A Company Analysis and Performance Evaluation of Pinduoduo

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Abstract. E-commerce have been integrated into everywhere of people's life, and have changed the way people consumed. The development of e-commerce cannot be separated from the support of financial market and consumers. Therefore, studying the financial situation of e-commerce companies can help investors and consumers understand more about e-commerce and industries. This study will analyze the data by comparing the financial statements of Pinduoduo with those of Jingdong, eBay, and Alibaba in four aspects: liquidity, solvency, profitability and investment, and the data shows that Pinduoduo performs well in all four aspects. The results of the study show that pinduoduo has an excellent debt structure and strong solvency. On top of that, the numbers keep rising in terms of profitability. However, Pinduoduo still has room for improvement in the efficiency of capital utilization and logistics efficiency. Overall, the study concludes that pinduoduo will continue to grow in the future with a lot of potential.

Keywords: E-Commerce Industry; Pinduoduo; Performance Evaluation.

1. Introduction

With the development of internet technology, e-commerce platform has become a giant engine of the new world. And it promotes the change of business model and pattern of consumption. Last two decades have witnessed the explosive growth of e-commerce platform. In the beginning, e-commerce was just a simple way of shopping. People can but things through the e-commerce platform. In the past, e-commerce is more focus on online sales by providing product information, placing order, making payments, and arranging delivery through platform to achieve online transaction. And now, e-commerce has developed into cross-border e-commerce. It even created live-streaming e-commerce, which introduces, demonstrates and sells products in live. Some of merchant can generate hundred millions of money in a few hours by live e-commerce. Besides, with the development of technology, artificial intelligence and big data analysis was used on the e-commerce industry to provide individualized service. And nowadays, the e-commerce industry is more closely integrated with the real retail, finance, logistics and other industries, forming a brand new business ecosystem and promoting the development of industrial upgrading and cross-border cooperation.

E-commerce market is still increasing in the whole range of the world. The popularization of the mobile Internet and the widespread use of smartphones have led to more and more people shopping online through mobile devices. Mobile e-commerce has become an important growth driver in the e-commerce market. The influence of social media platforms on the e-commerce market is gradually increasing, and the social e-commerce model has become an emerging force in the e-commerce market by integrating social relationships and shopping experience, attracting a large number of young consumers. PDD is one of the typical representatives of the social e-commerce. At the same time, represented by Alibaba's new retail concept, the line between traditional retail and e-commerce is gradually blurring. The combination of the two provides a better experience for users.

E-commerce industry has reached unprecedented levels and spread all over the life. Therefore, studying e-commerce companies helped us learn more about shopping consumption and industry prospect of e-commerce companies. Pinduoduo has risen rapidly in recent years. PDD achieved rapid market share growth and strong financial performance by its unique business model. It is one of the industry leaders. Thus, studying PDD can help us learn the trend of the e-commerce industry also offers a reference for the investors. This study will conduct a fundamental analysis of Pinduoduo, analyzing the liquidity, solvency, profitability and investment performance of PDD through financial data of 2022, 2021 and 2020. PDD will be compared with the 2022 financial data of Alibaba, eBay and Jingdong to analyze the position of PDD in the industry.

2. Liquidity Performance

To begin with, this study compares the liquidity ratios of PDD from to 2020 to 2022. In general, the data changed not obviously. Current ratio, quick ratio and cash ratio are remained stable, as Table 1 shown.

Table 1. Liquidity ratios of PDD from 2020 to 2022

	2022	2021	2020
Current ratio	1.85	1.72	1.78
Quick ratio	1.85	1.72	1.76
Cash ratio	0.79	0.7	0.89

