is approximately 32 billion USD (Daikin, 2024).

Hisense Home Appliances: Founded in Guangdong, China in 1984, its main HVAC and home appliance businesses account for 49.3% and 27% respectively, with a current market value of approximately 5.5 billion USD (Hisense, 2024).

Sichuan Changhong Electric: Founded in Sichuan, China in 1958, its main businesses include smart home appliances, HVAC, and general equipment manufacturing, with multiple manufacturing bases around the world, and a current market value of approximately 5.3 billion USD (Sichuan Changhong, 2024).

ECOVACS Robotics: Founded in Suzhou, China in 1998, it focuses on home service robots and high-end smart appliances. It is the world's leading home service robot brand with a market value of approximately 3.4 billion USD (ECOVACS, 2024).

Vatti Corporation: Founded in Guangdong, China in 1992, it is the leading kitchen appliance brand in China. The company's main business is high-end home kitchen appliances, with a market value of approximately 900 million USD (Vatti Corporation Ltd, 2024).

CHAPTER 2 VALUATION - RELATIVE METHOD

This chapter applies relative valuation to evaluate Midea's stock price. The analysis includes two valuation methods: historical band valuation (2.1) and peer group multiple valuation (2.3). The target price is determined by price-to-earnings per share (PE) ratio, price-to-book value (PBV), and enterprise value to EBITDA (EV/EBITDA) ratio.

2.1 Historical Multiple Band Valuation

This section analyzes the historical trends of Midea Group over the past five years. By using the mean and +1, +2, -1, -2 standard deviations (SD) as the baseline, it evaluates whether the current stock price deviates from a reasonable range.

2.1.1 Trailing PE Ratio

The data (Figure 2.1) shows that the trailing PE ratio surged above 25 in 2022, significantly exceeding +2 SD, reflecting the positive market expectations for its profitability at the time.



Figure 2.1 Midea's trailing PE Ratio

Source: Own Calculation

However, the PE ratio began to decline sharply and gradually fell below the historical mean after 2022. As of March 31, 2025, the PE ratio stood at 14.66, within the -1 SD, indicating that the current market valuation of Midea is relatively cautious, but there is no obvious undervaluation.

2.1.2 Trailing PBV Ratio

Over the past five years, the PBV ratio has gradually fallen from its peak in 2020 (Figure 2.2).



Figure 2.2 Midea's trailing PBV Ratio

Source: Own Calculation

As of March 31, 2025, the PBV ratio was 2.77, close to the -1 SD level. The market's expectations for its future have gradually become conservative, and the overall valuation has become more rational.

2.1.3 Trailing EV/EBITDA Ratio

The EV/EBITDA ratio has been on a downward trend since the beginning of 2021, reflecting the market's declining expectations for future profitability (figure 2.3).

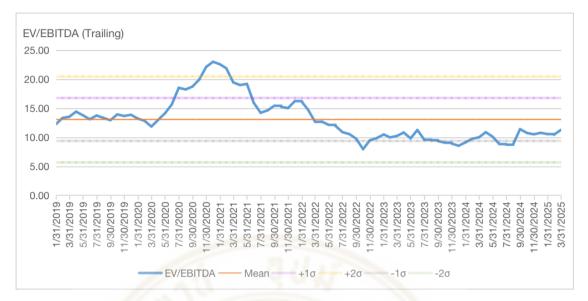


Figure 2.3 Midea's trailing EV/EBITDA Ratio

Source: Own Calculation

As of March 31, 2025, the ratio was 11.26, within -1 SD, indicating that the market expectation for its profitability and growth trend have declined compared with historical performance, but there are still no serious negative expectations.

2.2 Forward Multiple Band Valuation

This section evaluates Midea Group's valuation based on forward PE, PBV, and EV/EBITDA multiples. By integrating market expectations with historical valuation bands, this analysis supplements target price estimation and helps assess potential upside opportunities.

2.2.1 Forward PE Ratio

Forward PE is calculated by dividing the current stock price by the estimated earnings per share of the next fiscal year.

