

A Comparative Analysis of Amazon, Microsoft, and Apple's Stock Investment Value

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Abstract. This paper provides a comparative analysis of the stock investment value of Amazon, Microsoft, and Apple, three global companies that investors may consider when investing in stocks. The author analyzes each company's business diversity, financial situation, and industry competition. Amazon is a leading e-commerce company with strong domestic and international competitors in the field of e-commerce and cloud computing. Microsoft is a stable company with a dominant position in the personal computer operating system market and a growing market share in the field of cloud computing. Apple has a diverse product line, including hardware and software products, and faces competition from many competitors, but maintains its competitiveness in the market by investing in technological innovation. The paper concludes that the stock market is full of opportunities and challenges. And investors need to have a certain risk awareness and long-term investment vision. The analysis provided in this paper can help different investors to select stocks that suit their preferences and investment objectives. The paper uses data from Yahoo Finance and company websites to provide an overview of each company's performance, net sales, and stock prices. And compare the calculation results. Then select the stocks that investors with different preferences prefer.

Keywords: Investment value, risk, profitability ratios, benefit.

1. Introduction

As Tamplin said, an investment is a possession that will someday be worth more than it cost. Almost any asset, including intangible assets like education, can be considered an investment. Investing often refers to the purchase of stocks or bonds when discussing the stock market [1]. The significance of investment is that it can create wealth growth and value for individuals or enterprises and achieve long-term financial goals. Investing allows people to acquire more assets and increase sources of income.

At present, the global economy is still recovering, but due to the continuous impact of the new crown epidemic, the global supply chain and production activities have been hit to a certain extent. In addition, inflationary pressures have increased, and many central banks have adopted measures to raise interest rates. These factors may have a certain negative impact on the stock market. However, there are also some positive factors: first, the global economy is recovering, and market demand is expected to increase; second, many governments and central banks are taking measures to support economic recovery, which is also expected to boost market confidence; third, the development of some emerging industries and technology companies Rapidly, it is expected to become a new growth point of the market in the future. Generally speaking, the stock market is a market full of opportunities and challenges. Investors need to have a certain risk awareness and long-term investment vision.

In this paper, I will analyze each company's business diversity, financial situation, and industry competition of Amazon, Microsoft, and Apple. Besides this, I will also analyze the stock of each company and compare their risks from different aspects by using the data from Yahoo Finance and company websites.

2. First Description

2.1. Amazon (AMZN)

Amazon was founded in 1994 and is headquartered in Seattle, Washington, USA. The business began as an online bookstore and has since grown to become one of the biggest online merchants in the world. Among other things, Amazon generates revenue through its web services, subscriptions, and retail businesses [2].

With the development of technology, online business competition is becoming more and more fierce. In the field of e-commerce, Amazon faces strong domestic competitors such as Alibaba and JD.com, as well as challenges from international competitors such as eBay and Wal-Mart. In the field of cloud computing, Amazon's AWS faces competition from rivals such as Microsoft and Google. However, Amazon has maintained its leading position in the market by continuously investing in R&D and technological innovation to continuously improve the quality of its products and services.

As one of the largest e-commerce companies in the world, the shares of Amazon have been strong. As of February 28th, 2023, Amazon's stock price is \$93.76 per share. Amazon stock has performed well over the past year, with shares up about 35.53% in the third quarter. But the company's performance is not very good, with net sales reaching approximately \$514 billion in 2022, a year-on-year increase of 9%. Amazon posted a net loss of \$2.7 billion (Fig 1).



Fig. 1 Stock Price of Amazon <https://finance.yahoo.com/quote/AMZN?p=AMZN&.tsrc=fin-srch>

2.2. Microsoft (MSFT)

Microsoft Corporation is headquartered in Redmond, Washington, USA, and was founded in 1975. It sells computing devices, cloud systems and services, software, and other products to consumers and businesses. The company's intelligent cloud segment is the largest source of profit, as well as the fastest growing [3-4].

Microsoft's playing field is relatively stable. In the personal computer operating system market, Microsoft's Windows operating system has always occupied a dominant position; in the field of cloud computing, the market share of the Azure cloud platform is also growing. Microsoft has also expanded its developer community and ecosystem through initiatives such as the acquisition of GitHub. In the past five years, Microsoft's stock price has risen steadily, and it has declined for a period of time due to the impact of the epidemic, but it rebounded quickly and continued to rise.

Until December 31st, 2022, Microsoft's revenue was \$168.9 billion and its net profit was \$16.4 billion in the second quarter of 2022. As of February 28th, 2023, Microsoft's stock price is \$93.76 per share. In the past five years, Microsoft's stock has performed very well, and its stock price has risen by about 225% (Fig 2).

