Research on the Investment Value of eBay based on PEST, Financial and Valuation Methods

Chuxin Yao *

School of Business and Tourism Management, Yunnan University, Yunnan, China

* Corresponding author: yaochuxin@itc.ynu.edu.cn

Abstract. The e-commerce industry, as an important component of the global economy, has shown a rapid development trend in recent years. In this industry, eBay, as a well-known e-commerce platform, has attracted the attention of many investors with its unique business model and strong market competitiveness. This article conducts an in-depth analysis of eBay's investment value and provide useful references for investors. PEST is used to analyze the external environment of eBay, which reflects a relatively stable political and economic condition. Financial analysis shows that eBay's revenue has steadily increased in recent years, with good profitability and providing strong support for the company's sustainable development. Moreover, for eBay's valuation results, it has relatively lower P/E ratio and PEG. In this case, eBay may be undervalued. However, with the continuous development of the e-commerce industry and the acceleration of digital transformation, eBay is actively adjusting its strategy, increasing investment in artificial intelligence, big data, and other fields to improve user experience and service quality. Based on the findings of this paper, it is convinced that eBay has favorable investment value.

Keywords: eBay, PEST, financial analysis, valuation.

1. Introduction

With the deepening of globalization and the continuous development of capital markets, the analysis of company investment value has become a focus of attention for investors, enterprises, and managers. Investment value analysis not only helps investors identify potential investment targets, but also provides a basis for strategic planning and business decision-making for enterprises.

Since the outbreak of the COVID19, online shopping enterprises have indeed experienced rapid development due to significant changes in consumer shopping habits. Especially with the increasing maturity of artificial intelligence technology, e-commerce giants such as eBay, best buy and Amazon have made significant progress in business operations, customer service, and supply chain management. This development trend has had a profound impact on their stock prices and market value, while also attracting widespread attention from investors.

Therefore, this paper takes eBay as a representative for analysis. eBay, a globally renowned online auction and shopping website, especially playing an important role in online auctions and B2C and C2C transactions. It allows individuals or businesses to auction or sell various goods at fixed prices on the platform.

2. Literature review

According to the situation of capital market, the methods and theories of company investment value analysis are also constantly developing and improving. Numerous scholars have conducted in-depth research on the investment value of companies from different perspectives, forming a rich theoretical system and empirical results.

2.1. Methods and models for analyzing company investment value

Li pointed out that the cost approach, market approach, and income approach are the three most used evaluation methods. Among them, the cost method is the most widely used, but its disadvantage is that it cannot consider the overall profitability of assets and their potential future commercial value.

The use of income approach and market approach is relatively limited, but the evaluation of enterprise value is often more convincing [1]. Similarly, Wang also concluded that the income method, market method, and cost method are commonly used for evaluating the value of traditional enterprises [2]. Moreover, Jia indicated that the valuation methods can be summarized as absolute valuation method and relative valuation method. The absolute valuation method including cash flow discount model and option pricing model, relative valuation method, also known as market rules, includes PE valuation method, PEG valuation method, PB valuation method, and PS valuation method [3]. At the same time, Song used relative valuation methods for analysis, including P/E ratio, P/B ratio, and P/S ratio [4]. Otherwise, some scholars choose to use financial indicators to evaluate companies. Li used financial analysis to compare a company's financial data with stock price trends. It concluded that under the influence of multiple factors, a single financial data sometimes cannot fully expose problems and risks. Therefore, it's necessary to analyze other non-financial factors such as national policies, they can also have a significant impact on a company's stock price [5]. Similarly, Shi also from a financial perspective, using a four-dimensional investment value evaluation index system to evaluate company investment value, which includes debt paying ability, operating ability, development ability, and profitability [6].

2.2. Empirical research on corporate investment value analysis

The valuation methods used by companies in different industries may be different. For healthcare industry, Kang indicated that if only the EVA valuation model is used for company valuation, it is difficult to reflect the overall enterprise value of the company. Therefore, a valuation method combining EVA and B-S valuation models is reasonable, which provides a supplement to traditional valuation methods [7]. For hydropower industry, Pang selected factor analysis, case study method, and financial analysis method to analyze the basic situation, supply and demand situation, policy support, competition situation of the hydropower industry, and ultimately guide investors to implement efficient investment behavior [8]. For entertainment industry, Xu concluded that not only the investment risks and value of projects with stable development potential for these companies should be considered, capital scale, business performance, product design, product development, should not be ignored. In addition, research and judgment should also be based on the characteristics of the entertainment industry itself [9]. For e-commerce industry, Liu based on the annual report data of enterprises and the relative valuation method to analyze the investment value of the company, evaluating its stock value, and finally provide reasonable suggestions [10].