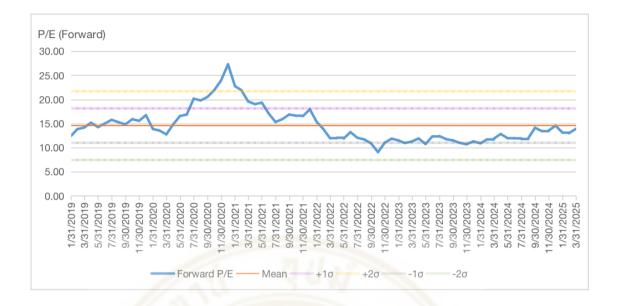


Figure 2.4 Midea's forward PE Ratio

Source: Own Calculation

The forward PE ratio shows a trend that is basically consistent with the trailing PE, both peaking in 2021 and gradually returning to within the standard deviation range. As of March 31, 2025, the forward PE stands close to the historical mean, indicating that the market's expectations for future earnings remain stable and slightly higher than the past performance.

2.2.2 Forward PBV Ratio

The forward PBV is obtained by dividing the estimated stock price by the forecasted book value per share.

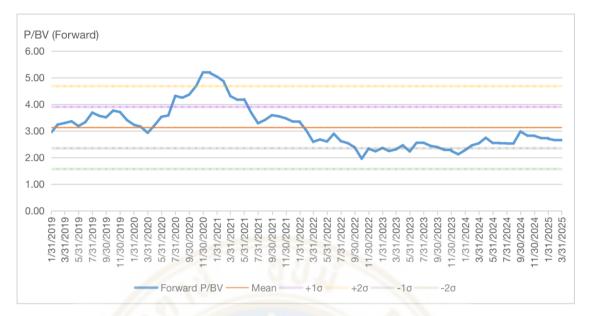


Figure 2.5 Midea's forward PBV Ratio

Source: Own Calculation

As of March 31, 2025, the forward PBV ratio continues its gradual downward trend since 2021. Although it has declined, the ratio remains within the range of -1 SD from the historical mean. This indicates that market expectations for Midea's asset growth in the upcoming year are conservative and consistent with the cautious valuation sentiment seen in previous periods.

2.2.3 Forward EV/EBITDA Ratio

Forward EV/EBITDA is calculated by dividing the current enterprise value by the projected EBITDA of the next year.



Figure 2.6 Midea's forward EV/EBITDA Ratio

Source: Own Calculation

Similar to the PE and PBV trend, the forward EV/EBITDA ratio is also consistent with its historical performance. This trend shows that the market's expectations of the company's operations are basically consistent with the actual situation, reflecting a relatively accurate and stable market prospect.

2.2.4 Summary

For historical multiples, market expectations for Midea Group have remained conservative since 2022, with valuation levels consistently around the -1 SD. Similarly, forward multiples show a comparable trend, staying within the same conservative range. The consistency between historical and forward valuations indicates that market expectations for future growth remain cautious and stable.

If the market environment and investor expectations in 2025 continue the current trend, the valuation is likely to remain in a similar range. Therefore, Historical multiples range provides a strong reference for estimating the 2025 target price.

2.3 Peer Group Multiple Valuation

This section analyzes peer group multiples, using the mean and median to assess Midea's valuation level within the industry. Selected peers include Gree Electric Appliances, Haier Smart Home, LG Electronics and other representative home appliance manufacturers to ensure a comprehensive industry comparison.

2.3.1 Trailing Multiple

To ensure a comprehensive industry comparison, the table below presents the trailing valuation multiples of Midea and other representative companies.

