A Comparative Analysis of Investment Assets of Three High-tech Companies

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Abstract. This essay provides an in-depth financial analysis of global high-tech leaders Dell, Apple, and Tesla with the aim of providing investors with effective investment strategies. Dell, Apple, and Tesla have some commonalities in their main businesses: hardware products, software and services, and retail and distribution. By examining the latest financial metrics of these companies, including interpretation of the data and analysis of asset selection challenges for different investor groups, the study uncovered a range of interesting findings. The study covers nine different investor profiles, including value, revenue, PEG, index, ratio analysis, DCF, Momentum, insider buying, and stock buyback investors. Using established financial models, the study find that index, momentum, insider buying, and share buyback investors are more inclined to choose the shares of these three companies. At the same time, ratio analysis and discounted cash flow (DCF) investors also show a preference for Apple. These findings provide valuable insights for developing personalized investment strategies aimed at optimizing financial returns in the high-tech sector. This study not only provides investors with practical decision-making tools, but also provides a new perspective for understanding the financial performance and attractiveness of high-tech companies.

Keywords: Risk; profitability; market ratio; high-tech companies.

1. Introduction

Investment is an important way to achieve financial freedom and wealth growth, which can effectively protect against inflation and maintain and increase value [1]. The stock market attracts many individual investors because of its stability, transparency and ease of participation. Despite the risks, the high yield potential of the stock market fuels investor enthusiasm [2]. Investors are committed to finding scientific methods to predict market trends in order to balance risks and returns and achieve stable wealth growth.

Technology companies offer significant investment value. Such companies often take technological innovation as the core driving force and can continue to lead the development trend of the industry and constantly open up new market areas [3]. In today's ever-changing science and technology, enterprises with advanced technology undoubtedly have stronger competitive advantages and profitability. At the same time, the high growth and broad market prospects of the technology industry also provide investors with rich opportunities and huge return potential. Therefore, for investors looking for long-term value and high returns, technology companies are undoubtedly very attractive investments. Through in-depth research and analysis, excavating those technology enterprises with technical strength, market potential and good governance structure is expected to bring considerable value-added effect to the investment portfolio [4].

Therefore, three well-known companies in the field of science and technology - Dell, Apple and Tesla - are selected as the research objects. By combining their financial data and building sophisticated models, this essay makes a comprehensive and in-depth analysis of the investment behavior of nine different investor groups [5]. In the investment strategy, portfolio diversification is widely regarded as an effective strategy, the core of which is to reduce risks and optimize returns by carefully selecting the asset classes with low correlation. The application of this strategy not only reflects the wisdom of investors, but also provides them with a steady investment path in the complex and changeable market environment.

2. Profile of the Selected Companies

2.1. Dell

Dell, a company that started out selling personal computers, made its name around the world. With the change of The Times and the innovation of technology, Dell continues to expand its business territory and gradually enrich the product line. Today, Dell's products cover personal computers, high-performance servers, mass storage devices, efficient networking equipment, innovative software and a full range of IT services to provide users around the world with more diversified and professional technical solutions.

2.2. Apple

Apple, with its superb development capabilities and superior product quality, is a leader in consumer electronics, computer software and online services. The breadth of its product line is impressive, from the disruptive iPhone smartphone to the trend-setting iPad tablet computer, to the stable and efficient iOS and macOS operating systems, each product demonstrates Apple's relentless pursuit of the perfect combination of technology and art.

2.3. Tesla

Tesla, as a leader in the field of electric vehicles and clean energy, brings a new way of travel and energy use to users around the world with its excellent innovation ability and market insight. Its product line not only includes the award-winning Tesla electric vehicle series, but also extends to clean energy products such as solar roofs and Powerwall energy storage systems and is committed to promoting the green transformation of the global energy structure.

