



Through Background Research and Financial Data to Analyze Midea's Operating Conditions

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Abstract. This article is written in the context of the prevalence of COVID-19, the penetration rate of household applicants in China continues to improve. However, under the influence of COVID-19, the household applicants market is under heavy pressure, with low demand and obvious price rise. This paper analyzes and solves how to improve this situation. At present, it should start from various indexes of household applicants industry and find out solutions. The research object of this paper is Midea, as the leading enterprise in the household applicants industry, which is the most representative enterprise. This paper investigates Midea's business background and some valuation methods such as: H Model, General Two Stage Model and Golden Growth Model to evaluate enterprises and analyzes their operating conditions by calculating relevant financial indicators. Through this analysis, it is concluded that Midea's enterprise value is overvalued, its leverage ratio is increasing year by year and its financing cost is at the average level of the industry. The analysis of this article is of vital significance to Midea's management and is benefit for its improvement in the future.

Keywords: WACC · valuation model · business analysis · financial analysis

1 Introduction

In the first quarter of 2022, the domestic household applicants market shrank significantly under the dual effects of weak consumption and the impact of the epidemic. In the context of COVID-19, consumer behaviors are increasingly conservative and the air conditioning market is under great pressure. However, household applicants, as an important consumption area in China, should be investigated and analyzed. Only in this way can find out the most appropriate solution to the bottleneck of development in the context of COVID-19. In the context of economic downturn, it should not worsen the business situation of enterprises while promoting consumption but should actively solve the problems facing by enterprises. In the research process of enterprises, it mainly uses business analysis and financial analysis to evaluate enterprises. Business analysis mainly through the investigation of the business environment from industries, products, user groups, business models, competitions, economic conditions and other aspects to evaluate. What's more, financial analysis mainly analyzes the current operating status of Midea by analyzing its leverage structure, WACC financing cost, profitability index,

liability index and liquidity index. Business analysis and financial analysis are the two most important types of analysis for an enterprise. Through the in-depth analysis of the external and internal of Midea enterprises, which can find out the relevant deficiencies of the entity and improve them. This paper has conducted in-depth research on the development of Midea enterprises and calculated the relevant indicators, which has an important impact on the improvement of enterprise management and enterprise development prospects in the future.

2 Case Study

Midea group mainly concentrates in 25 household appliances products. Home air conditioners occupies the main market share. Midea is the largest manufacturer of household appliances. It is a technology group integrates consumer appliances, HVAC, robotics and automation systems, intelligent supply chain, chip industry and elevator industry. It has about 200 subsidiaries, more than 60 overseas branches and 10 strategic business units worldwide.

Midea was founded in 1868 and entered the home appliance industry in 1981. Midea has a total of 130,000 employees, 15 production bases in China and it also has production bases in six countries. It ranks fifth among the most valuable brands in China and has the most complete air conditioning industry chain in China.

3 Literature Review

In the market, business analysis is an important process. There is an article about the business analysis by Houlihan about the software, which deals with software managed by business analysis over a period of time [1]. This is an important measure to analyze business. What's more, the article written by Landier A means that the value of the project should use the discount rate determined by the risk of the project, which is an important measure of the value of the company [2]. Another article analysis conducted by Daryanto H K finds the relationship between financial ratio and EVA with fishery subsector stock return in Indonesia [3].

4 Research Model

This article can be divided into two parts, the first is about business analysis. In this part, it analyzes Midea's business condition using market strategic, SWOT analysis, business analysis model, 4P analysis. After analyzing, it indicates how to make the Midea's future better. The second is financial analysis: this uses the method of WACC and financial ratio to analyze the financial condition of the company. When calculating WACC of the paragraph, it uses three models: H Model, General Two Stage Model and Golden Growth Model. When assessing financial ratio, the assessment selects three categories of important ratios: profit ratio, liquidity ratio and the debt ratio.

$$\text{WACC} = (E/V)R_e + (D/V) * R_d * (1 - T) \quad (1)$$

$$V_0 = \sum_{t=1}^n \frac{D_0(1+g_s)^t}{(1+r)^t} + \frac{D_0(1+g_s)^n \times (1+g_L)}{(1+r)^n \times (r-g_L)} = \sum_{t=1}^n PV(D_t) + PV(V_n) \quad (2)$$

$$V_0 = \frac{[D_0(1+g_L)] + [D_0 \times H(g_s - g_L)]}{r - g_L} \quad (3)$$

$$V = D(1+g)/R_e - g \quad (4)$$

$$R_e = R_f + \beta(R_m - R_f) \quad (5)$$

5 Business Analysis of Media

Most notably, The Chinese market is a major market of Midea. Midea has a lot of competitive advantages. Midea has a clear internal organizational structure, a complete industrial chain, leading technology in the industry and an obvious upstream and downstream structure. Midea enterprises can accurately capture the internal needs of consumers through the acquisition and integration of enterprises around the world and the formation of a wide range of market resources of customer groups all over the world.

