

Comparative Analysis Of Corporate Finance

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ABSTRACT

As the world struggles with the pandemic, all industries are vulnerable. The retail industry is closely related to people's lives. In order to explore the impact of the epidemic on the retail industry, we studied the business models and financial data of three companies in the retail industry, and finally obtained a more complete and innovative company model with stronger risk resistance.

Keywords: COVID-19 impact, Financial analysis, Risk management, Business model

1. INTRODUCTION

Retail is closely related to our daily life, so the sales industry is the best reflection of people's quality of life and the fastest response to the economic crisis industry. This article will take the three U.S. retail giant, Walmart, Costco and Target as the research target, from the position, customer behavior, inventory management and sales Angle analyzes the operating situation of three companies, and through to the three companies before and after the outbreak of COVID-19 in 2018-2021, and risk response data analysis of the economic downturn, such as cash flow, The stock market and so on, compare which company's risk management ability is better. We read a number of papers and found that almost all of the studies compared a company's financial performance before and after a recession, and although they focused on how companies changed in a market crisis, none of the existing literature chose to compare three companies horizontally. The paper analyzes the ability of the three companies to cope with risk by comparing their financial performance in the economic downturn during the COVID-19 pandemic, which is not covered by other researchers in the same field and will fill in the research gap. This paper will be composed of four parts: introduction, discussion, results and summary. The discussion section will be narrated from the perspective of companies analysis and financial analysis.

2. DISCUSSION

2.1. COMPANIES ANALYSIS

Walmart is a worldwide chain enterprise and retail giant. It has ranked first in the world's top 500 for many years. This scale and profitability are far beyond the reach of a good city [1].

The most important difference between Costco and Walmart is that different business models lead to different profit models, that is, different profit sources. Costco's profit comes more from the membership dues. It is precisely because Costco's profit source does not completely depend on the profit generated by selling goods, so it can lower the product price than Walmart, give people the impression of high cost performance, and further increase the purchase volume of members to achieve a virtuous circle.

Target's excellent performance during the epidemic is due to the return of many of the company's investments. Some of the company's investments include improving its full-service experience by providing services such as delivery on the same day and pick-up at the store. It also allows consumers to place orders on apps and take goods to their cars. The improvement of target department store's Omni channel seems to continue to promote customer flow and performance in the new year. The retailer is still looking

for better ways to adapt its physical stores to the needs of modern consumers.

