



Midea Group's Financial Statement Analysis

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Abstract. Being a world-leading brand in the smart home appliances industry, it is crucial for us to have deep analysis of the company's business condition when making decisions on Midea. Using the financial statements of Midea in 2023, this study will conduct specific ratio tests on profitability, liquidity, asset operation efficiency, debt status, and capitalization level, among others. Firstly, net profit margin, inventory turnover, days' sales outstanding (DSO), Free Cash Flow/Total Debt, gross profit margin, P/E ratio, return on assets (ROA), can be calculated based on calculation formulas; then further conclusions such as revenue increases with control costs and improve net profit margin are made according to data trends: meanwhile due to long accounts receivable DSO time lengthening and low current rate declining, the overall corporate operation shows poor efficiency; furthermore although leverage ratio goes up owing to huge debts but supported by enough debt-free income from high TIE indicates relatively healthy default possibility; consequently proposing related investment strategy that buy more Midea share stock if holding diversified portfolio so as to maximize profit through investing into stable profitable leading companies; otherwise short selling at inappropriate P/E level trading market cyclically or hedging extreme risky portfolio structure also provides possible ways for investment choice.

Keywords: Midea Group; Financial Ratio Analysis; Profitability; Operational Efficiency; Investment Strategy.

1 Introduction

In the context of China's ongoing high-quality economic development and the intensification of market competition, the strategic role of financial analysis as a critical instrument for informed investment decision-making has become increasingly prominent. As a representative enterprise of China's advanced manufacturing sector, Midea Group has consistently attracted substantial attention from capital markets due to its robust market performance and forward-looking industrial deployment. The firm's financial reporting system functions not only as a fundamental medium for assessing operational

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B. Siuta-Tokarska et al. (eds.), *Proceedings of the 2025 3rd International Academic Conference on Management Innovation and Economic Development (MIED 2025)*, Advances in Economics, Business and Management Research 348,

https://doi.org/10.2991/978-94-6463-835-6_37

efficiency, financial stability, earnings quality, and sustainability, but also as a comprehensive analytical framework that underpins value-oriented investment decisions.

In this essay, through calculating and analyzing the financial ratios which based on the disclosed 2023 annual financial reports of Midea Group, the author use quantifiable data from its annual financial report released by the company to assess the operating capacity of the company, short term and long-term bearing capacity, profitability, development capability, etc., so as to make prudent investment suggestions.

A quantitative analytical approach is adopted in this study, utilizing ratio analysis based on financial data extracted from Midea Group's publicly disclosed 2023 annual financial statements. These financial metrics will facilitate a comprehensive assessment of operational efficiency, liquidity, solvency, profitability, and market valuation, ultimately supporting well-informed investment recommendations.

The results of our comprehensive financial ratio analysis should be helpful in providing relevant financial insights for corporate decision-makers and contributing to sounder investment recommendations tailored to individual needs.

2 Methodology

This study employs a quantitative analysis approach, utilizing financial ratio analysis to assess the financial status of Midea Group in 2023 and proposes investment recommendations in accordance with the findings. The research design is elaborated in the following section:

2.1 Data Collection

Primary Data from Midea's 2023 audited financial statements, sourced from the company's official website and stock exchange filings [1, 2, 3].

2.2 Ratio Selection and Calculation

Ratios selected for analysis can be summarized into four categories: profitability, operational efficiency, solvency, and valuation. The detailed introduction will be placed following.

2.2.1 Profitability.

Gross Margin This metric evaluates a firm's profitability from core operations through consideration of direct production costs, with a higher gross profit margin indicating enhanced pricing power or superior efficiency in controlling production expenses [4]. The formula of this ratio is as following. (Equation (1))

$$\text{Gross Margin} = [(\text{Revenue} - \text{COGS}) \div \text{Revenue}] \times 100\% \quad (1)$$

2.2.1.1 Net Profit Margin.

The metric indicates the income portion which is retained as net profit once all costs, such as operational expenses, interest payments, and tax obligations, have been subtracted; a higher ratio signifies greater overall efficiency in cost management and enhanced profitability [5]. The formula of this ratio is as following. (Equation (2))

$$\text{Net Profit Margin} = \left(\frac{\text{Net Income}}{\text{Revenue}} \right) \times 100\% \quad (2)$$

2.2.1.2 Return on Assets (ROA).

This metric assesses the effectiveness with which a corporate entity utilizes its assets to generate profits, an increased ROA indicates enhanced effectiveness in utilizing assets [6]. The formula of this ratio is as following. (Equation (3))

$$\text{Return on Assets} = \left(\frac{\text{Net Income}}{\text{Average Total Assets}} \right) \times 100\% \quad (3)$$