3. Financial Indicators

3.1. Risk

Investment risk is the potential economic loss or adverse consequences of investing money in assets such as stocks, bonds, real estate or various financial instruments [6]. Under the framework of agency technology, when the essay study the risk of stock market, it usually comprehensively evaluates and reflects the risk level of assets through market indicators, β coefficient and debt ratio. Market capitalization is used to show the total value of all outstanding shares of a company in the stock market. This metric provides investors with an intuitive impression of a company's size and helps assess its position and potential value in the market. Beta is a measure of the relationship between a stock's price movements and changes in the broader index. It reveals the risk level of the stock relative to the whole market and provides an important reference basis for investors to build portfolios. The total debt ratio reflects the extent to which a company has raised its total assets through debt financing [7]. The ratio reveals more than just a company's financial structure. For investors, understanding this metric helps to more fully assess a company's solvency and long-term soundness. Related parameters are shown in the following Table 1.

Table 1. Risk

	DELL	AAPL	TSLA
Market Cap	87.64B	2774.29B	645.37B
Debt Ratio	1.03	0.82	0.40
Beta	0.95	1.31	2.43

It can be seen from Table 1 that the market value of the three enterprises has exceeded 100 billion yuan. Among them, the Beta value of TSLA is 3.43, which is the highest, so the investment risk is the highest. AAPL has a beta of 1.31. DELL is the least risky investment because it has a beta ratio

of 0.95. The total debt ratios of the three companies are not very different. DELL is 1.03, higher than both Apple and Tesla. Tesla has the lowest total debt ratio.

3.2. Profitability

Profitability is the potential of a business to generate profits or positive financial returns from its operations. This capability provides both external observers and internal decision makers with insights into how companies create value for shareholders and maintain long-term operational stability. Specific to various financial indicators, total assets (TA) represents the sum of all resources with economic value held by a company or an individual, which is an important basis for evaluating the scale and economic strength of an enterprise. Profit margin, a financial ratio that reveals how much profit a business can make from each unit of revenue after deducting all costs [8]. In short, it reflects the profitability efficiency of the business. Return on Assets (ROA) is a financial ratio that quantifies a company's ability to generate profitability from its total assets. Through this indicator, you can clearly see the efficiency of the transformation of enterprise assets into profits. Return on equity (ROE), on the other hand, focuses on how profitable a company is on the capital invested by shareholders. This is a key ratio because it is directly related to the return that shareholders can get on their investment. Related parameters are shown in the following Table 2.

Table 2. Profitability

	DELL	AAPL	TSLA
Total Asset Turnover	1.06	1.12	1.02
Profit Margin	2.92%	26.16%	15.50%
ROA	3.10%	29.40%	15.90%
ROE	-92.00%	156%	27.90%
Net Earnings	2442M	96995M	14997M

Apple's profit margin, at 26.16 percent, is the highest. Tesla's profit margin is 15.50%. Dell's profit margin, at 2.92%, is the lowest. AAPL has the highest ROA at 29.40%. TSLA's ROA of 15.90% and DELL's ROA of 3.10% are the lowest. In terms of net income, AAPL's income is the highest, reaching $96995M, followed by TSLA's income of 14,997m, and the lowest is Dell, which has less income than the first two. From the above data, it can be seen that Apple has the highest profit margin, return on assets and return on equity, and makes more money than other companies.

3.3. Market Ratio

The price-to-earnings ratio (P/E) is a key measure of a company's value, and it reflects the price investors are willing to pay for a company's earnings per share. The price-to-book ratio (P/B) evaluates companies from the perspective of book value, which compares the relationship between the market value of a company and its net asset value per share. The dividend yield is a financial ratio that reveals the relationship between the annual dividend income an investor can expect to receive from a particular stock investment and its current market price [9]. The price-earnings to Growth ratio (PEG) further considers a company's earnings growth potential by comparing the P/E ratio with its expected earnings growth rate to assess the value of a company's investment. The Discounted Cash flow (DCF) method is a valuation technique widely used in the financial field, which estimates the intrinsic value of a company by forecasting and discounting its future cash flows. Finally, a momentum (Mom) strategy is a trading strategy that focuses on capturing market momentum when the price of a stock rises or falls rapidly in order to make trading profits [10].

