

Evaluation of Corporate Financial Performance from an EVA Perspective: A Case Study of Company C

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Abstract: This study evaluates the financial performance of Company C, a leading Chinese home appliance manufacturer, using the Economic Value Added (EVA) framework to address limitations of traditional accounting metrics. By calculating key EVA components—Net Operating Profit After Tax (NOPAT), Total Capital (TC), and Weighted Average Cost of Capital (WACC)—from 2018 to 2023, the research reveals significant discrepancies between EVA and conventional indicators (ROA, ROE, net profit growth). Despite rising accounting profits, Company C's EVA remains negative in most years, indicating value destruction due to unaccounted equity capital costs and inefficient resource allocation. Core issues include imbalanced capital structure, high R&D investment risks, and suboptimal cost control. The analysis highlights EVA's superiority in capturing true economic value compared to profit-centric metrics. Recommendations focus on optimizing debt-equity ratios, enhancing R&D efficiency, strengthening cost management, and aligning strategies with market trends to foster sustainable value creation. This research contributes to refining performance evaluation systems in the home appliance industry and beyond.

1. Introduction

1.1. Background of the study

China's home appliance industry is facing unprecedented challenges as consumer demands evolve and competition intensifies. Rising living standards are driving demand for smart, energy-efficient and environmentally friendly products, while industry players are competing fiercely through technological innovation and cost control. However, traditional accounting metrics such as ROA and ROE do not take into account the cost of equity capital, incentivising short-term profit maximisation over sustainable value creation. EVA calculates economic profit by subtracting the total cost of capital from operating profit, thereby providing a performance metric that aligns management decisions with shareholder interests.

As a leading home appliance manufacturer, Company C's financial performance under EVA analysis provides critical insights into industry-wide challenges. This study assesses Company C's value creation dynamics from 2018-2023, highlighting EVA's ability to uncover hidden inefficiencies in capital allocation and R&D investment. By addressing gaps in traditional

valuations, this research contributes practical strategies for optimising financial performance and fostering long-term competitiveness in the home appliance sector.

1.2. Literature review

Domestic and international studies consistently recognize the central role of EVA in correcting the shortcomings of traditional performance evaluation. Stern (2019)^[1] points out that EVA inhibits managers' short-term behaviors by reflecting real economic profits, and Behera (2020)^[2] verifies that it is more applicable to the valuation of medium-sized enterprises. Domestic scholars emphasize that EVA addresses the omission of equity capital costs (Wei, 2018)^[3] and improves capital allocation transparency (Wang,2019)^[4]. Empirical studies show that EVA improves investment efficiency (Deng, 2021)^[5] and reveals the real value growth of enterprises by eliminating accounting manipulation items (Liu ,2020)^[6].

In summary, existing studies generally agree that EVA has advantages in overcoming the myopia of traditional performance evaluation and enhancing the scientific nature of enterprise value assessment, and its application scenarios and suitability have been expanded at the theoretical and empirical levels. Future research can further combine the characteristics of different industries to deepen the dynamic adjustment mechanism and localised application path of the EVA model.

2. Assessment of Company C's financial performance

2.1. Company C's performance from an EVA perspective

2.1.1. Calculation of net operating profit after tax (NOPAT) and analysis of indicators

Based on the formula, the process of calculating NOPAT can be derived from Table 1.

Table 1 Company C's net operating profit after tax 2018-2023

Unit: ¥100 million

vintages	2018	2019	2020	2021	2022	2023
Net profit	6.61	3.34	2.35	6.75	11.34	17.98
Operating profit	9.12	6.56	4.22	11.74	15.19	20.25
Income tax expense	2.57	3.31	2.07	2.13	3.13	2.41
Interest expense	6.59	9.04	5.76	3.65	3.85	4.13
Impairment of assets Losses	3.58	-3.03	-5.40	-4.34	-3.71	-5.90
Development expenditure	5.53	4.65	4.64	4.79	3.95	4.49
Increase in deferred tax liabilities	0.26	0.01	0.12	0.06	0.27	1.34
Increase in deferred tax assets	0.56	-0.10	0.66	0.31	0.38	1.48
Corporate income tax rate (%)	15	15	15	15	15	15
Net operating profit after tax	19.59	12.43	5.86	12.84	15.42	19.73

As can be seen from Table 1, Company C's net operating profit after tax, on the contrary, outperforms net profit and operating profit, appearing to be contrary to the accounting profit situation is due to the fact that the calculation of NOPAT, adjusted for the capitalization of development expenditures. On the one hand, the development of enterprises have to invest a lot of R & D funds, and R & D funds in the short term does not bring immediate benefits to the enterprise, increased costs, as for the future whether it will be turned into corporate capital for the enterprise to help, the situation is unpredictable. On the other hand, the high investment of R&D capital does not necessarily bring high returns, a large amount of R&D capital investment to the enterprise's profitability greatly reduced, adding a lot of uncertainty factors. On the judgment of NOPAT index, it brings C company a plus item for financial performance evaluation. This is not consistent with the

results reflected in the profit item of the traditional method.