However, due to differences in market environment, corporate characteristics, and investor preferences, existing investment value analysis methods still face some problems and challenges in practical application. Therefore, based on existing research, this article cannot only judge the investment value for investors in a practical sense, but also enrich the research on eBay's investment value from a theoretical perspective.

3. Method

3.1. PEST

This model is used to evaluate the external environmental factors faced by eBay. The analysis includes four parts: political, economic, social and technological. Political factor reflects the system, policies, laws and regulations of a country or region, which often constrain and affect the business behavior of enterprises, especially affecting their long-term investment behavior. Economic factor refers to the overall overview of national economic development, international and domestic economic forms and trends, as well as the industrial and competitive environment faced by enterprises. Social factor.

mainly includes social morality, cultural traditions, population trends, cultural education, values, social structure, etc. Technological factor refers to the overall level and trend of social technology, technological changes, the impact of technological breakthroughs on enterprises, and the

manifestation of the interaction between technology and the political, economic, and social environment (characterized by rapid, significant, and wide-ranging changes).

3.2. financial analysis

3.2.1. Profitability

Profitability refers to the ability of a company to generate profits, also known as its ability to increase funds or capital. It reflects the level of profit that a company earns over a certain period.

Indicators used in this article include Revenue Growth Rate, Gross profit margin, Net Profit Margin and Assets turnover.

3.2.2. Liquidity

Liquidity refers to the ability of a company's assets to realize and repay debts without loss of value. It reflects the available funding constraints faced by enterprises. Indicators used in this article include Current ratio and Interest cover.

3.2.3. Operating Capacity

Operational capability refers to the ability of an enterprise to utilize various assets to earn profits. It reflects the management level and utilization efficiency of existing assets by enterprises.

Indicators used in this article include Trade receivable days, Trade payable days.

As inventories are not included in e-commerce companies, inventory holding period is not calculated.

3.2.4. Capital Structure

Capital structure refers to the value composition and proportional relationship of various types of capital in an enterprise, usually referring to the structure of long-term capital.

Indicators used in this article include gearing and Long-term debt ratio.

Through comprehensive analysis of these four aspects, a more comprehensive understanding of the company's financial situation can be obtained, providing decision-making basis for investors, creditors, and the enterprise itself. At the same time, there is also a certain correlation and mutual influence between different indicators, so comprehensive consideration is needed in the analysis.

3.3. Valuation Method

Company valuation refers to the evaluation of the comprehensive value of a company based on its own perspective. The valuation of a company is a prerequisite for investment, financing, and trading, and is a forward-looking prediction that needs to consider the future changes of the company and the foundation of sustainable operation.

This paper selects several important indicators to analyze the valuation of eBay, such as Price to earnings ratio, EPS Growth Rate, Revenue Growth Rate, PEG.

4. Results and Discussion

4.1. Macro Environment of eBay Based on PEST

4.1.1. Political

Government regulation impacts key aspects of eBay. During 2021, legislation was passed requiring all businesses that process payments to issue a Form 1099-K for all sellers who receive more than $600 in gross payments in a year, as a result, Form 1099-Ks for the $600 threshold will be issued extensive and increasing government regulation and oversight could adversely impact business. Moreover, business and customers may be subject to evolving sales and other tax regimes in various jurisdictions.

4.1.2. Economic

From 2022 to 2023, the Federal Reserve hiked the benchmark interest rates to tackle inflation. Although the Fed has signaled its intention to cut rates in 2024, eBay's borrowing costs have been and will continue to be burdened by the higher interest rates, potentially hurting its operational performance and financial standing. Additionally, the fair market value of the fixed-rate investment securities took a hit in 2022 and 2023 due to the surge in interest rates, a scenario that could repeat in the future.

4.1.3. Social

For customer focus, eBay continuously investing in technology to enhance selling experiences and product quality, fostering the growth of its seller tools ecosystem. Furthermore, eBay offers the "eBay Money Back Guarantee" to further bolster the confidence of the buyers.