Companies Financial Data Collaction												
	WALMART			TARGET			COSTCO					
	1/31/2021	1/31/2020	1/31/2019	1/31/2018	1/31/2021	1/31/2020	1/31/2019	2/31/2018	8/1/2020	9/1/2019	9/2/2018	9/1/2017
Income Statement (all numbers in thousands)												
Revenue	559,151,000	523,964,000	514,405,000	500,343,000	93,561,000	78,112,000	75,356,000	72,714,000	166,761,000	152,703,000	141,576,000	129,025,000
Cost of Revenue	420,315,000	394,605,000	385,301,000	373,396,000	66,177,000	54,864,000	53,299,000	51,125,000	144,939,000	132,886,000	123,152,000	111,882,000
Operating Income (EBIT)	22,548,000	20,568,000	21,957,000	20,937,000	6,539,000	4,658,000	4,110,000	4,374,000	5,435,000	4,737,000	4,480,000	4,111,000
Interest Expense	2,194,000	2,410,000	2,129,000	2,178,000	977,000	477,000	461,000	530,000	160,000	150,000	159,000	134,000
Net Income	13,510,000	14,881,000	6,670,000	9,826,000	4,368,000	3,281,000	2,937,000	2,914,000	4,002,000	3,659,000	3,134,000	2,679,000
Balance Sheet (all numbers in thousands)												
Cash, Cash Equivalents & Short Term Investments	17,741,000	9,465,000	7,722,000	6,756,000	8,511,000	2,577,000	1,556,000	2,643,000	12,277,000	8,384,000	6,055,000	4,546,000
Receivables	6,516,000	6,284,000	6,283,000	5,614,000	1,135,000	962,000	1,100,000	929,000	1,550,000	1,535,000	1,669,000	1,432,000
Inventory	44,949,000	44,435,000	44,269,000	43,783,000	10,653,000	8,992,000	9,497,000	8,597,000	12,242,000	11,395,000	11,040,000	9,834,000
Total Current Assets	90,067,000	61,806,000	61,897,000	59,664,000	20,756,000	12,902,000	12,519,000	12,540,000	28,120,000	23,485,000	20,289,000	17,317,000
Total Assets	252,496,000	236,495,000	219,295,000	204,522,000	51,248,000	42,779,000	41,290,000	40,303,000	55,556,000	45,400,000	40,830,000	36,347,000
Total Current Liabilities	92,645,000	77,790,000	77,477,000	78,521,000	20,125,000	14,487,000	15,014,000	13,052,000	24,844,000	23,237,000	19,926,000	17,495,000
Total Liabilities	164,965,000	154,943,000	139,661,000	123,700,000	36,808,000	30,946,000	29,993,000	28,652,000	37,272,000	30,157,000	28,031,000	25,569,000
Total Equity	87,531,000	81,552,000	79,634,000	80,822,000	14,440,000	11,833,000	11,297,000	11,651,000	18,284,000	15,243,000	12,799,000	10,778,000
Liquidity ratios												
current ratio = CA/CL	0.97	0.79	0.80	0.76	1.03	0.89	0.83	0.96	1.13	1.01	1.02	0.99
quick ratio = (CA - inventory)/CL	0.49	0.22	0.23	0.20	0.50	0.27	0.20	0.30	0.64	0.52	0.46	0.43
cash ratio = cash/CL	0.19	0.12	0.10	0.09	0.42	0.18	0.10	0.20	0.49	0.36	0.30	0.26
Long-term solvency ratios												
total debt ratio = TL/TA	0.65	0.66	0.64	0.60	0.72	0.72	0.73	0.71	0.67	0.66	0.69	0.70
debt-equity ratio = TL/TE	1.88	1.90	1.75	1.53	2.55	2.62	2.65	2.46	2.04	1.98	2.19	2.37
equity multiplier = TA/TE	2.88	2.90	2.75	2.53	3.55	3.62	3.65	3.46	3.04	2.98	3.19	3.37
times interest earned = EBIT/interest	10.28	8.53	10.31	9.61	6.69	9.77	8.92	8.25	33.97	31.58	28.18	30.68
Turnover ratios												
inventory turnover = COGS/inventory	9.35	8.88	8.70	8.53	6.21	6.10	5.61	5.95	11.84	11.66	11.16	11.38
day's sales in inventory = 365 days/inventory turnover	39.03	41.10	41.94	42.80	58.76	59.82	65.04	61.38	30.83	31.30	32.72	32.08
receivables turnover = sales/accounts receivable	85.81	83.38	81.87	89.12	82.43	81.20	68.51	78.27	107.59	99.48	84.83	90.10
day's sales in receivables = 365 days/receivables turnover	4.25	4.38	4.46	4.10	4.43	4.50	5.33	4.66	3.39	3.67	4.30	4.05
total asset turnover = sales/total assets	2.21	2.22	2.35	2.45	1.83	1.83	1.83	1.80	3.00	3.36	3.47	3.55
Profitability ratios												
profit margin = NI/sales	0.02	0.03	0.01	0.02	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.02
return on assets = NI/TA	0.05	0.06	0.03	0.05	0.09	0.08	0.07	0.07	0.07	0.08	0.08	0.07
return on equity = NI/TE	0.15	0.18	0.08	0.12	0.30	0.28	0.26	0.25	0.22	0.24	0.24	0.25

Generally speaking, from the internal finance of the company, Walmart tends to be excellent and stable in all aspects, and has unique advantages in long-term asset and debt management. Target's inventory capacity is worth learning from the other two companies, and due to its inventory advantages, it has achieved an explosive increase in revenue after the outbreak of the epidemic. Costco's strong short-term solvency ensures the company's safety in the short term.