2.1.2. Total Capital(TC)Calculation and Indicator Analysis

Gross invested capital accurately quantifies the scale of capital on which a business operates, covering the core elements of equity capital and interest-bearing liabilities.

Table 2 TC of Company C, 2018-2023

Unit: ¥100 million

vintages	2018	2019	2020	2021	2022	2023
Total owner's equity	214.24	211.36	211.97	218.40	228.37	240.60
Impairment of assets Provisions	0.00	0.00	0.00	0.00	0.00	0.00
Construction in progress Net	8.34	10.19	2.62	3.76	2.41	2.08
Deferred income tax liabilities	0.53	0.55	0.66	0.72	0.98	2.32
Deferred income tax assets	2.25	2.15	2.81	3.12	3.51	4.99
Short-term borrowings	157.42	173.19	164.03	130.65	144.27	124.75
Financial liabilities for trading	1.71	0.00	0.00	0.00	0.00	0.00
Non-current liabilities due within one year	8.20	0.19	9.41	16.12	20.51	24.24
Long-term borrowings	1.02	11.66	16.62	17.70	15.52	31.02
Bonds payable	0.00	0.00	0.00	0.00	0.00	0.00
Long-term payables	0.13	0.27	1.43	0.57	0.56	0.56
Capital investment	372.66	384.87	398.69	377.27	404.30	416.41

As shown in Table 2, the total amount of capital invested in operations has a steady upward trend in Company C. The capital size reaches as much as \$41.6 billion in 2023, which proves that the company has further configured its capital structure and increased its financial leverage. Obviously, this expands the risk on the financial side while increasing the capital investment.

2.1.3. Calculation of the weighted average cost of capital ratio and analysis of related indicators

Weighted average cost of capital (WACC) reflects the average cost of acquiring various types of capital, and its estimation needs to accurately determine the cost of equity capital, the cost of debt capital and the weights of the two. In calculating WACC, the income tax rate is 15%; the cost of debt capital uses the bank's 1-year short-term loan rate; the risk-free rate of return uses the bank's 1-year deposit rate; β uses the BETA value weighted by the market value of Shanghai and Shenzhen stocks in circulation during 250 trading days; and the market risk premium is calculated by interpolating the GDP growth rate and the risk-free rate of return.

Table 3 Weighted average cost of capital for Company C, 2014-2023

Unit: ¥100 million

vintages	2018	2019	2020	2021	2022	2023
Debt capital	500.81	528.54	573.91	575.60	627.01	703.40
Cost of equity	106.64	134.33	133.87	152.80	121.87	244.20
Cost of bond capital (%)	4.35	4.35	4.35	4.35	4.35	4.35
Risk-free rate of return (%)	1.50	1.50	1.50	1.50	1.65	1.45
β	1.02	1.25	1.20	0.61	0.99	1.20
GDP (%)	6.75	5.95	2.24	8.45	2.95	5.25
Weighted average cost of capital (%)	4.25	4.38	3.45	4.13	3.57	4.29

Table 3 shows that the cost of equity capital ratio varies from year to year, but in general there is a downward trend, and a closer look reveals that this is related to the slowdown in GDP growth. At the same time, the WACC of Company C also has a downward trend, and the β coefficient is

related to the degree of attention to the company's stock. The more attention the stock receives from the market and the more volatile it is, the higher the value of the β coefficient; if $\beta=1$, it means that the volatility is similar to the overall average. Risk is also at the average.

2.1.4. Calculation of the EVA value of Company C and analysis of related indicators

All relevant indicators have been derived in the previous section and the EVA value of Company C is shown in Table 4. From 2018 to 2023, the EVA value of Company C is negative, indicating that the company has not been able to generate positive earnings and value for its shareholders on the basis of compensating for the cost of equity, but on the contrary has been destroying the value of the company. This is very different from what is reflected in the accounting profit on the balance sheet. It can be seen that the EVA calculation system can find the problem at a deeper level than the traditional financial index system.

