

Hisense Visual Technology Financial Analysis Based on Harvard Analytical Framework

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Abstract: China's manufacturing industry is in the stage of high-quality development. For the innovation of service trade development mechanism, the development of digital trade, and accelerating the construction of trade power, black home appliances industry is facing a grim development prospect background. Therefore, the financial analysis of Hisense Visual Technology, such as profitability, operating capacity and development capacity from 2019 to 2023 is carried out, and the Harvard analysis framework is used to increase the non-financial data analysis of strategic, financial and prospect dimensions to comprehensively reflect the overall business situation and development trend of Hisense Visual Technology. And some suggestions are put forward for the development of Hisense Visual Technology.

Keywords: Harvard Analytical Framework; Financial analysis; Hisense Visual Technology

1. Introduction

As China's economy enters a stage of high-quality development, competition in the consumer market is fierce, and the decline of the real estate industry has led to a slowdown in the development of the home appliance industry and a sluggish market environment. In July 2023, the National Development and Reform Commission issued the "Notice on Restoring and Expanding Consumption" to promote household decoration consumption and encourage the integration of indoor intelligent assembly. RUNTO predicts that the global laser display product shipments in 2024 will be 2.402 million units, an increase of 30.5%. The promulgation of policies and market expectations provide a broad space and opportunities for the future development of the display product industry. Hisense Visual Technology adheres to the globalization strategy, utilizes the advantages of products and technologies, and continuously promotes the development of the laser display industry, expanding the market space, and having a strong development trend. Therefore, it is particularly important for Hisense Visual Technology to use data analysis to quickly adjust its strategy.

Harvard Analysis Framework, established by Palepu et al., is a comprehensive analysis tool that integrates strategy and finance. It is more mature to use Harvard Analysis Framework for financial analysis because it can comprehensively understand the current situation of enterprise operation. Therefore, Hisense Visual Technology is selected as the research object, and the Harvard Analysis Framework is used to conduct financial analysis on it, so as to find out its advantages and whether it can be improved, to help Hisense Visual Technology make more scientific and reasonable strategies and decisions.

2. The Overview of Hisense Visual Technology

2.1 Company profile

Hisense Video Technology Co., LTD. (Hisense Visual Technology for short) was established in 1997 and is located in Qingdao, Shandong Province. Now it mainly engaged in display upstream and downstream industry chain products research, development, production and sales. Hisense Visual Technology, formerly known as Qingdao No. 2 Radio Factory, was established in 1969. It was listed on the Shanghai Stock Exchange in April 1997. In the course of development, Hisense Visual Technology follows the national opening policy, implements the improvement of scientific and technological innovation level and good financial strategy, and has leading products and sound financial system, occupying the leading position in China's color TV industry.

2.2 The commercial layout of Hisense Visual Technology

Hisense Visual Technology has a number of R & D centers, adhere to technological innovation as the driving force. It has a strong R & D capability, industry-leading technology and products, and it is committed to providing customers with high quality, personalized products and services. At the same time, Hisense Visual Technology's sound financial system bears less debt, which can adapt to the changing market environment while steadily improving the business capacity and achieving long-term development. However, due to the global economic downturn, the fierce competition in the market and the continuous adoption of new technologies and the introduction of new products by industry competitors, in order to maintain the continuous growth of customer advantages, it must continue to introduce innovative and cost-effective products. This means that Hisense Visual Technology in the future must improve internal processes, maintain stable customer resources, improve product competitiveness, further promoting the comprehensive upgrade of Hisense brand in the global field.

3. Financial analysis based on Harvard Analytical framework

3.1 Strategic analysis

SWOT analysis will be adopted in this part to analyze Hisense Visual Technology from four perspectives of corporate strengths, weaknesses, opportunities and threats ^[1].

3.1.1 Strengths

Hisense Visual Technology has a balanced global market and strong brand competitiveness. In 2023, the sales of smart display terminals, the market share of Hisense TV global shipments, and the retail sales in Chinese mainland all increased year-on-year. As a leading enterprise in China, it has firmly promoted high-end large-screen upgrading, upheld the "people-oriented technology", improved the technical level of products, and continued to promote the green and healthy development of the industry. Hisense Visual Technology is around Hisense, Toshiba, Vidda three brands. It implements independence, collaborative hierarchical management mechanism to meet the differentiated needs of different groups of users, taking laser display horizontal consolidation development as the base, to promote the vertical integration of the chip industry extension at the same time to enhance the basic AI capabilities to achieve the global development of independent brands.