2.2.1.3 Earnings Per Share (EPS).

This statistic illustrates the profit attributed to each share of common stock that is currently in circulation, indicating that a greater Earnings Per Share (EPS) signifies enhanced profitability on a per-share level [7]. The formula of this ratio is as following. (Equation (4))

$$\text{Earnings Per Share} = \frac{\text{Net Income Attributable to Common Shareholders}}{\text{Weighted Average Shares Outstanding}} \quad (4)$$

2.2.2 Operational Efficiency.

2.2.2.1 Inventory Turnover.

This ratio evaluates how frequently a company cycles through its inventory within a given period, with a higher inventory turnover indicating enhanced operational efficiency, effective cost management, and improved profitability [8]. The formula of this ratio is as following. (Equation (5))

$$\text{Inventory Turnover} = \frac{\text{COGS}}{\text{Average Inventory}} \quad (5)$$

2.2.2.2 Days Sales Outstanding (DSO).

This metric denotes the average duration required to collect receivables from customers, wherein a lower Days Sales Outstanding (DSO) signifies accelerated cash conversion and reduced credit risk exposure [9]. The formula of this ratio is as following. (Equation (6))

$$\text{Days Sales Outstanding} = \left(\frac{\text{Average Accounts Receivable}}{\text{Revenue}} \right) \times 365 \quad (6)$$

2.2.2.3 Total Asset Turnover.

This ratio evaluates a firm's effectiveness in generating revenue from its total assets, with higher values signifying superior asset productivity [10]. The formula of this ratio is as following. (Equation (7))

$$\text{Total Asset Turnover} = \frac{\text{Revenue}}{\text{Average Total Assets}} \quad (7)$$

2.2.3 Solvency.

2.2.3.1 Current Ratio.

This metric evaluates a company's capability to sustain immediate liquidity and meet its short-term obligations, indicating sufficient liquidity levels when values are above 1, thereby allowing for the coverage of immediate financial responsibilities. The formula of this ratio is as following. (Equation (8))

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}} \quad (8)$$

2.2.3.2 Debt-to-Asset Ratio.

This metric indicates the debt component of a company's capital structure, with a lower figure signifying diminished dependence on debt financing and a lower level of financial risk, although a moderate ratio may also suggest strategic utilization of leverage for growth opportunities [11]. The formula of this ratio is as following. (Equation (9))

$$\text{Debt - to - Asset Ratio} = \left(\frac{\text{Total Liabilities}}{\text{Total Assets}} \right) \times 100\% \quad (9)$$

2.2.3.3 Interest Coverage Ratio.

This metric assesses a firm's capacity to cover its interest obligations through operating earnings, with a value above 2 typically signaling sufficient financial stability, whereas a ratio below 1 denotes inadequate coverage and potential financial distress. The formula of this ratio is as following [12]. (Equation (10))

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest Expense}} \quad (10)$$

2.2.3.4 Free Cash Flow to Total Debt.

This ratio evaluates the firm's capacity to service its debt obligations through free cash flow, with a higher value indicating greater capability in debt repayment. The formula of this ratio is as following. (Equation (11))

$$\text{Free Cash Flow to Total Debt} = \frac{\text{FCF}}{\text{Total Debt}} \quad (11)$$

2.2.4 Cash Flow & Valuation.

2.2.4.1 Net Cash Ratio.

This ratio assesses earnings quality by comparing cash flow to net profit, where values exceeding 1 are preferable as they indicate earnings supported by actual cash inflows, thereby reducing susceptibility to accounting manipulation. The formula of this ratio is as following. (Equation (12))

$$\text{Net cash ratio} = \frac{\text{Net Cash from Operating Activities}}{\text{Net Income}} \quad (12)$$

2.2.4.2 Free Cash Flow Margin.

This ratio indicates the proportion of revenue converted into free cash flow, with higher values reflecting greater efficiency in operational cash generation [13]. The formula of this ratio is as following. (Equation (13))

$$\text{Free Cash Flow Margin} = \left(\frac{\text{FCF}}{\text{Revenue}} \right) \times 100\% \quad (13)$$

2.2.4.3 P/E Ratio.

This ratio evaluates market expectations regarding a company's future earnings growth relative to its current earnings, where a low price-to-earnings (P/E) ratio may suggest undervaluation or modest growth projections, while a high ratio indicates elevated growth expectations or possible overvaluation; thus, comparisons with industry averages are essential for meaningful analysis. The formula of this ratio is as following [14]. (Equation (14))

$$\text{P/E ratio} = \frac{\text{Market Price perShare}}{\text{EPS}} \quad (14)$$

2.3 Analytical Techniques

Through longitudinal analysis, this study compares Midea Group's 2023 financial ratios with those of the past two years (2021–2022) to identify trend variations.