Interestingly, we can see that due to the more innovative retail model of target and Costco, they seem to have a safer business model and better growth prospects than Walmart, which attracted the attention of investors during the outbreak of the epidemic and performed well, which is of great benefit to the future development of the two companies.

Walmart and target's sales increased significantly during the epidemic as consumers avoided shopping malls, bought more groceries and sought more items for use at home, from puzzles to home clothes. In particular, target's sales increased by more than \$15 billion in 2020, surpassing the total sales growth in the previous 11 years. According to research by the company and third parties, target gained about \$9 billion in market share in the fiscal year ended January 30.

At present, both retailers are facing new and

complex problems. Consumers are struggling to cope with more spending, and they are spending all the stimulus checks or savings they saved from the early days of the epidemic. At the same time, retailers decided to spend more on transportation and even charter ships to ensure sufficient inventory on shelves. In addition, they had to raise wages and welfare to ensure the staffing and smooth operation of warehouses and stores.

2.2 THE SPECIFIC DATA CAN BE ANALYZED FROM THE FOLLOWING POINTS:

(1) Liquidity

After the outbreak of the epidemic in 2019, we can see that the capital liquidity of the three companies is stronger than before, and the three liquidity ratio indicators have been significantly improved, which well shows the resilience and mechanism to risks during the epidemic.

The current ratios of the three companies are low, with an average value close to 1, fluctuating around 1. Costco's quick ratio is higher than the other two companies, reaching 0.64, indicating stronger short-term solvency. WalMart's liquidity is weak, and its cash ratio is lower than that of Costco and Target.

(2) Solvency

After the outbreak of the epidemic in 2019, the debts of the three companies changed little before and after the outbreak, and remained relatively stable with the state before the outbreak of the epidemic.

Target has a high debt ratio, which is similar to that of the other two companies. In terms of debt ratio and equity multiplier, Walmart's solvency is better than that of the other two companies.

(3) Turnover capacity

After the outbreak of the epidemic in 2019, we can see that the inventory management level of the three companies has improved, but it should be noted that Walmart did not greatly improve the efficiency of inventory management until 2021. In terms of inventory turnover capacity, Target is better than Walmart and better than Costco.

(4) Profitability

The profitability of the three companies has improved significantly. Walmart's revenue and profit are much higher than the other two companies before and after the outbreak of the epidemic, but it should be noted that target's revenue has increased explosively after the outbreak of the epidemic, while Costco's revenue growth rate has declined to a certain extent.

(5) Stock market performance

After the outbreak of the epidemic, the earnings per share of the three companies have increased significantly. Among them, Walmart has the lowest earnings per share. On average, investors who invest in target and Costco before the outbreak of the epidemic will get considerable benefits.

Target has the highest return on net assets, so it is more attractive for investors to invest. It should also be noted that after the outbreak of the epidemic, the ROE of target has increased significantly, while Costco has basically not changed.

Compared with the other two companies, Costco's market value has increased explosively,

The beta value of target stock is high and fluctuates around 1, indicating that the share price of target fluctuates violently and is suitable for short-term holding and selling. Costco's share price rose sharply before the outbreak of the epidemic and leveled off after the outbreak. Walmart has always preferred stability [2].

2.3. EXCELLENT BUSINESS MODEL

the most common definition of business model is 'the logic of the firm, the way it operates, and how it creates and captures value for its stakeholders [3].

Over the years, Walmart has become the world's

largest private employer and retail chain. Walmart's fiscal 2019 revenue of \$513.3 billion, despite the pandemic, speaks volumes about the strength of its business model and its ability to mitigate risk and It is worth our analysis and study.

Walmart mainly uses a cost-oriented strategy to manage the enterprise. Its business model is mainly long-tail and multilateral platform business model. Based on the business model created by Ostwald and Pineuw Canvas model framework, mainly divided into nine building blocks: Customer Details points, value proposition, distribution channels, revenue sources, core capital source, customer relationship, key business, cost structure, key partners companion. The 9 elements in the business model do not exist independently. Rather, there is a certain logical relationship :1) Value creates income: Provide value proposition, Finding customer channels ,building relationships. 2) Value creating Needs Infrastructure: Measuring Core Resources and Capabilities, Finding important partner. etc. The core resources are used for analysis, and the core resources of the business model make the enterprise. industry organizations are able to create and deliver value propositions, access markets, and Customer segments build relationships and earn revenue. core capital Including physical resources, financial resources, etc., that is, the implementation tools of enterprises Competencies and qualifications required by the business model [4].