Table 4 Economic Value Added (EVA) for Company C 2018-2023

Unit: ¥100 million

vintages	2018	2019	2020	2021	2022	2023
NOPAT	19.59	12.43	5.86	12.84	15.42	19.73
TC	372.66	384.87	398.69	377.27	404.30	416.41
Weighted average cost of capital (%)	4.25	4.38	3.45	4.13	3.57	4.29
EVA (billion)	3.75	-4.44	-7.89	-2.72	0.96	1.88

2.2. Comparison between EVA and traditional performance evaluation indicators

In order to evaluate the company's financial performance level more comprehensively, several indicators related to EVA, EVA return rate, EVA growth rate, and sales EVA rate are introduced and analyzed in comparison with the relevant traditional indicators, with the purpose of making the financial performance level of Company C to be comprehensively and realistically presented.

2.2.1. Comparative Analysis of EVA Return with ROA and ROE

ROA is the ratio of net profit to average total assets and ROE is the ratio of profit after tax to net assets, the higher the ROE, the more efficient the use of capital and the higher the return to shareholders. There is a correlation between the net profit margin on total assets and the return on net assets. Generally speaking, the higher the net profit margin on total assets are, the higher the return on net assets are. However, the difference between the two depends on the enterprise's debt level.

The EVA ratio compares EVA to the amount of capital employed to reflect how efficiently the capital of the company is being used. This indicator helps corporate decision makers to understand the economic value added created per unit of capital, so as to better optimize resource allocation and enhance operational efficiency.

From Figure 1, we can see that ROE is at a low level in 2020, and then rises sharply in 2021, with overall fluctuations, but the overall trend is rising. ROA is basically maintained between 0%-2%, and rises slightly in 2020-2023, with overall relatively stable fluctuations less than ROE. EVA returns are at their lowest point in 2020, with overall fluctuations, but most of the years are negative. EVA return is at its lowest point in 2020, the overall fluctuation is rising, but most of the years are negative.

To summarize, ROE and ROA are on the rise, while EVA return rate rises slowly and remains at a low level, which means that enterprises have not effectively controlled the cost of capital or

improved the efficiency of capital use while improving profitability. Enterprises need to further optimize the capital structure, reduce the cost of capital, or improve the operational efficiency and profitability of assets to enhance EVA return and truly create value for shareholders.

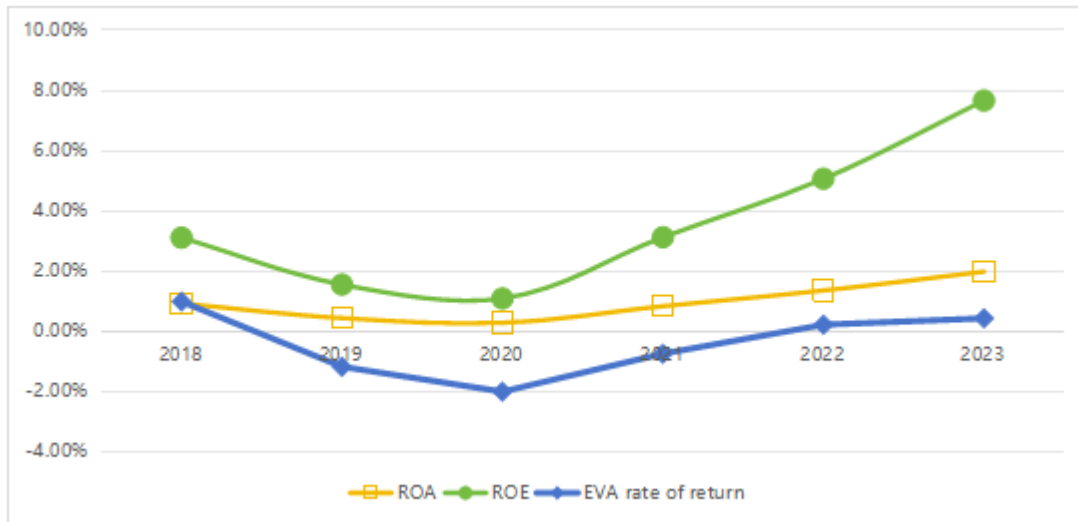


Figure 1 C Company ROA, ROE, EVA Returns Change 2018-2023

2.2.2. Comparative Analysis of EVA Growth Rate and Net Profit Growth Rate

The net profit growth rate reflects the growth of the company in terms of traditional accounting profit. Comparing the EVA growth rate with the net profit growth rate shows whether the company's growth in value creation has kept pace with the growth in net profit after taking into account the cost of capital. If the net profit growth rate is high while the EVA growth rate is low or even negative, this may mean that although the company's profit is increasing, the cost of capital is growing faster, or that the efficiency of the use of assets has not been effectively improved and the quality of the company's profit is not high.