2.4 Research Limitation

The study is subject to the following limitations: financial statement data may exhibit timeliness lags, certain industry benchmark data may be updated infrequently, and

non-financial factors (e.g., management strategies policy environment) are not incorporated. It is recommended that subsequent research integrate qualitative analysis to address these gaps.

3 Analysis and Discussion

3.1 Company Profile

Established in 1968 and based in Foshan, Guangdong, Midea Group has emerged as a global leader in the home appliance sector, propelled by technological innovation. Midea's business spans eight major areas, including smart home devices, industrial robots, and building technology, with a presence in over 160 countries worldwide. As a key player in the Chinese home appliance market, Midea owns renowned brands such as Midea, Little Swan, and COLMO. In recent years, through the acquisition of the German company Kuka, Midea has significantly enhanced its smart manufacturing capabilities. Its industrial internet platform, Midea MECO, has propelled its digital transformation. Moreover, Midea's commitment to green technology and low-carbon solutions is reflected in its dual listing on the Shenzhen and Hong Kong stock exchanges and its inclusion in the Fortune Global 500 for five consecutive years.

3.2 Ration Analysis

Table 1. Profitability ratios

	2021	2022	2023
Net Profit Margin	8.50%	8.67%	9.07%
ROA	7.76%	7.36%	7.43%
Gross Margin	91.61%	91.65%	90.62%
EPS	4.17	4.34	4.93

Midea's profitability ratios from 2021 to 2023 demonstrate stable and continuously improving financial performance, as shown in Table 1. The net profit margin steadily increased, reaching 9.07% in 2023, indicating improvements in cost control or revenue efficiency. The Return on Assets (ROA) exhibited slight fluctuations but remained stable, while the gross profit margin remained above 90%, despite a slight decline in 2023. Earnings per share increased from 4.17 to 4.93, reflecting an increase in shareholder value.

Table 2. Efficiency ratios

	2021	2022	2023
Total Asset Turnover	91.20%	84.87%	81.89%
Inventory Turnover	74.41%	62.45%	74.70%
DSO	25.47	28.06	29.98

Midea's total asset turnover ratio has continuously declined from 91.20% in 2021 to 81.89% in 2023, reflecting a decrease in the efficiency of converting assets into revenue, as shown in the Table 2. This trend may be attributed to slower sales growth, over-investment in assets, or underutilization of resources.

The inventory turnover ratio experienced fluctuations, dropping to 62.45% in 2022 before rebounding to 74.70% in 2023. The decline in 2022 suggests potential supply chain disruptions or poor inventory management, while the recovery in 2023 highlights improvements in inventory optimization or stronger demand consistency.

The days sales outstanding (DSO) steadily increased from 25.47 days in 2021 to 29.98 days in 2023, indicating a longer collection period for receivables. This trend may signal a more lenient credit policy, weaker customer payment capabilities, or inefficiencies in the accounts receivable process, thus posing a risk to liquidity.

Table 3. Liquidity ratios

	2021	2022	2023
Current Ratio	111.6%	126.5%	111.9%
Debt to Asset Ratio	65.25%	64.05%	64.14%
Interest Coverage Ratio	25.84	19.95	15.34
Free Cash Flow to Total Debt	-3.15	-1.46	-1.74

Midea's current ratio has fluctuated over the three years, with a slight increase in 2022 (126.5%) compared to 2021 (111.6%), as shown in the Table 3. However, it has decreased in 2023 (111.9%), suggesting a modest weakening in the short-term liquidity position of the company, although the metric still exceeds the standard benchmark of 100%.

The debt to Asset Ratio has decreased slightly from 65.246% in 2021 to 64.138% in 2023. While this indicates a reduction in the company's reliance on debt, it remains relatively high, suggesting that the company is still significantly leveraged.

A notable downward trend is observed in the interest coverage ratio, which declined from 25.837 in 2021 to 15.343 in 2023. This drop reflects a decreased ability to pay interest expenditure, which may indicate a potential concern for the company's financial health in the future if this trend continues.