For company's impact and responsibility, eBay remains resolute in its pursuit of achieving 100% renewable energy usage in its operations and data centers by 2025.

4.1.4. Technological

In the field of eBay's Marketplace, a combination of proprietary technologies and services are used. eBay treys to make platform more accessible to users by using technologies like AI, including generative AI ("GAI"). However, it also faces risks like online security risks, systems failures and privacy and protection of user data.

4.2. Financial Analysis of eBay

4.2.1. Profitability

The profitability indicators of eBay, Alibaba, best buy and Amazon are shown in figure 1 and figure 2. From 2021 to 2023, although eBay's revenue growth rate decreased hugely, it then gradually increased. Similarly, this changing trend also happened in eBay's net profit margin, which shows a positive trend. However, eBay's gross profit margin constantly decreased in past four years, which totally reduced by 7.8%. Although showing a negative trend, eBay still had a much higher gross profit margin than its competing companies (Alibaba, best buy, amazon). eBay's assets turnover nearly stabled at 46%, this means that for every complete turnover cycle of a company's assets, it can generate approximately 50% of its total sales revenue. eBay's assets turnover was almost the same as Alibaba but much less than best buy and Amazon. Moreover, during 2021, the various indicators of this year are quite outstanding, due to the economic recovery after the COVID19.