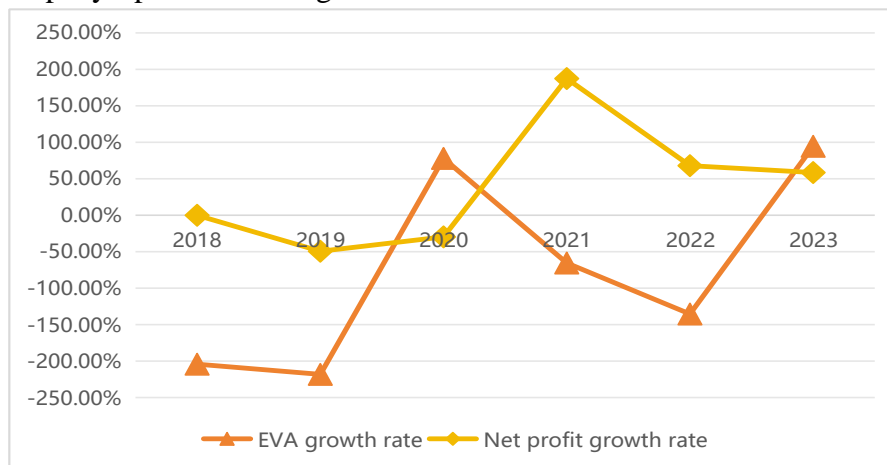


Figure 2 C's Net Profit Growth Rate and EVA Growth Rate Change 2018-2023

As shown in Figure 2, the growth rate of net profit increases significantly while the growth rate of EVA decreases, which indicates that although the net profit of the enterprise is increasing, the increased profit fails to cover the rise in the cost of capital, or the expansion of the enterprise's asset scale does not bring the corresponding value appreciation, resulting in the lack of EVA growth. The fluctuation of net profit growth rate is significantly larger than EVA growth rate. This indicates that

net profit is more likely to be affected by some short-term factors, such as one-time gains, non-recurring gains and losses, and short-term market fluctuations, etc., whereas the EVA growth rate is relatively more reflective of the stability and sustainability of a company's long-term value-creation ability. High fluctuations in net profit may bring greater uncertainty to investors, while fluctuations in EVA growth rate are more revealing of the problems and challenges in value management.

On the whole, enterprises need to further strengthen value management and improve the efficiency of capital use in order to achieve sustainable value creation and maximize shareholders' interests.

3. Suggestions for improving Company C's financial performance

3.1. Optimisation of capital structure

3.1.1. Rationalisation of debt ratios

Based on the current financial situation of Company C, there is an urgent need to optimise the capital structure in order to achieve a better balance between risk and return.

To achieve this goal, Company C can take the following path: on the one hand, it can moderately carry out equity financing and take full advantage of the capital market. Since the company has accumulated a number of core technologies in the field of smart home appliances and has a broad market perspective, it can attract strategic investors through the issuance of new shares, which not only enriches the equity capital but also brings in external high-quality resources to support industrial upgrading.

On the other hand, debt repayment is being carried out in a flexible manner. We have sorted out the existing high-interest debt and negotiated with creditors to replace some short-term high-interest loans with long-term low-interest bonds. By issuing long-term bonds at a lower cost, we can save considerable interest expense each year, reduce the pressure of debt repayment, optimise cash flow, ensure the stability of the capital chain and lay a solid foundation for long-term development.

3.1.2. Reducing the cost of capital

First, company C should strengthen communication and transparency with investors by holding regular online and offline investor exchange meetings, explaining in detail the strategic layout of the company, the progress of technological research and development, and the effectiveness of market expansion to reduce information asymmetry, thereby attracting more long-term capital inflows, stabilising the share price, and creating a good market environment for equity financing.

Second, expanding diversified financing channels, actively exploring the possibility of listing on emerging boards such as the Science and Innovation Board and the Growth Enterprise Market, establishing special financing platforms for smart chip R&D and new energy home appliance projects, accurately docking with investors, and reducing the cost of equity financing.

Third, strategies to reduce the cost of debt financing are equally important. Efforts should be made to optimise one's credit rating, standardise financial management and maintain a good debt servicing record, and rely on credit upgrading to obtain low-interest bonds and loans, so as to significantly reduce the cost of debt financing.

