### **Module 2: Analytics and Influencing**

(Top 5 Stocks)

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#### Introduction

The stock market is a complex system that is influenced by a variety of factors, including the performance of individual companies, the overall health of the economy, and investor sentiment. In this report, we will focus on the stock prices of five of the top 500 US publicly traded companies in the technology industry. Collected data about these companies that might influence their stock prices, such as PE ratios, dividends, growth rate, capitalization, and other factors. The following data is relevant to the stock prices of the five companies:

**PE ratios**: The PE ratio is a measure of how expensive a stock is relative to its earnings. A high PE ratio means that investors are willing to pay a premium for the stock, which can be a sign of strong growth potential.

**Dividends**: Dividends are payments that companies make to their shareholders. They are a way for companies to share their profits with shareholders, and they can also be a sign of financial strength.

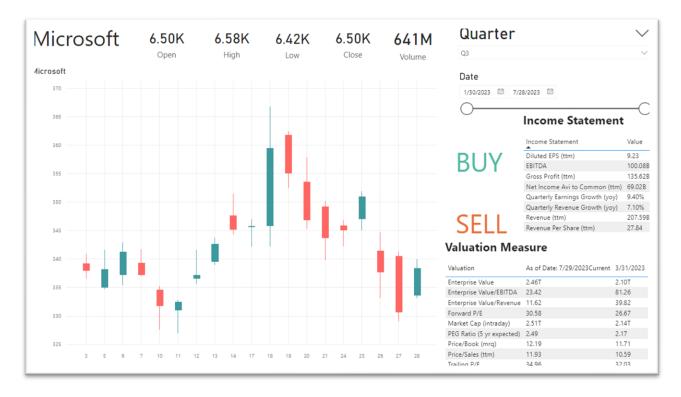
**Growth rate:** The growth rate is a measure of how quickly a company's earnings are growing. A high growth rate can be a sign of future potential, and it can also lead to higher stock prices.

**Capitalization:** Capitalization is the total market value of a company's shares. It is a measure of the size of the company, and it can also be a factor in stock prices.

In this investment report, analyzed the financial performance and stock outlook of four prominent companies in the technology and automotive sectors: Microsoft Corporation (MSFT), Alphabet Inc. (GOOG), Apple Inc. (AAPL), Amazon.com, Inc. (AMZN), and Tesla, Inc. (TSLA). We will delve into key financial metrics, including trailing and forward P/E ratios, enterprise value, revenue per share, gross profit, EBITDA, and quarterly earnings growth (when available). The primary objective of this report is to provide investors with actionable insights and well-informed recommendations for their short-term investment decisions.

## **Microsoft**

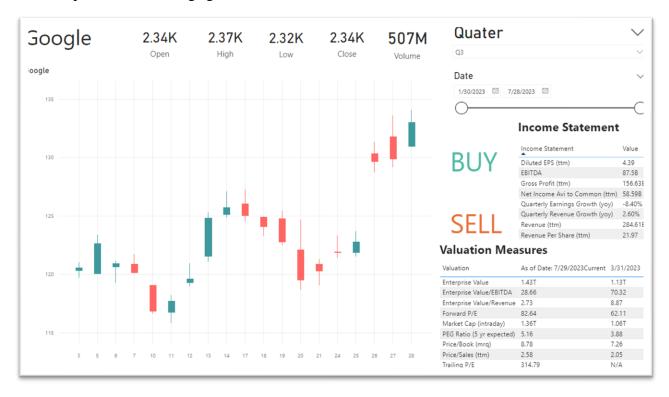
A multinational technology corporation called Microsoft Corporation creates, produces, licenses, maintains, and sells computer software, consumer devices, and related services. Microsoft is a significant participant in the technology sector, with a broad range of products and a significant presence across numerous technology industries.