Comparing the liquidity ratios with its competitors, PDD has a outstanding data of cash ratios which reached at 0.79, as Table 2 shown. Ranking first in the competition, shows that PDD has a sufficient cash reserve. It benefits from the business model of consumer-to-business(C2B), which is also called social commerce. Consumers become the dominant party under the model of C2B [1]. They post their demand on the social network and form group booking with other consumers. PDD will accept consumer’s order and organize the production. Business can meet consumer’s order accurately, reduce the inventories and keep more cash. What’s more, social interaction can reduce cost of marketing. Compared with the traditional advertisement, C2B model is more depend on the sharing between the consumer and the word of mouth, so PDD decreased the expenditure in the promotion in the market and keep more cash. On the other hand, PDD obtains a lot of support from the capital market. In June 2020, PDD announced the completion of a $4.5 billion equity financing. And this financing was the largest single financing in Chinese e-commerce company. In January 2021, PDD announced the completion of a $1.9 billion capital raising. A great mount of financing and capital raising provided a large number of cash for PDD. Therefor, PDD had a outstanding data of cash ratio. However, high cash ratio indicates that PDD has not making full use cash. From another perspective, PDD was more conservative in investments. Although the cash ratio have descent to 0.79 in 2022, it was still a little high compared with its competitors.

Table 2. Liquidity ratios of Company PDD and its competitors

Company name	Current ratio	Quick ratio	Cash ratio
Alibaba	1.81	1.74	0.60
eBay	2.18	2.18	0.51
Pinduoduo	1.85	1.85	0.79
Jingdong	1.32	1.02	0.32

From the current ratio and quick ratio, both of the PDD’s number are 1.85 and at a great level in the industry. For the e-commerce company, PDD is at a healthy level. PDD has a great performance to repay debts in the short term, realizing and working around capital . Thus, this also means PDD can better cope with sudden financial distress or market volatility. From the scale of current assets and current liabilities, PDD has a smaller scale of current asset which just reached at 31.399 billion while Alibaba has reached at 101.610 billion. This means PDD still has much progress to make. Although expanding the scale of current assets and current liabilities can improve operational flexibility, it has certain risk on expanding the scale [2].

3. Solvency Performance

The next part is solvency analysis in this study. According the solvency ratios of PDD from 2020 to 2022, total debt ratio has been falling for three years, as Table 3 shown. E-commerce company always have high total debt ratio. The reason is that e-commerce always needs a great number of investment to support their operating. PDD lowered the total debt ratio and reduced the risk. From 2020 to 2022. PDD reduced their long-term debt from $2,211 million in 2020 to $228 million in 2022. In recent years, PDD financing by issuing shares and other means. And use these money to repay the long term debt. PDD also accumulate internal cash flow and repay the debt. After efforts in recent years, PDD has repaid most of their long-term debt to reduce the financial risk and improve their credit rating. Besides, PDD has made huge change in times-interest-earned. From -8.38 in 2020 to 673.63 in 2022. The greatly improvement in profitability and multi-channel of financing has provided a large amount of funds for the repayment of interest. Over all, the solvency of the PDD has improved a lot in the three years. And the structure of liability is also optimized. Whether or not a business has a great debt structure also has a significant impact on the business, and an excellent debt structure will have a positive impact on the business [3].

Table 3. Solvency ratios of PDD from 2020 to 2022

	2022	2021	2020
total debt ratio	53.07%	58.54%	62.13%
long-term debt ratio	0.71%	6.51%	9.08%
times-interest-earned	673.63	8.89	-8.48

Table 4 compares the ratios with competitors. It is apparently PDD has a much smaller ratio than competitors, which is as low as 0.71% in 2022 while eBay reached at 43.67% in 2022. In the past several years, eBay has made many acquisitions and mergers and acquisitions, it includes StubHub, braintree, paypal and so on. These activities need a lot of money to accomplish and increase the liability level. What’s more, eBay still spends money on research and development. They develop infrastructure to improve the efficiency and reliability of platform. In the past several years, eBay conducted their share buyback program to increase stockholder’s equity per share. And they also issue bonds to raise money and then expand the business. These actions all will increase the debt levels. Then, the risk of operating will increase. Of course, these practices may also lead to greater wealth effects in the future [4]. If these activities ultimately improved the profitability and market position, then it’s worth to take these risks. By contrast, PDD has better balance structure and has greater solvency ability when coping with risk.