Identufier	Company Nanme	Currency	Market Capital	Closing Price 31-Nov-24	Trailing P/E Nov-24	Trailing P/BV 31/Nov/2024	Trailing EV/EBITDA 31/Nov/2024
000651 CH Equity	GREE ELECTRIC APPLIANCES I-A	CNY	234,470,000,000.00	45.45	7.80	1.88	4.92
600690 CH Equity	HAIER SMART HOME CO LTD-A	CNY	245,830,000,000.00	28.47	14.66	2.51	6.96
066570 KS Equity	LG ELECTRONICS INC	KRW	12,750,000,000,000.00	83,500.00	13.15	0.68	3.99
6367 JP Equity	DAIKIN INDUSTRIES LTD	JPY	4,970,000,000,000.00	18,660.00	22.30	1.99	10.12
000921 CH Equity	HISENSE HOME APPLIANCES GR-H	CNY	37,130,000,000.00	28.90	9.36	1.97	5.98
600839 CH Equity	SICHUAN CHANGHONG ELECTRIC-A	CNY	52,260,000,000.00	9.65	72.67	3.61	16.85
603486 CH Equity	ECOVACS ROBOTICS CO LTD-A	CNY	32,700,000,000.00	47.00	53.71	4.15	24.34
002035 CH Equity	VATTI CORPORATION LTD-A	CNY	5,980,000,000.00	7.34	14.13	1.76	8.41
	•		•	Peer Average	25.97	2.32	10.20
				Peer Median	14.39	1.98	7.69
				Midea Average	14.63	2.75	11.44
				Max	72.67	4.15	24.34
				Min	9.36	0.68	3.99

Table 2.1 Trailing Multiple of Peer Group

Source: Own Calculation

Historical data show that Midea's PE ratio is close to the industry median, indicating that the market's expectations for its stock price are relatively reasonable, and there is no obvious overvaluation or undervaluation.

2.3.2 Forward Multiple

To better understand Midea's market valuation from a future perspective, the following table summarizes the forward valuation multiples of Midea and its peers.

Identufier	Company Nanme	Currency	Market Capital	Closing Price	Forward P/E	Forward P/BV	Forward EV/EBITDA
Identuller	Identifier Company Namine Currency		MarketCapitar	31-Nov-24	Nov-24	Nov-24	Nov-24
000651 CH Equity	GREE ELECTRIC APPLIANCES I-A	CNY	234,470,000,000.00	45.45	7.66	1.63	5.56
600690 CH Equity	HAIER SMART HOME CO LTD-A	CNY	245,830,000,000.00	28.47	12.45	2.09	8.70
066570 KS Equity	LG ELECTRONICS INC	KRW	12,750,000,000,000.00	83,500.00	10.53	0.63	3.25
6367 JP Equity	DAIKIN INDUSTRIES LTD	JPY	4,970,000,000,000.00	18,660.00	18.94	1.86	8.09
000921 CH Equity	HISENSE HOME APPLIANCES GR-H	CNY	37,130,000,000.00	28.90	8.38	1.80	5.96
600839 CH Equity	SICHUAN CHANGHONG ELECTRIC-A	CNY	52,260,000,000.00	9.65	45.60	2.15	12.89
603486 CH Equity	ECOVACS ROBOTICS CO LTD-A	CNY	32,700,000,000.00	47.00	17.98	3.21	18.54
002035 CH Equity	VATTI CORPORATION LTD-A	CNY	5,980,000,000.00	7.34	9.56	1.40	5.97
				Peer Average	16.39	1.85	8.62
				Peer Median	11.49	1.83	7.03
				Midea Average	14.63	2.75	11.44
				Max	45.60	3.21	18.54
				Min	7.66	0.63	3.25

Table 2.2 Forward Multiple of Peer Group

Source: Own Calculation

From the perspective of PBV and EV/EBITDA ratio, Midea Group's multiple is significantly higher than the industry median. This may be due to Midea's leading position in the industry, with more significant advantages in brand value, market share and long-term growth potential compared to its competitors. Therefore, the market is willing to pay Midea a higher price than the industry average.

This suggests that directly using peer group PBV and EV/EBITDA ratio in the valuation process may lead to an underestimation of Midea Group. Therefore, the valuation method should consider Midea's industry-leading position to avoid underestimating its market value.