Under Walmart's integrated business model, Walmart's profit sources will change from single to diversified, which is the key to resisting risks. The first layer of profit is to use the combination of commodities to arrange the 25,000 categories of commodities that are owned, to lower the prices of commodities familiar to customers, and to raise the prices of high-quality commodities. This will give customers the illusion that they are taking advantage of. The second tier of profit is that Walmart charges an entry fee for incoming goods. We all know that items on the shelves of Walmart supermarkets are more likely to be swept away, so suppliers are also scrambling to pay Walmart entry fees to qualify for Walmart shelves. The third tier of profits comes from excellent logistics management and centralized procurement. There are many aspects to a supply chain foundation, such as lead times, performance metrics, and order constraints. Most importantly, it is driven by consumer preferences [5].

Using its huge logistics system and sales volume, Walmart can purchase goods on a large scale, thus keeping the prices of goods bought from suppliers very low, and using its own developed logistics system to transport goods to all parts of the world, so goods The cost is also much lower than the average small and medium supermarkets. The forth layer of profits come from the right investment strategy. Walmart makes full

use of its cash flow by investing in a combination of various short-term financial products and futures to generate more profits for itself. And under the column of operating assets, the credit financing level provided by the supplier for the enterprise is listed. These operating liabilities are not funds provided by corporate shareholders. This means that Walmart can put its capital elsewhere to make the most of its floating capital to create value for the company. The fifth layer of profit comes from buyout products, exclusive agents. In this way, Walmart develops its own products and finds a foundry to process them, and finally sells them under Walmart's own brand. These products tend to be highly profitable. The profit of the sixth floor comes from the development of various forms of supermarkets. At present, in addition to ordinary department stores, Walmart also has Sam's Club stores, as well as convenience supermarkets in residential buildings. Most importantly, since online shopping has entered the competition, Walmart is also actively engaged in online sales. These various Diverse sales methods provide great protection for Walmart to resist the risk of the epidemic and the company's sustainable development concept also enhances customer loyalty.

Finally, Walmart is the most widely distributed in the world, so Walmart is currently the most powerful import and export platform in the world. Walmart has become a procurement platform between countries, and I believe that Walmart will not stop at its pace and will continue to amplify this advantage to gain more benefits.

However, as an established retailer, under the development of the Internet, Walmart's Internet shopping has not become the mainstream of the market. The fundamental reason is that Walmart's fixed thinking does not pay attention to brand promotion, does not pay attention to the user experience in the Internet thinking, and ignores the user-oriented thinking logic. Although Walmart also dragged out its own online shopping app and door-to-door delivery, but almost no one cares. Perhaps in the next few years, Walmart can pay more attention to Internet shopping and make the Internet become Walmart's main source of profit. After all, the Internet will be the mainstream trend in the future.

Walmart is a worldwide chain enterprise and retail giant. It has ranked first in the world's top 500 for many years. This scale and profitability are far beyond the reach of a good city. The most important difference between Costco and Walmart is that different business models lead to different profit models. Costco's profit comes more from the membership dues. It is precisely because Costco's profit source does not completely depend on the profit generated by selling goods, so it can lower the product price than Walmart, give people the impression of high cost performance, and further increase the purchase volume of members to achieve a virtuous circle. Target's excellent performance during

the epidemic is due to the return of many of the company's investments. Some of the company's investments include improving its full-service experience by providing services such as delivery on the same day and pick-up at the store. It also allows consumers to place orders on apps and take goods to their cars. The improvement of target department store's Omni channel seems to continue to promote customer flow and performance in the new year. The retailer is still looking for better ways to adapt its physical stores to the needs of modern consumers [6].