As can be seen from the Table 3, with the exception of Dell, the remaining two companies are growth stocks, as they have price-to-earnings and price-to-book ratios of more than 10%. DELL and AAPL both have dividend yields below 1.5%. All three companies have PEG ratios greater than 1, with the highest PEG being DELL, which may have a relatively high P/E ratio, possibly due to investors' optimistic expectations about the company's future earnings. A high P/E ratio usually means

that investors are willing to pay more for a company's earnings per share. The current price momentum divided by the 200-day average price of all three companies is greater than 1, the highest being Tesla's 234.79. In view of the Smart money, Except Dell, the other two have Smart money. All of the companies have their insider buying. In view of the Stock Buybacks, Apple has the highest value of 2.38%, DELL is 1.30%, and Tesla is -1.41%. Tesla's low buyback rate may also be related to its cash flow situation. If a company needs to preserve cash for day-to-day operations, capital expenditures, or to deal with potential market risks, it may not have enough money for a large-scale share buyback. The share buyback ratio is only one aspect of assessing a company's financial health and governance strategy. When making investment decisions, investors should also consider other financial indicators, market conditions, industry trends, and company fundamentals.

Table 3. Market Ratio

	DELL	AAPL	TSLA
P/E	18.87	27.98	47.13
P/B	-18.88	37.44	10.30
PEG	4.45	2.21	2.38
Dividend Yield	1.19%	0.53%	N/A
50-Day Moving Average	82.87	187.40	212.57
200-Day Moving Average	66.49	183.94	234.79
Stock Buybacks	1.30%	2.38%	-1.41%
Insider buying	yes	yes	yes
Smart money	no	yes	yes

4. Results for Asset Selection

This paper analyzes the choices of 9 types of investors in these three stocks, and the research results are shown in the following Table 4, different types of investors show certain preferences and tendencies when choosing these three companies. Specifically, index investors, momentum investors, and investors who focus on insider buying and share buybacks are more likely to choose the stocks of these three companies, which may be due to the strong attractiveness of these companies in terms of market performance, share price momentum, and insider confidence in the company's prospects. At the same time, Apple's value and revenue are relatively objective compared with the other two companies, and ratio analysis investors and discounted cash flow (DCF) investors show a special preference for Apple. This may be because Apple's excellent performance in financial ratios such as profitability and operating efficiency, as well as its strong cash flow generation ability, makes these investors more bullish on Apple's long-term investment value. In general, the asset selection results in the table above reflect the different views and preferences of different types of investors for the three high-tech enterprises. These results provide a valuable reference for investors to develop personalized investment strategies and help them better understand and grasp the investment opportunities and risks in the high-tech industry.

Table 4. Investing Selection

Types of investors	DELL	AAPL	TSLA
Value		√	
Income		√	
PEG	√		
Index	√	√	√
Ratio analysis	√		
DCF			√
Momentum	√	√	√
Insider buying	√	√	√
Stock buyback	√	√	

5. Conclusion

This study takes an in-depth look at the financials of global technology leaders - Dell, Apple and Tesla - in an effort to point investors towards smart investments. Although the three companies overlap in their main businesses, such as hardware manufacturing, software development and service provision, and even retail and distribution, they are distinct. Through a detailed analysis of these companies' latest financial data, combined with in-depth analysis of the asset allocation conundrum of different investor groups, this essay arrives at a series of compelling conclusions. The study covers nine investor types, including value investing, income-oriented, PEG strategies, index tracking, ratio analysis, discounted cash flow (DCF) assessment, momentum trading, insider buying, and share buybacks. Using sophisticated financial analysis models, this essay finds that index trackers, momentum traders, and investors who focus on insider buying and share buybacks are more likely to include the three tech giants in their portfolios. At the same time, ratio analysis enthusiasts and DCF investors have shown a particular fondness for Apple. These findings provide a valuable reference for investors to tailor their investment strategies to help them pursue superior investment returns in the technology sector. In addition, this study also provides market observers with a fresh perspective to gain a deeper understanding of the financial performance of technology companies and their market appeal. Overall, the research not only provides practical tools for investment decisions, but also broadens the perception of financial conditions in the technology industry.

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