2.4 Target Price of Midea Group

This section we use historical multiple valuation and peer group multiple valuation to determine Midea's target price, ensuring that the final valuation aligns with market trends while accurately reflecting the company's intrinsic value.

2.4.1 Target price from band valuation

Historical valuation multiples provide a basic framework for understanding the valuation fluctuations of stocks under different market conditions. The table 2.3 summarizes Midea's historical valuation ranges and corresponding target prices based on different standard deviation levels from the historical average.

Current price of Midea	75.22		
	2024	2024F	2025F
EPS	4.93	5.10	5.63
Book Value Per Share	23.18	25.07	27.57
EBITDA	49,232,884,000.00	46,738,333,333.33	51,506,666,666.67

Historical Multiple							
	Trailing P/E	Trailing P/BV	Trailing EV/EBITDA				
+2σ	23.93	5.30	20.67				
+1σ	20.02	4.38	16.92				
Mean	16.10	3.46	13.18				
-1σ	12.19	2.54	9.43				
-2σ	8.27	1.63	5.68				

Target Price of Historical Multiple						
	Trailing P/E	Trailing P/BV	Trailing EV/EBITDA			
+2σ	134.71	146.08	140.81			
+1σ	112.67	120.76	115.29			
Mean	90.63	95.44	89.77			
-1σ	68.59	70.13	64.25			
-2σ	46.54	44.81	38.73			

Table 2.3 Target Price from Band Valuation

Source: Own Calculation

As analyzed earlier, Midea's valuation multiples have been stable at around -1 SD of the historical mean in recent years. Therefore, we use -1 SD as a reference benchmark. If the calculated target price fluctuates around -1 SD, it indicates that it is consistent with the company's long-term growth trend. However, if the price exceeds +2 and -2 SD, it may indicate a risk of serious overvaluation or undervaluation.

2.4.2 Forward Multiple

The selection of appropriate multiples is crucial to the calculation of target prices. The table below presents the derived target prices using both trailing and forward valuation multiples of the peer group.

Target Price of Peer Multiple						
Trailing P/E Trailing P/BV Trailing EV/EBITDA						
Peer Average	146.18	63.94	69.45			
Peer Median	64.67	75.94	52.36			

Target Price of Peer Multiple						
Forward P/E Forward P/BV Forward EV/EBIT						
Peer Average	92.23	50.88	58.72			
Peer Median	64.67	50.40	47.89			

Table 2.4 Target Price from Peer Multiple

Source: Own Calculation

Since the industry average may be affected by outliers, resulting in abnormal valuation levels, we use the industry median to ensure the stability and accuracy of the valuation.

Additionally, although historical multiples provide a useful reference for historical valuation trends, they only reflect the historical performance of the industry, without considering the changes in the future market environment.

In contrast, the forward multiple includes analysts' expectations for future earnings, asset values, and cash flows, making them more consistent with current market pricing. Based on the forward-looking nature of valuation, choosing forward multiples as the basis can more accurately estimate the target price.

2.4.3 Selecting Target Price

Based on the historical and peer multiples analysis, we determine 64.67 CNY as Midea's target price, using the forward P/E ratio of peer median (Table 2.5).

Target Price of 2025						
	Forward P/E	Forward P/BV	Forward EV/EBITDA			
Peer Median	64.67	50.40	47.89			
-1σ of Midea	68.59	70.13	64.25			
Overvaluation	14.03%	33.00%	36.33%			
Current price of Midea	75.22					

Table 2.5 Midea's Target Price

Source: Own Calculation

Among the three forward multiples, the forward PE ratio is selected for the following reasons:

From a theoretical perspective, PE ratio is a widely used and profit-oriented indicator. It is especially suitable for companies like Midea, which have relatively stable profits and an asset-light structure. In contrast, PBV is more affected by accounting differences and does not directly reflect profitability, while EV/EBITDA can be affected by debt levels and non-operating factors. In the case of Midea, PE provides a clearer and more relevant information.