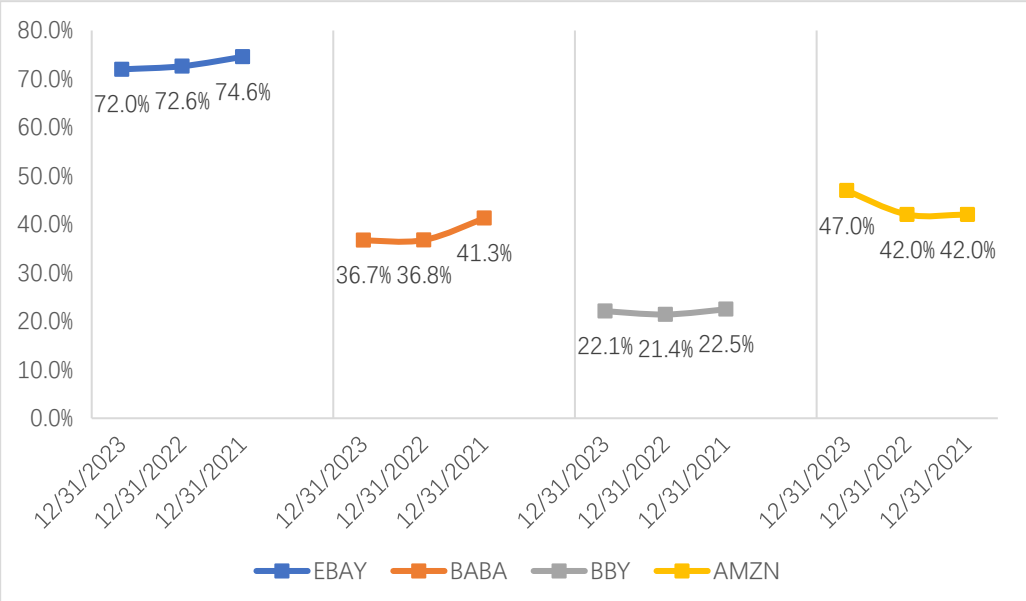


Figure 1. Gross Profit margin

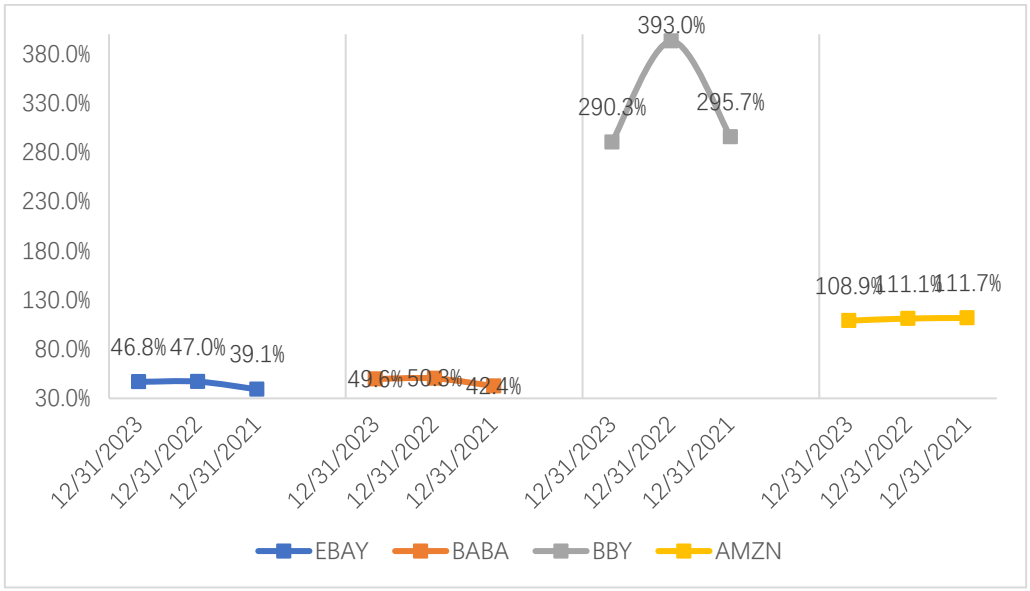


Figure 2. Assets Turnover

4.2.2. Liquidity

The liquidity indicators of eBay, Alibaba, best buy and Amazon are shown in figure 3 and figure 4. eBay's current ratio increased year by year, reflecting this company has adequate amount of assets to cover liabilities. Moreover, eBay's current ratio is much higher than other competing companies, which indicates that the financial situation of eBay is relatively stable. For interest cover, eBay's had 15.1, this is usually a healthy indicator, indicating that a company has strong debt paying ability and can easily pay its interest expenses even in the face of certain business fluctuations or economic pressures. However, best buy's interest cover is more than twice of eBay, which should not be neglected.