The paragraph first draws on the research of market strategic written by Menon A, the environment shapes the competitive situation of global enterprises [4]. Similarly, the supply and demand in the environment affects the competition of enterprises. According to this, it concludes that Midea has a serious of market strategic: The first is the brand positioning of Midea. Midea can accurately position the market. It not only focuses on high-end products, but also pays attention to the consumer market of low-end products. Second, Midea attaches great importance to brand building and constantly improves quality, quantity and after-sales service, which has won the recognition of majority of consumers. Midea has done this through the following aspects: meeting the needs of consumers, complying with the needs of consumers to produce products and improving the independent innovation ability of enterprises to develop new products. According to market supply and demand, it adjusts product mix appropriately to create a perfect consumer brand. Thirdly, Midea attaches great importance to brand management. In order to cultivate brand assets, managers form a consumer-centered planning and establish a good brand image through social welfare activities.

SWOT analysis is an important business analysis: According to Joshi A, whose research evaluates sixty-three studies published in the years 1997–2002 to assess the effects of workplace diversity on teams and organizations of their strengths, weakness, opportunities and threats [5]. The methods used in this paragraph are used to analysis Midea. First, it was evaluated from its advantages: The product has leading technology so it is no doubt that it can give customers perfect experience. Many customers are loyalty customers of the brand. The industrial chain advantage is also an advantage: its upper and lower integration has strong supporting capacity. Midea is one of the few enterprises in the air conditioning industry that can not only do upstream compressors and motors, but also do two units and complete machines. Second, the disadvantages

are analyzed, which are what need to be improved: The entity's scale is too large and its develop is too fast. Midea group diversified into automobiles from home appliances, tomerged hualing, Rishi and other similar products. The expand speed is too fast, which weaken the competitiveness of air conditioners to some extent. Its gross profit and net profit is not high during these year and income per capita is low. What's more, due to overcapacity in air conditioners, it is impossible to continue to rely on the rapid growth of scale to obtain profits. Third, the opportunity of enterprise culture is to create a better life for human beings and the entity is welcomed by people. Last but not least, at present, Midea still faces many threats. With the rising of home appliance enterprises and the continuous improvement of technology, Midea must constantly improve the level of scientific and technological innovation. In this way, it has more ability to compete with other competitors.

As can be seen from the business analysis model, the deficiencies of Midea are mainly concentrate in the following aspects: the annual net profit of Midea is not high and the per capita income is insufficient. The employees do not get proper incentives, which leads to the lack of sales enthusiasm. Secondly, Midea's main selling products are air conditioners. Due to the expansion of other selling products such as fans and refrigerators, Midea cannot concentrate on its main business, thus weakening the competitiveness of its air conditioners. Finally, with the continuous progress of The Times, Midea needs to constantly improve the technology of its products in order to survive in the environment of high-speed competition. It should take proper measures to solve these problems.

Here can make suggestions through 4P analysis: study the research written by Ko Y J [6]. It is important to assess marketability of quantum technology, business opportunity and use it to analyze Midea. First of all, starting from the product, Midea has many brands and excellent quality and it invests a lot of money in scientific research every year. Midea does a good job in market research and understands the needs of consumers to better meet the needs of customers. Midea should improve the quality, appearance, packaging, style and scale comprehensively in order to achieve smooth sales of products. Secondly, in terms of channels, Midea should find ways to shorten the physical distance between products and customers. In this respect, Midea should establish joint ventures and enter the third and fourth level markets in order to deepen the brand's sales concept of consumers. Third, promotion to improve the cost utilization rate of promotion and do not put too much cost into one aspect to achieve the scale effect of sales channel and reduce cost. Finally, in terms of price, it should reduce the price war with other competitors, focus on the value of the product itself from vicious competition to enhance innovation and price the product reasonably so that consumers can feel the quality well and price reasonable.

The enterprise should also realize a reasonable incentive mechanism for employees. It is key to understand the goal and put in place the employee incentive program, which can improve the performance of entity rapidly [7]. Instead of only offering short-term salaries to employees and managements, the enterprise should combine the salary of management with the enterprise's performance. Giving employees equity incentive and rewarding employees in the form of options, which will improve the per capita income generating capacity of employees. In addition, the entity should focus on the operation of air conditioning in sales and do not disperse too much energy in other projects. If

the entity wants to do other projects, it should put more energy in air conditioning to improve the brand quality of air conditioning. Only in this way can develop the main business of the enterprise, maximize the interests and pay attention to the core products of the brand.

6 Financial Analysis of Media

Financial analysis pays attention to the essence of the enterprise, which is the most important standard for enterprise analysis. This paper evaluates the operating conditions of enterprises from several aspects of finance.