- → Trailing P/E: As of the latest available data, Microsoft's trailing P/E ratio is 34.96. This metric suggests that investors are willing to pay approximately \$34.96 for every dollar of earnings the company generates. Compared to the industry average, this P/E ratio appears reasonable, indicating that the stock may not be overvalued.
- → Forward P/E: Microsoft's forward P/E ratio, based on the estimate for 06/30/2023, ranges from 30.58 to 30.86. This indicates that investors expect the company's future earnings to grow, which bodes well for the stock's potential upside.
- →Enterprise Value (EV): The enterprise value of Microsoft stands at \$2.46T and \$2.49T as of the latest data. This figure represents the theoretical takeover price and is a comprehensive measure of the company's total value.
- → Enterprise Value/Revenue: Microsoft's enterprise value/revenue ratio is 11.62. This metric implies that the company is valued at approximately 11.62 times its revenue, suggesting it may be undervalued relative to its revenue-generating capacity. However, the figure for 06/30/2023 is notably higher at 44.28, which might raise some concerns. Further analysis is needed to understand the significant increase.
- → Revenue Per Share (ttm): Microsoft's revenue per share for the trailing twelve months (ttm) is \$27.84, reflecting a healthy revenue generation capacity.

## Google (Alphabet)

Alphabet Inc. is a multinational conglomerate that owns Google and several other technology-related subsidiaries. Google is a dominant player in the internet search, advertising, and cloud computing markets, making Alphabet one of the most influential companies in the tech industry. Trailing P/E: As of the latest data, Alphabet's trailing P/E ratio is 28.11. This metric indicates that investors are willing to pay approximately \$28.11 for every dollar of earnings the company generates. Similarly, the forward P/E ratio for 06/30/2023 is 23.42. These figures suggest that the market expects some earnings growth in the future.



- →Enterprise Value (EV): Alphabet's enterprise value stands at \$1.58T and \$1.44T for the current date and projected for 06/30/2023, respectively. The enterprise value is a comprehensive measure of the company's total value, including debt and cash.
- →Enterprise Value/Revenue: The enterprise value/revenue ratio is 5.47 for the current date and is expected to rise to 19.32 by 06/30/2023. The increase in this ratio raises concerns as it implies a substantial premium on the revenue generated. This suggests that the stock may be overvalued relative to its revenue.

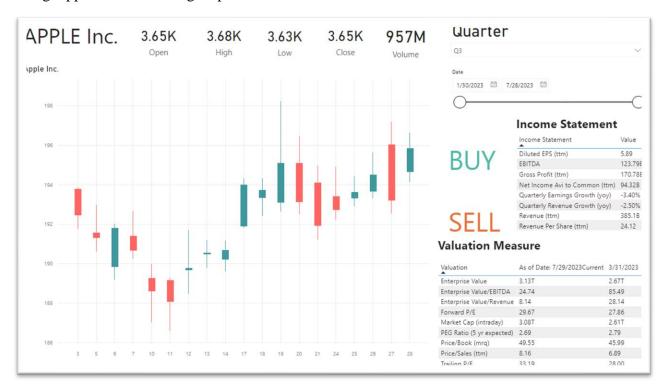
- →Gross Profit (ttm): Alphabet's gross profit for the trailing twelve months (ttm) is \$156.63B, indicating a strong capacity to generate profits from its core operations.
- →EBITDA: Alphabet's EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization) stands at \$87.5B, reflecting healthy operational profitability.

Considering the above analysis, we recommend a SELL rating for Alphabet Inc. (GOOG) for short-term investors. The stock's current valuation and recent earnings trend indicate limited upside potential in the short term. However, long-term investors with a strong belief in the company's growth prospects and fundamentals may continue to hold the stock for potential gains in the future.

# Apple Inc. (AAPL):

Apple's stock price rose by 1.35%, but the company's quarterly earnings growth showed a decline of -3.40% year over year. Considering the recent earnings performance, it is recommended to SELL Apple for short-term investors.