From a peer comparison perspective, Midea's PBV and EV/EBITDA are much higher than the industry median, reflecting its industry leadership. Using those multiples may undervalue the company value. The peer median forward PE is more balanced and better reflects its profitability and industry position.

Finally, the target price of 64.67 CNY within Midea's historical valuation range (around -1 SD), matching the market's conservative pricing trend in recent years. Based on industry performance, this price is both reasonable and consistent with investor expectations.

2.5 Sensitivity and Scenario Analysis

This section further explores the potential fluctuation range of Midea's target price under different market environments through sensitivity analysis (2.5.1), scenario analysis (2.5.2), and investment implications (2.5.3), ensuring the accuracy and practical relevance of the valuation.

2.5.1 Sensitivity Analysis

In this case, we focus on the changes in PE ratio, which ranges from -20% to +20%. By adjusting a single variable (Table 2.6), we can observe the specific impact of the valuation multiple on the target price, thereby verifying whether the P/E ratio is an appropriate valuation indicator.

EPS of 2025F	Forward P/E	Current Price	Target Price		
5.63	11.49	75.22	64.67		
	P/E -20%	P/E -10%	P/E 0%	P/E +10%	P/E +20%
Target Price	51.74	58.20	64.67	71.14	77.60
Upside/Downside Potential	-31%	-23%	-14%	-5%	3%

Table 2.6 Sensitivity Analysis

Source: Own Calculation

The sensitivity analysis demonstrates that changes in the forward PE ratio have a significant impact on the target price. In the most conservative condition (PE - 20%), the target price may decline to 51.74 CNY, whereas in the most optimistic scenario (PE +20%), the target price could reach 77.60 CNY.

2.5.2 Scenario Analysis

Compared with sensitivity analysis, the scenario analysis matrix (Table 2.7) adjusts both the PE ratio and EPS variables, which can more comprehensively simulate the impact of market fluctuations on stock prices. This analysis considers the fluctuation of PE ratio and EPS between -20% and 20%, taking into account the impact of potential extreme market conditions on valuation.

EPS of 2025F	Forward P/E	Current Price	Target Price		
5.63	11.49	75.22	64.67		
	P/E -20%	P/E -10%	P/E 0%	P/E +10%	P/E +20%
EPS -20%	41.39	46.56	51.74	56.91	62.08
EPS -10%	46.56	52.38	58.20	64.02	62.08
EPS 0%	51.74	58.20	64.67	71.14	77.60
EPS +10%	56.91	64.02	71.14	78.25	85.36
EPS +20%	62.08	69.84	77.60	85.36	93.13

Table 2.7 Scenario Analysis

Source: Own Calculation

Scenario analysis shows that even under relatively pessimistic conditions (PE -10%, EPS -10%), the stock price remains at 52.38 CNY, supporting the validity of the 64.67 CNY target price. In extreme scenarios, the price may fluctuate between 41.39 CNY and 93.13 CNY, investors should consider the uncertainty of the market.

Nevertheless, the target price of 64.67 CNY is still within a stable valuation range under most reasonable conditions.

2.5.3 Investment Implication

Based on the above scenario analysis, we divide the valuation results into three areas to support investment decisions (Table 2.8).

	P/E -20%	P/E -10%	P/E 0%	P/E +10%	P/E +20%
EPS -20%	41.39	46.56	51.74	56.91	62.08
EPS -10%	46.56	52.38	58.20	64.02	62.08
EPS 0%	51.74	58.20	64.67	71.14	77.60
EPS +10%	56.91	64.02	71.14	78.25	85.36
EPS +20%	62.08	69.8 <mark>4</mark>	77.60	85.36	93.13

Table 2.8 Investment Implication

Source: Own Calculation

Compared to the market price of 75.22 CNY as of December 31, 2025, when the implied value is higher than 75.22 CNY (green area), the stock is considered undervalued and may present a buying opportunity. Prices between 60 CNY and 75 CNY (white area) fall within a reasonable value range and are suitable for holding. If the implied stock value is below 60 CNY (red area), it suggests that the market price is overvalued and not worth investing in.