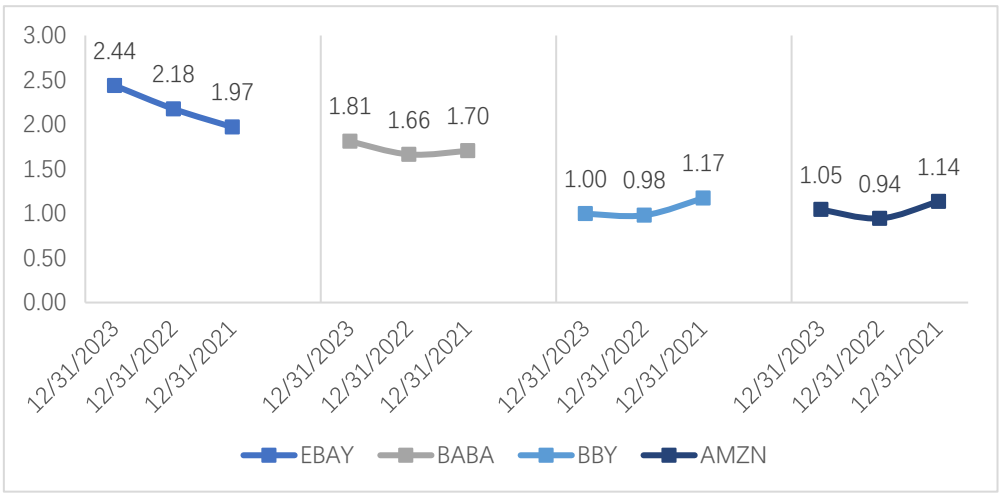


Figure 3. Current Ratio

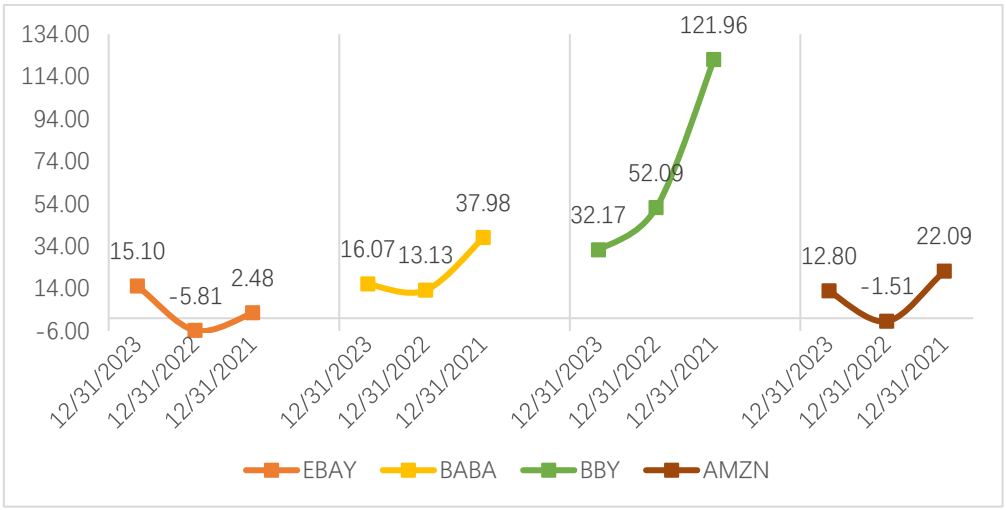


Figure 4. Interest Cover

4.2.3. Operational Capacity

The operational indicators of eBay, Alibaba, best buy and Amazon are shown in figure 5 and figure 6. Inventory is not included, therefore, there's no calculation of inventory holding period. In this section, eBay's trade receivables days are like the industry situation. However, these increase days may reflect eBay's credit period is longer than before or the customers take longer time to finish payment, which may increase the risk of bad debts and cash flow pressure. For trade payables days, which is longer than other competing companies. eBay had a longer cycle in paying supplier payments. Although this can provide more cash flow buffer for eBay, excessively long accounts payable turnover days may damage relationships with suppliers, leading to supply chain instability or a decrease in credit ratings. In addition, excessively long accounts payable turnover days may also indicate that the company has issues with payment delays or poor cash flow management.