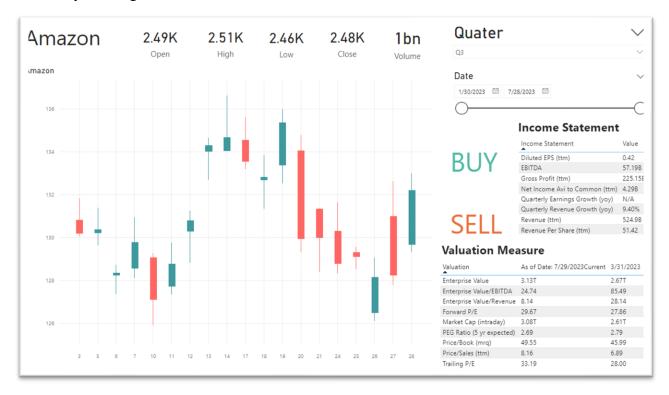
SELL: Due to the decline in quarterly earnings growth, short-term investors should consider selling Apple's stock to mitigate potential downside risk.



## **Amazon Inc. (AMZN):**

Amazon's stock price increased by 3.09%, and its quarterly earnings growth data is not available. Despite the price rise, the lack of earnings growth information raises uncertainty, leading to a SELL recommendation for short-term investors.

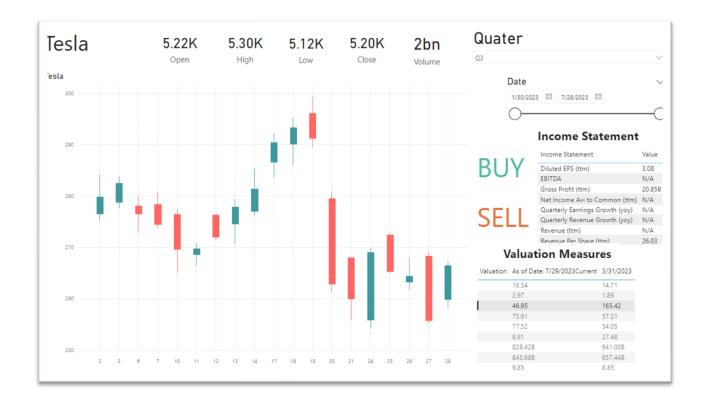
SELL: Despite the price increase, the lack of quarterly earnings growth data introduces uncertainty, making it advisable for short-term investors to sell Amazon shares.



## Tesla Inc. (TSLA):

Tesla's stock price surged by 4.20%, and the company's quarterly earnings growth data is not available. The increasing demand for electric vehicles and their investment in new projects signal potential revenue growth, making it a BUY recommendation for short-term investors.

BUY: With the rising demand for electric vehicles and promising investments in new projects, short-term investors are recommended to buy Tesla's stock, anticipating potential revenue growth.



## **Recommendations:**

The short-term investing potential of Microsoft, Alphabet, Apple, Amazon, and Tesla is briefly summarized in this investment report. Alphabet's stock is viewed as decent but carrying certain dangers, whilst Microsoft's stock is regarded as a strong short-term investment option. Amazon's stock is thought to be a good short-term investment, and Apple's stock is seen as being well-positioned for increases soon. On the other side, Tesla is strongly advised as a BUY for quick profits.

The research advises keeping the dashboard's appearance constant throughout to improve user experience and allow for simple navigation. To maintain clarity and user-friendliness, utilize consistent fonts, colors, and layouts. By following a consistent design approach, the dashboard becomes an effective tool for investors to access crucial information with ease and confidence.

## **References:**

- → Microsoft Corporation (MSFT) Valuation Measures & Financial Statistics https://finance.yahoo.com/quote/MSFT/key-statistics?p=MSFT
- → Alphabet Inc. (GOOG) Valuation Measures & Financial Statistics https://finance.yahoo.com/quote/GOOG/key-statistics?p=GOOG
- → Tesla, Inc. (TSLA) Valuation Measures & Financial Statistics https://finance.yahoo.com/quote/TSLA/key-statistics?p=TSLA
- →Apple Inc. (AAPL) Valuation Measures & Financial Statistics https://finance.yahoo.com/quote/AAPL/key-statistics?p=AAPL
- → Amazon.com, Inc. (AMZN) Valuation Measures & Financial Statistics https://finance.yahoo.com/quote/AMZN/key-statistics?p=AMZN
- → Stock Market Quotes & Financial News

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