At present, both retailers are facing new and complex problems. Consumers are struggling to cope with more spending, and they are spending all the stimulus checks or savings they saved from the early days of the epidemic. At the same time, retailers decided to spend more on transportation and even charter ships to ensure sufficient inventory on shelves. In addition, they had to raise wages and welfare to ensure the staffing and smooth operation of warehouses and stores.

3. RESULTS

Our purpose in this paper is to examine that in the impact of Covid-19, how Walmart, Target, and Costco were affected respectively. We compared these three company's financial statement before and after the pandemic. Through the analysis of financial statement data, this paper concludes that Walmart has advantages in sales scope, inventory management and cash reserves, but its high leverage ratio and WACC easily make it inferior in the economic downturn. For Target, it's the most attractive for Millennials, but it lacks the capital to resist risks as economic recession. As for Costco, it has the richest consumers and is relatively conservative in fund management among the three companies.

4. CONCLUSION

This paper takes Wan-Mart, Target and Costco as the research objects, and finds out that Walmart's business strategies can be used for reference by other companies in coping with risks and economic downturn. By analyzing the business models and financial data of these three companies, we also find that companies with strong pricing power are more able to resist risks. The essence of pricing power is that you create unique consumer value, the revenue that consumers give you in return. Merchants use all means to prove that their commodities are unique and can bring consumer surplus. It is this uniqueness that makes consumers choose companies even when the economy is down. As the COVID-19 pandemic has hit, it is clear that online shopping is becoming more popular, so catching the younger generation of online shoppers means minimizing the impact of the pandemic. Obviously, amazon, Walmart, Target and other retail giants do this.

From the above analysis and data comparison, it is not difficult to see that retailers' focus is shifting from physical to online sales, which is also an important node whether retailers can seize the opportunity. Strengthening and improving the management and control of enterprise funds is also an important aspect to reduce risks. Walmart is the best at this. If an enterprise wants to remain invincible in the industry and have better development space, it should pay attention to capital management and improve the efficiency of capital use. Strengthening fund management, there are many channels, from the reasonable layout to the efficient market development, from the funds are used to raise money, from raw materials in the scale of production, capital management in enterprise daily production and business operation activities, to the management for economic profit, less investment, large output, effective solutions to improve business efficiency. Flexible use of SWOP model, based on the analysis of internal and external environment situation, through investigation can list the main internal strengths, weaknesses and external opportunities and threats, etc., and arranged according to the matrix form, and then use the thought of system analysis, the various factors each other match analysis, from which a series of corresponding conclusions, and conclusion is usually a certain decision-making. In short, the economic downturn and other shocks brought about by the pandemic can serve as a cautionary tale for other companies to learn from the best of those that have handled the situation well in case of a risk.

REFERENCES

- [1] Brea-Solis, Casadesus-Masanell, R., & Grifell-Tatjé, E. (2015). Business Model Evaluation: Quantifying Walmart's Sources of Advantage. *Strategic Entrepreneurship Journal*, 9(1), 12–33. <https://doi.org/10.1002/sej.1190>
- [2] Meeks, & Chen, R. J. (2011). Can Walmart Integrate Values with Value?: From Sustainability to Sustainable Business. *Journal of Sustainable Development*, 4(5), 62 – 62. <https://doi.org/10.5539/jsd.v4n5p62>
- [3] Hoske. (2009). The wisdom of Wal-Mart's supply chain strategies. *Manufacturing Business Technology: IT for Manufacturing Executives.*, 27(5), 6–7. <https://doi.org/info:doi/>
- [4] Chen Andy W.. Competitive expansion strategies between retailers: the case of Wal-Mart and Target[J]. *The International Review of Retail, Distribution and Consumer Research*,2021,31(1).
- [5] Xiaoyu Mao, Jianjun Wu,Ran Duan. The Evolution of Omni-Channel Retailing of Walmart[J]. *International Journal of Science*,2020,7(5).
- [6] Xinyuan Chen. An Empirical Study on the Return Rate of Listed Companies in My Country's A-share Retail Industry-- Based on the Fama-french Three-factor Model[J]. *World Scientific Research Journal*,2022,8(5).