3.1.2 Weaknesses

From an industry point of view, home appliances do not have traditional alternatives, the so-called substitutes are from their internal technology to improve the innovation of new products. Therefore, enterprises need to increase research and development investment, improve product technology level, update and iterate new products to improve their product competitiveness. Secondly, Hisense Visual Technology's main technology is laser. Due to the high price of Laser TV, the current penetration rate is low. Since its demand rigidity is not comparable to normal laser type, the future market space is limited, resulting in Hisense Visual Technology's own disadvantage.

3.1.3 External opportunities

With the reform of the supply side of consumption, the development trend of high-end and intelligent has become the direction of the industry. We need to focus on expanding domestic demand, and enhance the basic role of consumption in economic development. Investment plays a key role in optimizing the supply structure, which will have a positive impact on the domestic market and also provide momentum for the sustainable development of the home appliance industry. As one of the "four leading fields" of traditional consumption, home appliances are the key areas of China's recovery and expansion of consumption. Therefore, the home appliance industry, as a representative of the manufacturing industry and an important part of the real economy, Hisense Visual Technology will steadily advance toward the development goal of "becoming a leader in global home appliance technology innovation at the end of the 14th Five-Year Plan".

3.1.4 Threats

On the one hand, after years of development, China's home appliance domestic market's product penetration rate has reached a high level, home appliance market has been basically saturated. Due to the decline in residents' expected income, the depression of the real estate industry, the continuously declining marriage rate and birth rate and other factors, China's home appliance industry is facing the

problem of insufficient domestic demand, and the sales scale has declined ^[2]. On the other hand, the "re-industrialization" of foreign countries, such as Europe and the United States, has formulated their own industrial development plans, and comprehensively used policies and measures such as taxation, trade, finance, and scientific and technological innovation to seize the manufacturing highlands. China-US trade frictions and anti-dumping and safeguard measures by other countries on the import of home appliances in China will increase tariff costs and procurement costs, and expand exchange rate fluctuations, which will lead to a decline in Hisense Visual Technology revenue and profitability.

3.2 Accounting analysis

Accounting policies and accounting estimates are the basic standards for companies to recognize, measure and report accounting, and accounting estimates are professional judgments made by companies based on available information. Therefore, it is necessary to determine Hisense Visual Technology's accounting policies and accounting estimates in the analysis in order to better understand the quality of its accounting data. The accounting policy change of Hisense Visual Technology in 2023, for the lease transaction that initially recognizes the lease liability and is included in the use right asset on the start date of the lease term, the deferred income tax liability and the deferred income tax asset are respectively recognized for the equivalent amount of taxable temporary difference and deductible temporary difference resulting from the initial recognition of the asset and liability, and the financial statements are expressed in net terms.

3.3 Financial analysis

3.3.1 Debt paying ability

Hisense Visual Technology financing strategy is to use equity financing to maintain enterprise development and operation. As shown in Table 1, the asset-liability ratio, quick ratio and cash ratio are selected in this section to analyze the solvency of enterprises.

Table 1: Hisense Visual Technology solvency index data from 2018 to 2022

Year	2019	2020	2021	2022	2023
Liquidity ratio	2.0943	2.0521	1.9529	1.9328	1.9289
Industry current ratio	1.4679	1.5865	1.6475	1.6197	1.6457
Quick Ratio	1.8329	1.6953	1.5945	1.6564	1.6116
Asset-liability ratio	44.43%	44.45%	45.35%	44.35%	44.06%
Industry asset-liability ratio	53.88%	50.95%	49.80%	48.71%	48.93%

Current ratio and quick ratio indicate the ability of an enterprise to repay short-term liabilities, and the higher the ratio is, the greater the repayment guarantee is. Hisense Visual Technology's quick ratio changes less, and is higher than the industry flow ratio; The quick ratio of Hisense Visual Technology is above 1.5, the peak value is as high as 1.83, and generally greater than 1 is relatively appropriate, indicating that the enterprise has sufficient protection for the repayment of short-term debt. Hisense Visual Technology actively uses equity financing to maintain its daily operation, reduce debt financing, and reduce debt risks. The asset-liability ratio is the proportion of assets derived from debt, and the asset-liability ratio is an important indicator of long-term solvency. From 2019 to 2023, the asset-liability ratio of Hisense Visual Technology is stable and flat, and the index amount can be kept below 50%, thanks to the fact that the company has followed the theory of "conservative finance" since the second year after its establishment, and mainly relies on equity sources of funds, and the company has strong long-term solvency.

As a giant enterprise in the home appliance industry, Hisense Visual Technology has high indicators of long-term solvency and short-term solvency, which is conducive to improving and ensuring the steady development of enterprises. Even if the economic environment is not satisfactory, Hisense Visual Technology can still show excellent results in this case, which shows its steady attitude of development and excellent control of the capital structure.