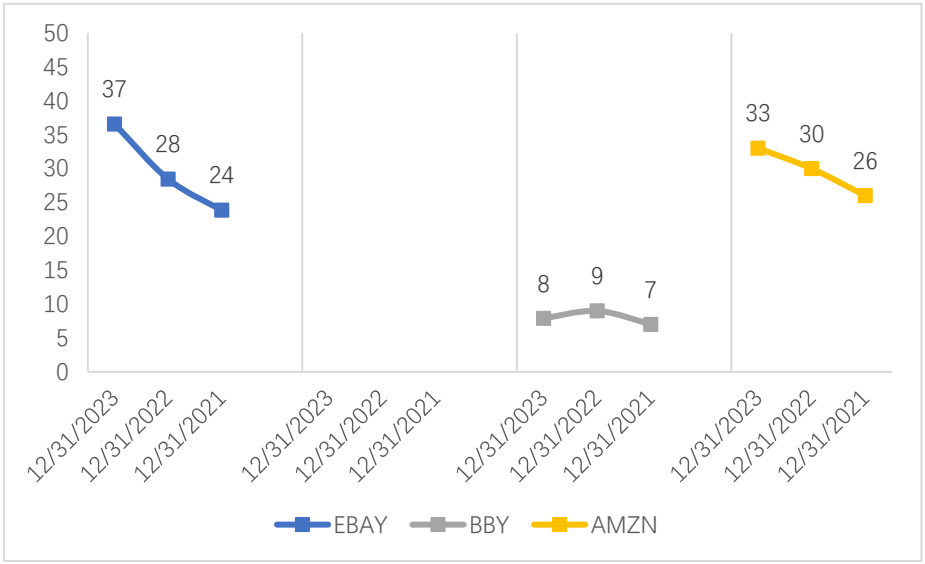


Figure 5. Trade Receivables Days

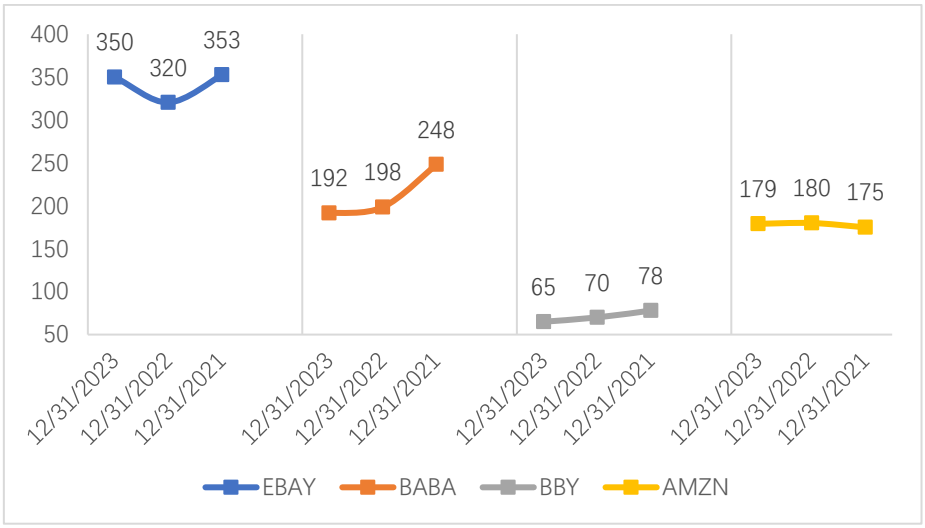


Figure 6. Trade Payables Days

4.2.4. Capital Structure

The capital structure indicators of eBay, Alibaba, best buy and Amazon are shown in figure 7 and figure 8. eBay's gearing is relatively high, which may bring some benefits to the company, such as increasing financial leverage, thereby improving shareholder returns. However, at the same time, this may also increase debt pressure and financial risks, especially in unstable economic environments or poor business operations. eBay's high gearing may lead to higher interest and repayment pressure, which may have a negative impact on the company's profitability and cash flow stability. For long-term debt/equity ratio, eBay's figures are nearly around 1, which means eBay's long-term debt is roughly equal to equity. eBay may use borrowing to support its operations. Although borrowing can bring additional funds to a company for investing in new projects, it also increases the financial risk and debt repayment pressure of the company.