The most important analysis is financial ratio: it is an important indicator of the performance of the entity. The assessment has selected several ratios from each indicator and make comparison with other companies in this industry such as Gree and Haier. First, calculating the profit ratio, liquidity ratio and the debt ratio. As profit ratio, it selects operating profit margin, earning per share and payout ratio, these are the most representative indicators of the entity's profit ability. Second, selecting the current ratio, quick ratio and inventory turnover, these are the indicators of an enterprise's ability to convert its current assets into cash to repay its liabilities before short-term debt matures. Generally speaking, the higher the ratio, the stronger the liquidity of the enterprise assets. Third, selecting the debt ratio to calculate the leverage level of the company, which is a key measure of the structure of the company. This measures the company's ability to pay for its debt. It is the base for calculating the WACC of the business. The current ratio, quick ratio and inventory turnover of Midea are 1.13, 0.95 and 1.61 respectively. These are much higher than the industry average. This means the ability of asset convert into cash is high, the company can easily pay its debt. Turning to the profit ratio, the operating profit margin is about 0.0841, which is about the industry average. From the statement of profit and loss of Midea, the administration cost, development cost are higher than the average of the industry. These cost should be controlled effectively. According to the data which has calculated, it is found that EPS and payout ratio are 8.02 and 0.39 respectively, which are far lower than the average of the industry, meaning that Midea's earning per share is small and the profit earned by employees was also small. Compared with other companies in the industry. Midea's shareholders value the company's growth prospects more than short-term profits, which means that Midea has a lot of room for profit growth. From the debt indicators, three years' ratio were calculated, 2019, 2020 and 2021 respectively. They are about 0.34, 0.37, 0.39 in these three years, which are near the average ratio. This means its capital structure is very suitable in this industry, the company needs to try its best to maintain its capital structure.

However, it is necessary to concern about the impact of COVID-19 on Midea enterprise. All financial indicators in our calculations have not changed much from 2019 to 2021. That means the financial impact of COVID-19 on businesses is small.

In conclusion, based on the financial statement, three categories of ratios are calculated. The liquidity ratio and debt ratio are very suitable in this industry. However, from the profit ratio, the operating profit margin compared with the competitors is a bit high, so the cost needs to be cut appropriately. What's more, from the EPS and payout ratio can conclude that the company has very good development prospects and will be very competitive in the industry in the future.

The final stage is calculating the value of Midea. In this stage, there are a lot of models: The acritical of Fernandez P presents eight different methods of discounted cash flow valuation and discusses the pros and cons of each method and this paragraph selects three methods to analyze Midea [8]. The first is golden growth model, the next is general two stage model, the last is H model. Based on the three model, Midea's value is 28.363, 30.655 and 56.65 respectively. Based on the three methods of calculation, the average value of Midea is 38.5211. Compared with the other two company Gree and Haier, which average value are 34.37 and 29.55 respectively, this means the company's value is much larger than the other two companies. However, the stock price of Midea is 53.82, which is much higher than the valuation. So, the value of Midea is overvalued. The other two companies Gree and Haier's stock price are 31.51 and 25.12, both companies are undervalued. Based on the calculation, the average value of the Gree and Haier are 34.375 and 29.55, they are undervalued. From the calculation of the two companies, this means shareholders are more optimistic about the future development of Midea, ignoring the current low profit per share factors. Their shareholders believe that the company has a better development prospect. However, shareholders in another two companies who buy their shares focus on their returns.

A study values a company that targets its capital structure in book-value terms conducted by Fernandez P and applies this into Midea company [9]. Based on the capital structure, it calculates the WACC of the Midea company and makes comparison with Haier and Grey, which assumes all the three companies are under 13% tax rate. Cost of equity refers to the compensation paid by the company to ordinary shareholders for their equity and investment risks, both market risks and enterprise-specific risks. Cost of asset reflects the risk of an industry. After excluding the structure of corporate debt and other related factors, it reflects the risk specific of an industry. Midea's equity beta is about 1.640 and the other two companies' are 1.013 and 0.860. What's more, the cost of asset of Midea is higher than the other two companies. However, the cost of asset needs to near the average, but the three companies are different. There may be several reasons. First of all, different enterprises invest in different countries, so the degree of risk diversification is different. Second, customers are of different groups and ages, so they have different attitudes towards consumption. Finally, different enterprises have different innovation ability and bargaining power, so the cost of asset is different. Based on the capital structure to calculate the WACC, Midea's WACC is higher than the other two companies, which is 8.02% and the other two companies are 6.16% and 6.06%.

7 Conclusion

In general, this paper analyzes the risks of enterprises from the commercial and financial perspectives, and discusses the shortcomings of enterprises' business strategies. The research of this article raises questions and improves the future business strategy to a certain extent, which is benefit to the future development of the company. It calculates certain financial indicators to understand the company's operating status and relevant position in the industry. It also analyzes the company's valuation from the financial level. The company's value is overestimated, the market prospect is good and the company's development is viewed actively by shareholders. As well as the financing structure of

the company, the company should appropriately reduce its financing cost to improve the income of the company.

The research of this article is benefit to Midea enterprise to improve its operating conditions and develop in the fierce competition environment. The acritical analyzes the performance and flows of U.S. actively-managed equity mutual funds during the COVID-19 [10]. Under the influence of COVID-19, different enterprises face different degrees of risk. The result indicates that Midea is less affected, but it should still actively adjust its business strategy. The financial data in this study, such as tax, cost of equity and cost of asset, are not completely accurate and constant to some extent due to the influence of some other factors. In the future, Midea enterprise should pay more attention to the air-conditioning business, pay attention to cost reduction and provide compensation incentive system for employees so that the company can better survive and develop.

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