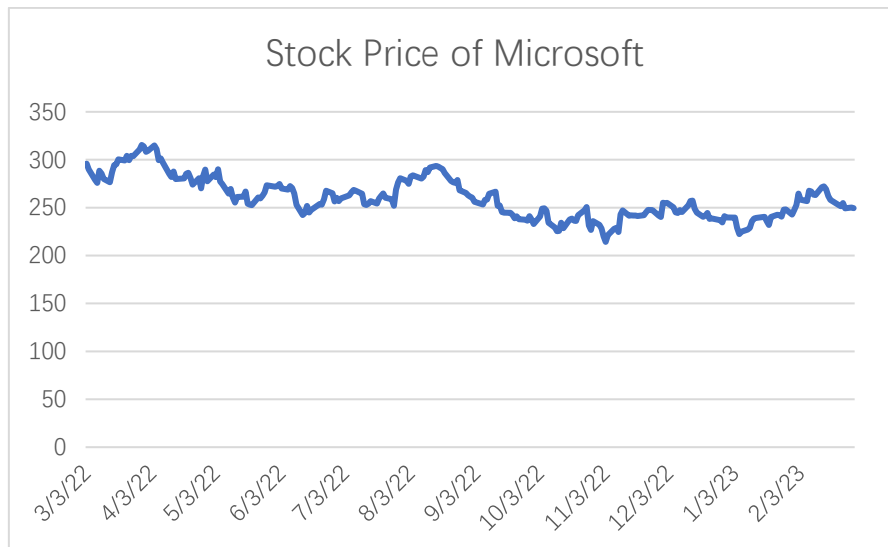


Fig. 2 Stock Price of Microsoft <https://finance.yahoo.com/quote/MSFT?p=MSFT&.tsrc=fin-srch>

2.3. Apple (AAPL)

As a world-renowned technology company, Apple has a strong diversity of product lines. It mainly includes iPhone, iPad, MacBook, Apple Watch, AirPods, and other hardware devices, as well as iOS, macOS, watchOS, and other software products. At the same time, Apple has also set foot in fields such as cloud services, digital content, and payment services. Therefore, product diversity is a major advantage of Apple. This diversity reduces Apple's product risk because if one product or service does not perform well in the market, others can still support the company's profitability.

Apple is highly competitive in the market, facing pressure from many competitors such as Samsung, Huawei, and Xiaomi. However, Apple maintains its competitiveness in the market by continuously launching new products, improving product performance and quality, increasing brand value, and expanding its service business. In addition, Apple's customer loyalty is also very high, because the quality of its products and user experience has been widely recognized [5].

Apple's stock has always been one of the leaders in the global stock market, and its market value has always been among the top in the world. Since 2000, Apple's stock market value has increased more than 20 times, once becoming the most valuable company in history. While Apple's stock price can be affected by market volatility, its performance has been strong. Until September 1st, Apple's revenue was \$117.2 billion. And its net profit was \$20.7 billion according to the fourth quarter financial report of 2022. As of February 28th, 2023, Apple's stock price is \$128.03 per share (Fig 3).

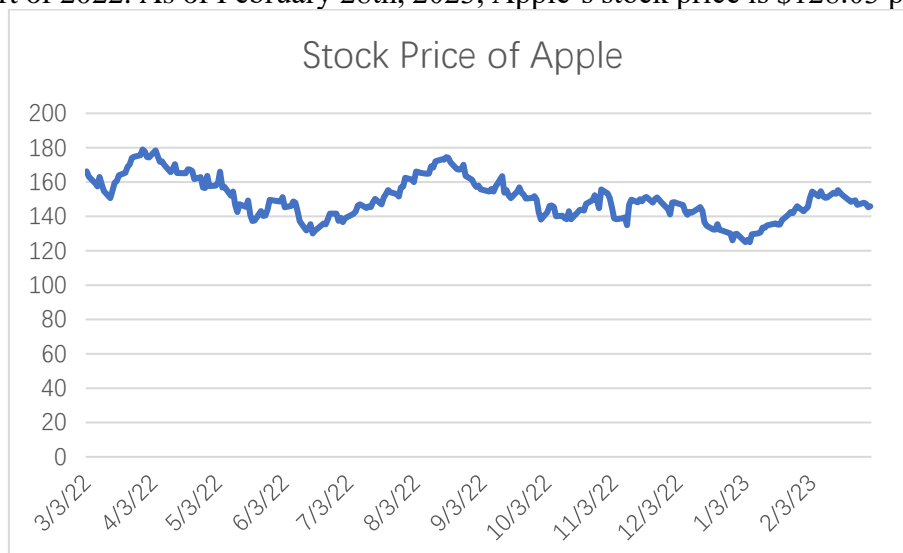


Fig. 3 Stock Price of Apple <https://finance.yahoo.com/quote/AAPL?p=AAPL&.tsrc=fin-srch>