Free Cash Flow to Total Debt remains negative across the three years, and the values have worsened from -3.150 in 2021 to -1.738 in 2023. A negative free cash flow to total debt ratio reflects insufficient internal ready money generation to service the company's outstanding debt obligations, which could raise concerns about its financial sustainability.

Table 4. Cash flow ratios

	2021	2022	2023
Net cash ratio	29.838%	19.195%	28.997%
Free Cash Flow Margin	-23.18%	-23.79	-25.68%
P/E ratio	15.97	10.67	10.47

The net cash ratio has decreased from 29.838% in 2021 to 28.997% in 2023, as shown by the Table 4. Despite this slight decline, the company still maintains a relatively healthy cash position, as the ratio remains positive and indicates its capacity to meet short-term obligations using available cash resources.

The free cash flow margin has been negative over the three years, with a slight worsening from -23.184% in 2021 to -25.675% in 2023. This negative value indicates that the company continues to struggle with generating positive cash flow after capital expenditures, which may limit its ability to fund future growth or reduce debt.

The P/E ratio has decreased from 15.97 in 2021 to 10.47 in 2023. This decline suggests that the company's stock has become less expensive relative to its earnings, which may indicate lower market expectations or reduced profitability. The decreasing trend in the P/E ratio could also reflect investor concerns about the projected growth in the company's earnings.

4 Conclusion

With the continuous change of China's economic situation and market competition, financial analysis is essential for making informed investment decisions. As one of the world's leading smart manufacturing enterprises and home appliance manufacturers, it is very important for Midea Group to maintain good financial strength and flexible business operations in order to compete in the market. This essay aims to use various ratio analysis methods to analyze Midea Group's financial status in 2023 in depth from different aspects such as profitability, operating efficiency, short term and long term solvency, and market evaluation, so as to provide decision support and valuable reference for investors and relevant parties according to the results.

A quantitative framework was employed, utilizing 14 key financial ratios extracted from Midea Group's audited financial statements for 2023. A longitudinal analysis spanning 2021 - 2023 was conducted to track trends and changes. The ratios were categorized into four dimensions: profitability, operational efficiency, solvency, and cash flow/valuation.

Midea Group's financial performance from 2021 to 2023 demonstrates a mix of stability and challenges. The company has shown consistent profitability, improving its net profit margin and EPS, reflecting strong revenue growth and cost management. However, operational efficiency has slightly declined, as evidenced by a decreased total asset turnover ratio and increased days of outstanding sales. This could indicate inefficiencies in asset utilization and collection processes.

Liquidity remains stable, with the current ratio staying above the industry benchmark. However, the decline in the ICR and negative free cash flow to the total debt ratio give rise to concerns regarding the capacity of company to cover the financial obligations without external support. The company's valuation reflects investor apprehension, as seen in the declining P/E ratio, suggesting lower confidence in future earnings growth. Although Midea maintains a robust market position and profitability, addressing operational inefficiencies and liquidity challenges is essential to ensure long-term financial stability and sustain investor confidence.

This study makes several significant contributions to financial analysis and investment strategy formulation. First, it establishes a multidimensional and integrated financial evaluation framework. By synthesizing profitability, operational efficiency,

liquidity, solvency, and valuation indicators into a unified analytical approach, the study provides a systematic method for assessing corporate financial health. Through the application of 14 key financial ratios—including Days Sales Outstanding (DSO), Free Cash Flow to Debt Ratio, Return on Assets (ROA), and the P/E Ratio—this research facilitates a detailed evaluation of Midea Group's performance across multiple dimensions. This framework identifies critical trends and is a replicable model for analyzing other companies within capital-intensive industries.

Second, this study bridges the gap between theoretical financial analysis and actual strategic investments. Matching financials with various schemes involving increasing stock holdings for a Long-term perspective or making tactical markets entries for Short-term holders provides insight that would actually be taken by managers operating in varied risk modes. Highlighting Midea's undervalued P/E Ratio along with its impact on cyclic returns indicates how findings from ratio application can actually serve as guidance in buy/sell decisions made on targeted equity issues.

While powerful decision tools, it concedes limitations mostly surrounding nonfinancial considerations and lack of horizontal industrial comparisons hence recommending qualitative studies alongside in subsequent phases.

In summary, using real-world financial statements, we offer better knowledge into analytical theory concerning ratios through evidence-based conclusions regarding diagnostic abilities and their use for strategic positioning and benchmarking; useful insights especially within China's dynamic marketing conditions emphasize increased degrees of both physical performance effectiveness coupled with financial sustenance among participant ventures engaged in product manufacturing sectors seeking prolonged survivability amid unceasing competitive pressure scenarios.

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