3.3.2 Profitability performance

Whether an enterprise's profitability has been improved can reveal the performance of its investment strategy. Three indicators of gross profit rate, operating net profit rate, return on total assets and sales net profit rate are selected for research and analysis to measure the profitability of Hisense Visual Technology.

More information can be seen in Table 2.

Table 2: Hisense Visual Technology's profitability indicator data for 2019-2023

Year	2019	2020	2021	2022	2023
Gross profit rate	17.96%	17.90%	15.75%	18.22%	16.94%
Net profit ratio	2.37%	3.88%	3.41%	4.70%	4.76%
Net assets income rate	5.10%	9.04%	8.95%	11.30%	11.30%
Industrial net assets income rate	8.39%	9.31%	11.14%	8.73%	6.69%
Return on total assets	2.75%	5.02%	4.93%	6.23%	6.31%
Industrial return on total assets	3.79%	4.46%	5.58%	4.43%	3.39%

Gross profit rate mainly reflects the cost control and product pricing ability of enterprises. Hisense Visual Technology gross profit rate has a trend of fluctuation and rise, indicating strong profitability and high market competitiveness^[3]. The net interest rate of enterprises has been increasing, indicating that the efficiency of enterprise cost management and operation management has been improved. The year-on-year decline in gross margin and net margin in 2021 was mainly affected by rising raw material prices, resulting in a downward trend from the average in 2021. Return on equity reflects the level of return on investment obtained by shareholders and the ability of enterprises to create value. The value of return on equity of enterprises rises and is much higher than the industry average in 2022 and 2023. The index of return on total assets has increased steadily and is in good condition. Hisense Visual Technology has developed against the trend, benefiting from the differentiated advantages of smart terminal display and traditional color TV. Hisense Visual Technology also named the Qatar World Cup in 2022 to explore foreign markets, further increasing the company's market competitiveness and global market share, and improving corporate profitability.

Hisense Visual Technology's reasonable investment strategy has gradually shown unique advantages and good implementation results. First, it has always paid attention to technology research and development innovation, taking it as the foundation and investing a lot of money. Second, it will focus on the main business, and timely grasp the times, in response to the rapid development of the Internet under the social situation, and actively exploring diversified business development.

3.3.3 Operating capacity

The analysis of operating capacity is very important for both short-term and long-term planning of the enterprise. Any any bad condition of any asset can lead to unbalanced development of the enterprise^[4]. Therefore, in this section, accounts receivable turnover rate, inventory turnover rate and total assets turnover rate are selected for analysis, as shown in Table 3.

Table 3: Hisense Visual Technology's operating capacity index data from 2019-2023

Year	2019	2020	2021	2022	2023
Inventory turnover rate	8.49%	8.48%	8.14%	8.02%	8.89%
Industrial inventory turnover rate	5.56%	5.26%	4.31%	4.26%	4.25%
Accounts receivable turnover rate	13.40%	13.54%	12.34%	11.77%	13.22%
Industrial accounts receivable turnover rate	4.77%	4.98%	5.24%	5.19%	4.84%
Total assets turnover rate	1.16%	1.29%	1.45%	1.33%	1.33%
Industrial total assets turnover rate	1.01%	1.01%	0.99%	0.95%	0.85%

Hisense Visual Technology's inventory turnover rate remained basically flat from 2019 to 2023, reflecting its stable sales efficiency and inventory use efficiency. Hisense Visual Technology can have more funds to make up for the weakness of the cash ratio, and in turn enhance the solvency. This achievement is closely related to Hisense Visual Technology has always attached importance to inventory management, and it took the lead in adopting the concept of zero inventory and putting it into practice, making its stable and safe operation when the industry is in a downturn. Accounts receivable turnover rate evaluates the realization speed and management efficiency of an enterprise's accounts receivable.

The turnover rate of accounts receivable is much higher than the industry average level, and suppliers and customers have a higher right to speak, so as to ensure the safe operation and steady development of the enterprise. The total asset turnover ratio is in line with the industry trend, but it is better than the industry, with strong asset operation and management ability and high asset utilization rate.

Hisense Visual Technology's operating capability is excellent, which is mainly due to its safe operating strategy. First, Hisense Visual Technology can establish a harsh accounts receivable management system. Second, it pays attention to inventory management, which not only occupies the capital of the enterprise, but also wastes the opportunity cost of the enterprise.

3.3.4 Growth ability

Growth ability refers to the future development trend of the enterprise, focusing on the future development potential of the enterprise. As shown in Table 4, Hisense Visual Technology is analyzed from three aspects: net profit growth rate, total asset growth rate and operating income growth rate.