3.2. Optimise internal management

3.2.1. Enhanced cost management

Identify the cost drivers of each link in the value chain using job costing methodology,

implement targeted optimisation strategies, achieve collaborative control of costs along the entire chain and strengthen the company's competitiveness.

In R&D, accurate R&D planning: the company should establish a project evaluation system, utilize big data and market research to align R&D direction with market demand, avoid blind investment, and improve capital efficiency; in procurement, optimise supply chain management: expand domestic high-quality suppliers, sign long-term contracts and joint R&D to enhance bargaining power; balance reliance on international suppliers to reduce cost risks caused by technology monopoly; in production, implement lean production. Lean production: optimise the layout and automation level of production lines to reduce redundant operations; strengthen quality control to reduce the scrap rate, complemented by staff skills training to improve efficiency and compress the cost per unit of product; in sales and after-sales, precise marketing and channel integration: optimise advertising based on consumer preference data, integrate online and offline channels to reduce conflict costs; in an efficient after-sales network, rationally deploy service bases, optimise parts inventory management and balance service quality. Optimise parts inventory management and balance service quality and cost.

3.2.2.Strengthening the science of strategic management and decision making

The establishment of a sound strategic management system is key to improving the performance of Company C. A dedicated strategic planning department should be set up to collect and analyse internal and external information, forecast industry trends and formulate long-term development plans for the company. External think tanks, such as industry experts and consulting organisations, should be introduced to regularly evaluate and optimise the company's strategy to ensure that the strategic direction is correct.

In the strategic decision-making process, it is crucial to strengthen market research. A thorough understanding of changes in consumer demand, competitive dynamics and technology development trends provides an accurate basis for decision-making. For example, in the field of smart home appliances, through big data analysis of consumer preference for smart features, habits and potential demand, combined with the competitive situation in the market, reasonable planning of product development direction and promotion strategy, to avoid blindly following the wind investment, improve the scientific and forward-looking decision-making, so that corporate strategy closely match the market demand, seize the development opportunity.

3.2.3.Improving R&D and innovation investment and efficiency

Company C should strengthen the strategy of R&D investment: ensure that the proportion of R&D investment is increased year by year, focus on core technology research such as intelligent chips and operating systems, and reduce fragmented investment; deepen the cooperation between industry, academia and research, and build joint laboratories with universities to accelerate the transformation of technological achievements; implement the dual-track incentives of “material + spiritual”, set up an innovation fund and optimize the promotion channel to stimulate the effectiveness of R&D teams, build an efficient innovation system, and enhance the technological barriers of the products. The company has also implemented “material + spiritual” dual-track incentives, set up innovation funds and optimized promotion channels to stimulate the effectiveness of the R&D team, build an efficient innovation system and enhance the technological barriers of products.

3.3. Addressing external challenges

3.3.1. Flexible adaptation of competitive strategy

In the face of fierce competition, Company C needs to break out through differentiated strategies: focusing on the optimization of intelligent interactive functions and the integration of smart home ecosystems to create scenario-based smart home appliances; adopting the “data-driven + omni-channel integration” marketing model, precisely reaching users through live broadcasting/social communities online, and constructing an immersive experience scenario to enhance conversion offline; and reinforcing the communication of brand value to create a technologically advanced and user-oriented brand image to consolidate its position in the market with innovative products and marketing modes. Company C should strengthen brand value communication, shape a brand image characterized by technological leadership and user-centricity, and consolidate its market position through innovative products and marketing models.

3.3.2. Active response to macroeconomic policies

Company C should seize the opportunity of the national “dual-carbon” policy to accelerate the layout of new energy and green home appliances, research and development of energy-saving and efficient new energy home appliances, which not only fits the policy guidance but also opens up new space for growth. At the same time, we need to establish a policy response mechanism, take the initiative to dock with government departments, accurately declare industrial support projects, strive for funding and tax incentives, alleviate the pressure on R&D and production funds, accelerate technological upgrading and industrial transformation, and strengthen financial performance and industry position.

4. Conclusion

Based on the EVA perspective, this study analyses the corporate financial performance of Company C. By calculating the EVA indicators of Company C for the last ten years, it provides a clear insight into the value creation trajectory of the company in its past development. Contrary to traditional performance indicators, some years have negative EVA values despite substantial net profits, which warns that the company has not brought substantial wealth creation to shareholders, and the root cause is the neglect of the cost of equity capital and the blind pursuit of scale and book profits, which is caught in the predicament of value destruction. An in-depth study of the causes of EVA fluctuations in different years is closely related to the wave of change in the home appliance industry and the company's own strategic choices.

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