CHAPTER 3 RECOMMENDATION

This chapter mainly analyzes Midea's valuation and makes corresponding suggestions for investment in Midea. It first summarizes the valuation results (3.1), then evaluates the risks of investing in Midea (3.2), and finally gives corresponding investment suggestions based on the risks and valuation (3.3).

3.1 Valuation Result

According to the valuation results in Chapter 2, the implied price of Midea Group calculated based on the relative valuation method is CNY 64.67 per share, which is lower than the market price of CNY 75.22 per share on December 31, 2024.

From an industry perspective, the global home appliance industry is undergoing a valuation correction. During the COVID-19, the surge in home appliance demand drove rapid industry expansion, but as the market became saturated and the industry growth slowed, the market gradually returned to rationality (Xinhua News Agency, 2022). In recent years, the industry's average PE ratio has dropped from 18 times during the pandemic to around 12 times, and the valuation premium of leading companies has also narrowed (Euromonitor, 2024). Midea's current P/E ratio is still 32% higher than the industry average, exceeding the level supported by its fundamentals, which may bring further downside risk for its stock price (Guotai Junan Securities, 2024).

In addition, Midea has adjusted its own market expectations. The company revised its 2025 revenue growth forecast from 10% to 8% and lowered its expected overseas gross margin from 22% to 19% (Midea, 2024), reflecting a more cautious view of future performance. Meanwhile, uncertainties such as the unclear Sino-US trade relations, the obvious trend of de-Channelization of the global supply chain (CITIC, 2025) have added pressure to Midea's profitability and development in the future.

In conclusion, although Midea's current valuation multiples are lower than its historical averages, considering the overall downward trend in industry valuations and the uncertainty in the external environment, the current market price is still overvalued.

3.2 Investment Risk

This part mainly explains the risks of investing in Midea, mainly analyzing from five aspects: Economic Risk (3.2.1), Business Risk (3.2.2), Market Risk (3.2.3), Financial Risk (3.2.4), and Regulatory Risk (3.2.5). Table 3.1 summarizes the likelihood and severity of each of the above risks.

Risk M	Lo tuiv		Severity	
KISK IV		Acceptable	Moderate	Intolarable
	Unlikely		Industry Access and Technology Licensing Risks	
Probability	Possible		Technology and Brand Risk Operational Capacity Risk	Economic Risk Environmental Policy Risks Data Compliance and Privacy Regulatory Risks
	Probable	Quality Control and After-sales Risks	Competitor Risk Risk of Profitability Fluctuations	Supply Chain Risks

Table 3.1 Risk MatrixSource: Own Elaboration

3.2.1 Economic Risk

As a global leader in the home appliance industry, economic fluctuations have a direct impact on Midea Group. After the impact of COVID-19, the global economic growth has slowed and consumer spending has declined, leading to a reduction in overall demand for the home appliance industry and more intense industry competition. Additionally, rising interest rates will increase corporate financing costs, weaken corporate profitability, and further intensify industry competition (World Bank, 2024).

At the same time, with the growing international market of Midea, fluctuations in the CNY exchange rate introduce additional uncertainties. The depreciation of the CNY will increase the cost of importing raw materials, while the appreciation may weaken the price advantage of the international market and reduce profitability. Moreover, geopolitical instability further influences global exchange rate fluctuations, posing additional challenges for multinational corporations in overseas trade.

3.2.2 Business Risk

3.2.2.1 Supply Chain Risks

The home appliance manufacturing industry is highly dependent on the global supply chain. For example, international political instability, environmental disasters, and logistics disruptions may lead to shortages of raw materials and cost increases, which significantly impact the supply chain. In addition, the global chip shortage has also introduced uncertainty to the production and operation of smart home appliances, further affecting the profitability and competitiveness of enterprises (NDRC, 2022).