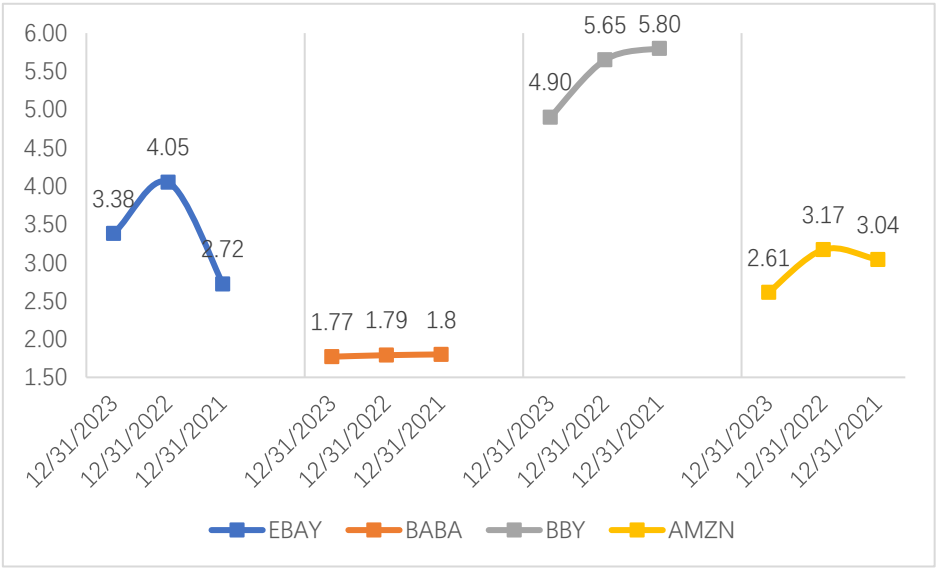


Figure 7. Gearing

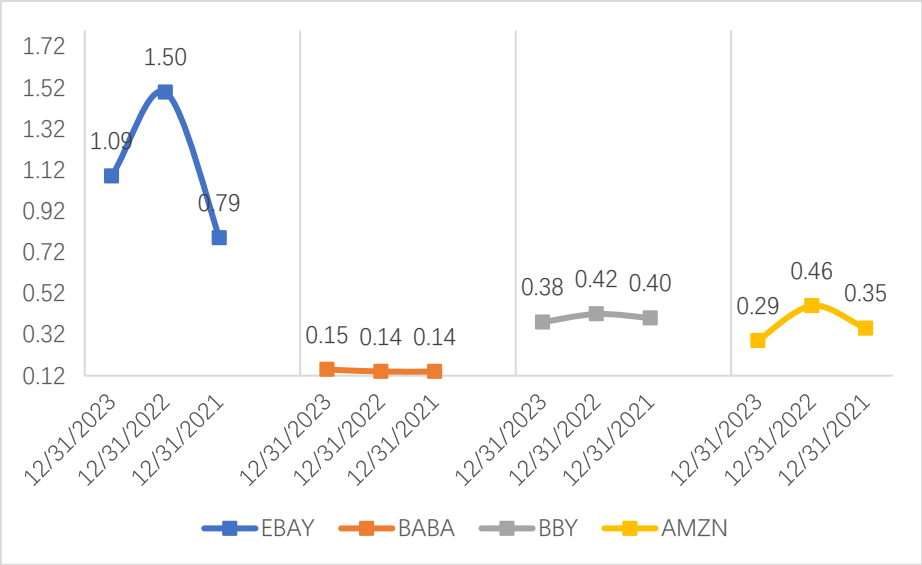


Figure 8. Assets Turnover

4.3. Valuation Analysis of eBay

The valuation indicators of eBay, Alibaba, best buy and Amazon are shown in table 1. Although eBay has the cheapest stock price, it may indicate that eBay's performance in the market is not as good as the other three companies, or that investors hold a pessimistic view of eBay's future growth and profitability. Financial condition will also affect stock price, such as the debt pressure. However, eBay is still favorable as it has the relatively lowest TTM, NTM P/E ratio and PEG ratio. In this case, the investment return period may be shorter and the investment value of the stock may be greater. Therefore, eBay can be a favorable investment target.

Table 1. Valuation Indicators

2024/3/7	eBay	Alibaba	Best buy	Amazon
stock price ($)	50.61	72.75	78.20	174.17
TTM EPS	4.24	8.77	6.38	2.88
NTM EPS	4.66	8.53	6.05	4.13
EPS growth rate	9.9%	-2.7%	-5.2%	43.4%
TTM P/E	11.9	8.3	12.3	60.5
NTM P/E	10.9	8.5	12.9	42.2
PEG	1.21	NA	NA	1.39

4.4. Investment Value of eBay

According to the positive macro environment condition, stable financial performance and relatively reasonable valuation result, eBay can be a favorable investment target. However, investors also need to carefully consider the intensity of market competition, the risk of policy environment changes, and other potential factors when making decisions to ensure that their investment decisions are more cautious and rational.

5. Conclusion

This paper uses the PEST model, financial indicator analysis, and valuation analysis methods to study eBay. The research results are as follows: Firstly, from the external environment, despite facing some challenges in the macro environment, the overall situation is still good. Moreover, as for eBay's financial performance, eBay's profitability and liquidity is showing a positive trend, which is relatively more favorable than its competing companies. eBay's trade receivables and payables days are also relatively reasonable. However, eBay has a relatively high gearing and aggressive capital

structure, which may bring more risks for eBay's future operating. Finally, eBay has the lowest PEG ratio, which reflects the investment return period may be shorter and the investment value of the stock may be greater. However, its cheapest stock price and low P/E ratio may indicate eBay is undervalue and may affect confidence of investors, which should also be considered.

These analyses above have an impact on both investors and eBay itself. For investors, PEST analysis helps to understand the macro environment eBay faces, such as policy, economic, social, and technological trends, to predict its market potential and risks. Financial analysis provides key information on eBay's profitability, solvency, and operational efficiency, which helps investors evaluate its financial health. Company valuation analysis helps investors determine eBay's reasonable market value and provides a basis for investment decisions. At the same time, from the perspective of eBay itself, these analyses help identify market opportunities and challenges, optimize financial structure, and develop reasonable valuation strategies, thereby enhancing its market competitiveness and profitability.

However, the paper also has some limitations. Such as, PEST analysis may overlook specific competitive trends within the industry, financial analysis may be influenced by data lag and stationarity, while company valuation may be influenced by various uncertain factors, resulting in biased valuation results. Therefore, in the future studies, it is necessary to comprehensively consider multiple factors to ensure the accuracy and effectiveness of the analysis.

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