Table 4. Solvency ratios of Company PDD and its competitors

Company name	total debt ratio	long-term debt ratio	times-interest-earned
Alibaba	35.37%	8.58%	16.064
ebay	70.86%	43.67%	10.298
Pinduoduo	53.07%	0.71%	673.625
Jingdong	53.83%	5.09%	7.575

From the total debt ratio, PDD is in the middle of the competitors and have a reasonable proportion of total debt. From the times-interest-earned, PDD is much higher than its competitors. The times-interest-earned of PDD was 673.625 times, more than 60 times that of competitors. And this is related to their strategy of optimizing the debt structure. It will be a great competitive advantages of PDD in the industry.

4. Profitability Performance

This section will discuss the profitability performance of PDD. According to the profitability ratios of PDD from 2020 to 2022, PDD has negative profit margin and operating margin, which was about -12.7% and -15.76%, as Table 5 shown. And it was actually caused by COVID-19. The measurement of government lockdown and changes of consumer behavior led to supply chain disrupt. PDD needs to conduct the expensive expenditure of company while the market demand is at a low level. As the economy recovers from the pandemic, PDD’s profit margin and operating margin show an increasing trend. Asset turnover of PDD has declined from 2020 to 2021, while increase again in 2022. As a whole, it remains at a high level and indicates that PDD can use founds to create money efficiently.

Table 5. Profitability ratios of PDD from 2020 to 2022

	2022	2021	2020
profit margin	24.16%	8.27%	-12.07%
operating margin	23.28%	7.34%	-15.76%
asset turnover	67.96%	59.95%	79.11%

Compared with competitors, PDD has the highest profit margin, which reached at 24.16%, as Table 6 shown. The operating margin was 23.28% in 2022. Such results were mainly caused by low cost goods. The first reason is that PDD’s merchants have the complete supply chain, and they can produce product with lower cost. PDD launched the model of group buying, which people can invite their friends or launch an order to buy the same products in a lower price. Under this model, PDD gathers a large number of user requirements and buy in bulk to reach preferential agreements with suppliers [5]. Besides, by working directly with manufacturers or suppliers, PDD saves the profits of intermediate links such as traditional retailers. In addition, PDD used the power of word of mouth to reduce the cost of advertising, just like the group buying mentioned. Besides, PDD adopts no storage mode, which reduces the cost of reduce storage. Thus, PDD decreased the cost of production by series of operations above.

Table 6. Profitability ratios of Company PDD and its competitors

Company name	profit margin	operating margin	asset turnover
Alibaba	8.35%	10.27%	47.64%
ebay	-12.96%	27.38%	41.91%
Pinduoduo	24.16%	23.28%	67.96%
Jingdong	0.99%	1.75%	199.19%

In terms of strategy, PDD has more relaxed entry requirements which attracts more small and medium-sized business to settle in. A large number of unknown brands have flooded into the platform with the characteristics of low price and low cost. Unknown brand dose not means low quality. With the development of manufacturing production, more and more products are produced in good quality with a low cost. And there are still many e-commerce had the mistake opinion that there is no relationship between low price and low quality now. What can't be ignored is the impact this will have on the brand ecosystem as well [6]. Today's Taobao and Jingdong are more eager to introduce famous brand and quality goods, so they have raised the bar for platform entry. By contrast, PDD aims at the huge scale of sinking market. PDD captures the sinking market where people prefer cheap products instead of the brand. It is equally important that COVID-19 pandemic has dealt a blow to the economy. Now’s people have changed their consumption concept and willing to pursue more cost-effective goods [7]. Thus, PDD captures market demand and makes money quickly rely on its scale. They took this as breakthrough in the market and developed rapidly in the market in recent years.

From the asset turnover ratio, PDD has the ratio of 67.96% in 2022. Compared with its competitors, PDD was in the middle. It is worth noting that Jingdong's asset turnover rate has reached 199.19%

and it’s far ahead of other competitors. It can be seen that JD is very efficient in supply chain management with its comprehensive management of logistics, warehousing, distribution and so on. They also optimize operations to develop efficiency [8]. In theses aspects, PDD has a certain gap.