3. Marketing Analysis

3.1. Risk

Table 1. Risk Ratios comparing

	Amazon (AMZN)	Microsoft (MSFT)	Apple (AAPL)
Market Cap	1.043T	1.847T	2.311T
Beta	1.17	0.93	1.27
Total Debt Ratio	2.12	0.24	2.37
Current/Quick Ratio	0.94/0.68	1.93/1.89	0.88/0.85

The market capitalization of these three stocks is not much different. We can judge that these three companies are all big companies (Table 1). But their beta values are quite different.

Beta in a stock is a measure of a stock's volatility relative to the overall market or a stock's systematic risk. Investors can use beta to help decide which stocks to include in their portfolios. According to the data of Yahoo Finance, compared with the other two corporations, Microsoft has the lowest beta in February 2023. Microsoft's stock with a lower beta than the market average is generally considered a low-risk stock because its price will fluctuate less. If an investor wants to construct a more conservative portfolio, they may choose Microsoft to reduce the systematic risk of the overall portfolio. According to the value of beta, we can judge the risk ranking of the three stocks as Apple>Amazon>Microsoft.

The total debt ratio in the stock is an indicator to measure the debt level of the company, indicating the ratio of the company's total liabilities to its total assets [6]. This ratio can tell investors about the financial risk of the company because a high Total Debt Ratio means that the company has high debt levels and may face difficulties in repaying debts, thereby reducing the company's solvency and profitability. Compared with the other two corporations, Apple has the highest total debt ratio. This means that Apple has a high debt level and may face difficulties in repaying debts, thereby reducing the company's solvency and profitability. Microsoft has the lowest total debt ratio. This shows that Microsoft Corporation has stronger solvency and financial stability. The total Debt Ratio is an important metric for investors because it can help assess a company's financial stability and debt-servicing ability.

Besides this, Microsoft has the highest current ratio and quick ratio. Comprehensive consideration, Microsoft's stock has the least risk. Microsoft is the most stable company compared to the other two companies.

3.2. Profitability Ratios

Table 2. Profitability Ratios comparing

	Amazon (AMZN)	Microsoft (MSFT)	Apple (AAPL)
Total Asset Ratio	0.3	0.15	0.26
Profit Margin	2.26%	33.05%	24.56%
ROA and ROE	2.71%&14.44%	18.14%&39.87%	24.06%&169.90%

The total assets ratio refers to the ratio of a company's total assets to its shareholders' equity. It is a financial metric that measures how a company's assets are financed and capitalized (Table 2). The higher the ratio of the total assets, the higher the debt ratio of the company. And the capital structure is biased towards debt financing which has higher risks. A lower total asset ratio indicates that the company's debt ratio is relatively low, and the capital structure is biased towards equity financing, with less risk. Microsoft has the lowest total asset ratio. This means that Microsoft has the least financial risk compared to the other two companies.

Profit margins are one of the key indicators of a company's business health and profitability. Microsoft has the highest profit margin. It usually indicates that this company is well-run, managed effectively, and has the ability to resist the impact of market changes.

ROA means “Return on Asset” and ROE means “Return on Equity”. The higher the ROA, the more effectively the company can use its assets to make more profits [7-9]. The higher the ROE, it means that the company can use shareholders' investment funds more effectively and bring higher returns to shareholders. Apple has the highest ROA and ROE [10]. This means Apple has the highest profitability and capital utilization compared with the other two companies.

From a profitability ratio point of view, Apple's stock could bring big gains to shareholders. But it also comes with greater risks.

4. Conclusion

In this article, I compare the stocks of the three companies from the perspective of risk and profit. And I also evaluate the investment risk and value of stocks by collecting and calculating data. All things considered, Microsoft is the most stable stock, followed by Amazon. Investing in Apple is riskiest but correspondingly potentially more profitable. Investors are biased differently. The greater the risk in the stock market, the greater the return. But some investors will invest in Microsoft for safety reasons, while some investors will invest in Apple for greater benefits.

Most of the data in this paper are as of February 2023 and are not complete. And the stock market fluctuates quickly, my calculation results are for reference only. In the future, I may use updated data to calculate and compare from more aspects.

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