3.2.2.2 Quality Control and After-sales Risks

The home appliance industry has strict requirements for product quality and safety. Especially in the context of the rapid development of smart home appliances, the probability of product failure and the difficulty of repair have increased significantly. In addition, the installation and after-sales service of home appliances directly affect market competitiveness. As the smart home appliance market sinks, whether convenient on-site installation and repair services can be provided has become a key factor affecting consumers' purchasing decisions.

3.2.3 Market Risk

3.2.3.1 Competitor Risk

Competitive brands in the home appliance industry are emerging in an endless stream. The revenue growth and innovation capacity of traditional categories are limited. Midea's categories are relatively single, and its new business lines have not yet formed large-scale production, which does not give it an advantage in the competition. Competitive brands such as Gree have an absolute advantage in air-conditioning appliances (Gree, 2024), and Haier has seized the mid-to-high-end market through its smart ecology (Haier, 2024). The layout of these brands poses a strong competitive threat to Midea.

3.2.3.2 Technology and Brand Risk

Midea's technological development and innovation in the field of home appliances need to be improved, but it still needs to seize the market share of smart home appliances to ensure a corresponding competitive advantage. Otherwise, Midea has a long history in brand and has formed its own brand loyal users, but there are still deficiencies in developing new brand users, which has also become a risk faced in the next step of market development (CICC, 2024).

3.2.4 Financial Risk

3.2.4.1 Operational Capacity Risk

Compared with other competitors in the industry, Midea has a lower inventory turnover rate and a higher inventory turnover day (Table 1.2). This shows that Midea still has problems in managing survival and cannot well predict revenue and inventory and balance the supply and demand of inventory, which leads to inventory backlogs and higher inventory storage costs.

3.2.4.2 Risk of Profitability Fluctuations

Midea's operating margin and net profit margin in 2015-2023 generally exceeded the industry average. However, it still has a large gap compared with Gree. At the same time, the stability of the profit ratio during this period is also lacking, which shows that Midea's cost control still needs to be improved, so as to increase Midea's profitability and reduce Midea's profit fluctuations.

3.2.5 Regulatory Risk

3.2.5.1 Environmental Policy Risks

The Chinese government has proposed a "dual carbon" policy, requiring manufacturing companies to improve energy efficiency and control emissions. Otherwise, they will face fines, suspension of production or being eliminated by the market. In the future, in response to environmental policies, Midea needs to further achieve energy conservation and emission reduction, reduce the pollution of the products produced to the environment, which can meet the industry standards.

3.2.5.2 Data Compliance and Privacy Regulatory Risks

Since Midea is transforming from traditional home appliances to smart home appliances, developing smart home appliance business will involve relevant data security risks. The "Personal Information Protection Law" and "Data Security Law" proposed by regulatory agencies require companies to reasonably protect consumers' personal information and personal privacy, otherwise they will be fined. Therefore, Midea needs to further improve its information system to help companies improve data protection and meet regulatory requirements.

3.2.5.3 Industry Access and Technology Licensing Risks

As one of the home appliance companies, Midea needs to obtain special certifications, production licenses, etc. when developing new technologies, which is closely related to regulatory policies. If the policy is updated, it will affect Midea's product design and market launch.

3.3 Conclusions

It is recommended to sell Midea's stock currently.

According to the valuation results, Midea's implied stock value is less than the stock price on December 31, 2024. This shows that Midea's stock is overvalued and not worth investing now. The reason for its overvaluation is mainly due to investors' uncertainty about the current market, and investors are rushing to buy leading companies in defensive industries. At the same time, the overall home appliance industry is currently in a sluggish and recession, mainly due to the low willingness of residents to consume and the downturn in the related real estate industry (Midea, 2024). Therefore, it is recommended to sell Midea's stock in the short term, but it can wait until the emotional impact disappears and the stock price returns to the real value level before investing.