5. Investment Performance

From the perspective performance aspect, the ROE for PDD rose from -11.31% in 2020 to 27.41% in 2022, ad Table 7 shown. ROA had increased from -4.28% to 14.66%. As a whole, the profitability of PDD and the investors return has been continuously enhanced from 2020 to 2022. However, the market to book ratio has fell from 50.62 to 7.

Table 7. Investment ratios of PDD from 2020 to 2022

	2022	2021	2020
ROE	27.41%	10.21%	-11.31%
ROA	14.66%	4.23%	-4.28%
Market-to-book ratio	7	6.9	50.62

Compared with competitors (see Table 8), PDD has the highest ROE at 27.41% in 2022, which shows that PDD has strong ability to generate income from equity. On one hand, it can interpreted that PDD’s profit has increased rapidly. Both revenue and user scale have grown rapidly. On the other hand, PDD have optimized their capital structure. PDD company adopt the business model of asset-alight, which does not need a great amount of investment in fixed assets [9]. At the same time, PDD raised money in many ways. It reduced the liabilities and improved ROE in some extent. In terms of ROA, the figure 14% demonstrates PDD has greater ability to generate profits compared with its competitors. The low-priced strategy PDD used leads to a lower cost and higher quantity sale, which can develop the efficiency of asset use. What’s more, PDD also devotes to developing the Self-developed social e-commerce model and artificial intelligence algorithm. It can promote the efficiency of platform and enhanced the asset utilization.

Table 8. Investment ratios of Company PDD and its competitors

Company name	ROE	ROA	Market-to-book ratio
Alibaba	6.45%	4.17%	1.67
ebay	-25.15%	-7.33%	4.61
Pinduoduo	27.41%	14.66%	7
Jingdong	3.88%	1.79%	2.89

From the aspect of market to book ratio, PDD is still also ahead of its competitors. The market is optimistic PDD and PDD is a hot stock in the market. In the several years, PDD always has a high market to book ratio. This is benefit from PDD’s core moat, and it stabled PDD’S market position. Some companies indicate that e-commerce has entered a stage of slowing growth and intensifying competition for customer keeping [10]. Under the background of economic downturn, the head company of e-commerce platform has made efforts in the direction of high cost performance. And PDD have built the core moat and they think the fundamentals of the company's domestic business will remain solid. PDD secured their market position with users, business ecology and good supply. These three dimensions of core competence reinforce each other, helping the company to continuously solidify its competitive position in the domestic e-commerce market. At the same time, the expansion of overseas markets also brings great development prospects, and the rapid growth of Temu is well documented. In the short term, the effect brought by the moat will effectively increase the profit margin. In the long run, the strength of the overseas market will bring new growth momentum for the company.

6. Conclusion

In conclusion, PDD has the great performance in the four aspects. In terms of liquidity, PDD's ratios are outstanding. This suggests that they have enough cash to defend the risk, but this is also to some extent that the utilization of capital is insufficient. PDD is able to use its capital more efficiently in terms of investment in the future. In terms of solvency performance, PDD demonstrates their excellent debt structure and strong solvency ability. The extremely low level of long-term debt allows for an excellent debt structure. And the interest payments are high. In terms of profitability, PDD has recovered and grown rapidly since the pandemic. Excellent cost control has led to a significant increase in profitability. At the same time, optimization of the supply chain and the group purchasing business model contributed significantly to the earnings performance. Finally, from the investment perspective, the market is generally optimistic about PDD. The protection of the core moat and the expansion of overseas markets escort PDD's development. In general, PDD has great prospect and performs well in its financial statements. With the development of e-commerce, the trend in e-commerce platforms has shifted from expansion to customer retention. PDD’s innovation in business model retains more customers for itself. At the same time, PDD has an excellent track record in the industry, both in terms of profitability and in terms of solvency and investment performance.

Finally, this study compares PDD's financial statements to its competitors and analyzes them on a fundamental level. It helps people to understand more about PDD's financial situation and the trend of the company and industry. It also helps us to understand the differences between different companies and provide reference for investors. As described in this study, analyzing PDD on a fundamental level demonstrates its strength and promise, and in the future it will be possible to analyze PDD on a technical level.

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