Table 4: Hisense Visual Technology growth capability index data from 2019-2023

Year	2019	2020	2021	2022	2023
Growth rate of total assets	-0.42%	7.45%	5.74%	7.51%	26.14%
Industrial growth rate of total assets	7.49%	9.18%	14.96%	7.23%	4.82%
Net profit growth rate	47.58%	89.07%	4.57%	34.86%	18.52%
Industrial net profit growth rate	0.54%	12.37%	29.48%	-11.46%	-19.52%
Revenue growth rate	-2.91%	15.28%	19.04%	-2.27%	17.22%
Industrial revenue growth rate	4.99%	7.16%	11.04%	6.86%	-3.11%

The negative growth of Hisense Visual Technology's total asset growth rate in 2019 is the reduction of financial assets and the recovery of notes receivable. And the substantial increase in operating income in 2023 has brought explosive growth of total asset growth rate. Hisense Visual Technology revenue growth rate fluctuated greatly, from 19.04% to -2.27% in 2021, mainly affected by short-term shocks in the process of optimization and adjustment of overseas product structure, and returned to normal in 2023. Since 2018, the increase in investment in research and development of Hisense video technology has led to a decline in the company's profits. From 2021 to 2023, the domestic economic growth has slowed down, coupled with the adverse impact of the pandemic, the industry is in a weak period. The industry net profit growth rate has declined, but in 2022, the Hisense Visual Technology net profit has increased significantly, which is its display industry to achieve a jump in development. Years of product research and development and benefit from the 2022 World Cup marketing to enhance brand influence, overseas high-end channel development efficiency significantly improved, and net profit growth rate increased.

Compared with the previous year, in the past two years, Hisense Visual Technology has outperformed the industry in terms of growth ability, but the overall development trend is more volatile. On the one hand, it is affected by the downturn in the market environment, and on the other hand, the globalization development strategy of enterprises will also have an impact on the growth ability.

3.3.5 Prospect analysis

Hisense Visual Technology as the "No. 1 in China and the No.2 in the world" smart TV brand, bearing strong strength, can move forward steadily in the development process of the market. The steady flow of cash generated from operating activities provides the cash expenditure required to meet its daily operations and development. Hisense Visual Technology's sufficient equity funds and strong debt solvency provide sufficient financial protection for its future business planning or other investments. Hisense Visual Technology's firm research and development path can ensure basic support, and its diversified product advantages lay the foundation for enhancing market competitiveness.

Under the new normal of economy, people's demand for "upgrading" of household appliances is increasing. In the context of the government's policy of expanding domestic demand, we will deepen supply-side structural reform and strive to form a higher level dynamic balance in which demand pulls supply and supply creates demand. In the context of globalization, the improvement of the China's international image has helped its local industries accelerate their development. Therefore, Hisense Visual Technology has broad development prospects and more development opportunities and space.

4. Conclusion and Suggestions

Through the analysis of Hisense Visual Technology financial performance indicators, the company's solvency, profitability, operating capacity and development capacity have steadily improved in the past five years, and exceeded the average level of the industry. The development resilience has been enhanced, and the business condition is good. Hisense Visual Technology has a clear strategy, based on scientific and technological research and development, optimized product structure, met consumer demand, opened up the global market, and further expanded its leading advantages.

Therefore, combined with the market development trend and the company's financial situation in recent years, the following suggestions are put forward for Hisense Visual Technology:

First, debt financing needs to be increased and the use of financial leverage needs to be strengthened. Hisense Visual Technology's capital source mainly comes from equity investment, which will increase the cost of capital of enterprises. And the single source of capital makes enterprises unable to seize opportunities in time when high-quality investment opportunities come, and unable to make full use of the additional income brought by financial leverage. Second, operating income needs to be stabilized and costs need to be reduces. It should follow the tide of globalization, while ensuring the proportion of the domestic market, actively exploring the international market. In this way, it can explore consumer demand, and strengthen brand building. At the same time, it should also strengthen the management of enterprise costs and expenses, reduce unnecessary expenditures, and optimize production and sales links.

References

- [1] Liu Gang, Cao Zhipeng. *A new perspective of modern financial analysis—Harvard Analysis framework* [J]. *Finance & Accounting for Transport*, 2015, (5): 55-58.
- [2] Xia Ziwei. *Financial Analysis of Household Industry Enterprises based on Harvard Analysis Framework—Taking Company A as an example* [J]. *China Management Informationization*, 2024, 27(2): 40-42.
- [3] Jiang Yihong, Wei Gang. *Main business profit, core profitability and company value* [J]. *Securities Market Herald*, 2001, (4): 25-30.
- [4] Chen Qun. *Analysis system of enterprise operation ability* [J]. *China Circulation Economy*, 2020, (34): 76-78.