According to the risks of investing in Midea, it is not suitable to invest in the short term. Midea has many existing risks. Investing in Midea is affected by various regulatory risks. It is necessary to consider the Chinese government's environmental protection policies, data security requirements and technology licensing regulations. In addition, Midea is transforming from traditional home appliances to smart home appliances, and the future situation is not particularly clear. At the same time, there are many home appliance brands in the industry, which also poses a great threat to Midea's development.

Therefore, from a valuation and risk perspective, selling Midea's stock is an option currently.



REFERENCES

- CICC Research Department. (2024). Home Appliance Industry Analysis Report. Retrieved from https://www.cicc.com
- CITIC Securities. (2025). Q1 2025 Research Report on Home Appliance Industry. Retrieved from https://www.citics.com
- Daikin Industries, Ltd. (2024). Daikin Industries, Ltd. Annual Report 2024. Retrieved from https://www.daikin.com
- Dyson Limited. (2023). Annual Report and Financial Statements for the Year Ended 31 December 2023. Retrieved from https://dysonfoundation.org/
- ECOVACS Robotics Co., Ltd. (2024). ECOVACS Robotics Co., Ltd. Annual Report 2024. Retrieved from https://www.ecovacs.com
- Euromonitor International. (2024). Global Household Appliances Market Report 2024. Retrieved from https://www.euromonitor.com
- Gree Electric Appliances Inc. (2024). 2024 Semi-Annual Report. Retrieved from https://www.gree.com
- Guotai Junan Securities. (2024). Midea Group Equity Research Report. Retrieved from https://www.gtja.com
- Haier Smart Home Co., Ltd. (2024). 2024 Semi-Annual Report. Retrieved from https://www.haier.com
- Hisense Group Co., Ltd. (2024). 2024 Semi-Annual Report. Retrieved from https://www.hisense.com
- International Monetary Fund (IMF). (2025). World Economic Outlook Update January 2025. Retrieved from https://www.imf.org/zh/Publications/WEO/Issues
- LG Electronics Inc. (2024). LG Electronics Inc. Annual Report 2024. Retrieved from https://www.lg.com
- Midea Group Co., Ltd. (2020). Midea Group Co., Ltd. Annual Report 2020. Retrieved from https://www.midea.com

REFERENCES (Cont.)

- Midea Group Co., Ltd. (2023). Midea Group Co., Ltd. Annual Report 2023. Retrieved from https://www.midea.com
- Midea Group Co., Ltd. (2024). Midea Group Co., Ltd. Annual Report 2024. Retrieved from https://www.midea.com
- National Bureau of Statistics of China. (2024). Gross Domestic Product (GDP) Statistics. Retrieved from https://www.stats.gov.cn
- National Development and Reform Commission (NDRC). (2022). Notice on promoting the stable development of the integrated circuit industry and supply chain. Retrieved from https://www.ndrc.gov.cn/fggz/gjhz/zywj
- Qianzhan Industry Research Institute. (2024). Overall development of China's home appliance industry from January to July 2024. Retrieved from https://bg.qianzhan.com/report
- Samsung Electronics Co., Ltd. (2024). Consolidated Financial Statements as of December 31, 2024 and 2023, and for the Years Then Ended. Retrieved from https://www.samsung.com/
- Statista. (2024). Home Appliances Statistics & Facts. Retrieved from https://www.statista.com/topics/1068/home-appliances/#topicOverview
- SWOT & PESTLE.com. (2023). Midea Group SWOT and PESTLE Analysis. S&P Global. Retrieved from https://www.swotandpestle.com/midea-group
- Sichuan Changhong Electric Co., Ltd. (2024). Sichuan Changhong Electric Co., Ltd. Annual Report 2024. Retrieved from https://www.changhong.com
- Vatti Corporation Ltd. (2024). Vatti Corporation Ltd. Annual Report 2024. Retrieved from https://www.vatti-china.com
- World Bank. (2024). Global Economic Prospects: June 2024. Retrieved from https://www.worldbank.org
- Xinhua News Agency. (2022). COVID-19 and Home Appliances. Retrieved from http://www.xinhuanet.com