

Different Investors' Choices of Technology Stocks: An Analysis Based on Microsoft, Dell, and Intel

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Abstract:

This paper compares three leading technology companies-Microsoft, Intel, and Dell Technologies-to understand why different investors prefer different technology stocks. The study shows how a company's financial performance affects investor choices and offers useful ideas for making investment decisions in the technology sector. By looking at key financial numbers-such as risk measures (market size, beta, debt ratio), profit measures (asset turnover, ROA, ROE), and market value ratios (P/E, P/B, PEG), this research finds clear patterns in what investors prefer. The results show that Microsoft attracts many types of investors, including PEG, DCF, and smart money investors. Intel is mainly liked by value and insider investors. Dell is mostly preferred by momentum investors. These findings help us see how financial features influence investor behavior and give practical advice for investors who want to match technology stocks with their own risk and return goals. This can help them build stronger and more personalized investment portfolios.

Keywords: Technology stocks; investment analysis; financial indicators; investor behavior; portfolio strategy.

1. Introduction

In today's changing economy and fast technology growth, picking the right investments is very important for financial success because it affects both possible returns and risks. Especially when markets are unstable, choosing assets well is a key skill for investors to handle markets and earn high returns [1-3]. This study picks three technological companies - Microsoft, Intel, and Dell - as sample investments because they are important in the technology industry. Microsoft is a top company in software and cloud

computing, Intel is a major maker of computer chips, and Dell is a big name for personal computers and IT infrastructure. Their different business styles, company sizes, and financial setups make them good choices for comparison. This can help show how different technological areas attract investors. This paper studies these three companies by looking closely at risk, profitability, and market value measures. The results give useful directions to investors who want to match their technological stock picks with their investment plans, helping them make smarter and better decisions.

2. Introduction of Companies

Microsoft Corporation started in 1975 and is based in Redmond, Washington. It is a world-leading technology company, famous for its software, cloud computing, and digital services. Its main products include the Windows operating system, the Office software suite, and the Azure cloud platform. These are used by many people, businesses, and developers around the world. Under CEO Satya Nadella, Microsoft has focused more on artificial intelligence and cloud solutions, adding AI tools into its products to encourage new ideas and growth. The company also cares about sustainability and responsible business, and it keeps shaping technology's future through buying other companies and developing its own products.

Intel Corporation began in 1968 and is located in Santa Clara, California. It is a global leader in making computer chips and technology. Intel is known for its x86 microprocessors that made personal computers possible. It remains important in data centers, Internet of Things (IoT), and self-driving car technologies. Even with strong competition and market changes, Intel spends a lot on improving how it makes products and on new chip designs. Its main business areas include Client Computing, Data Center and AI, Network and Edge, and Accelerated Computing Systems, putting it at the center of modern computing.

Dell Technologies Inc. was started by Michael Dell in 1984 and is headquartered in Round Rock, Texas. It is a global technology company known for personal computers, servers, data storage devices, and network solutions. Through its owned companies like VMware and SecureWorks, Dell provides complete technology answers for both individual users and large businesses. Dell's way of selling directly to customers changed how PCs are sold,

and the company continues to innovate in hybrid cloud, edge computing, and cybersecurity. With a focus on digital change and sustainable business, Dell remains a key player in the worldwide technology supply chain.

3. Financial Indicators

3.1 Risk

In investment analysis, risk means the uncertainty that comes with expected investment returns [4-5]. This uncertainty can come from many things, like market changes, borrowing money, or poor business operations. Furthermore, investor attention has been shown to significantly affect the volatility of technology stocks, a relationship further corroborated by Zhang and Li [6]. To fully understand the risks of Microsoft, Intel, and Dell, this study uses three main measures: Market Size, Beta, and Debt-to-Total Assets Ratio. Market Size shows how big the company is and how stable it is in the market. Usually, bigger companies are less affected by market problems. Beta measures how much a stock's price moves compared to the whole market. If beta is 1, the stock moves with the market. If beta is more than 1, the stock is more unstable than the market. If beta is less than 1, it is more stable. A negative beta is unusual and means the stock moves opposite to the market. Debt Ratio shows how much of a company's assets are paid for by debt. It is found by dividing total debt by total assets. A higher ratio means the company uses more debt and has more financial risk, especially when the economy is bad or interest rates are rising. Important data is shown in Table 1.

Table 1. Risk Indicators

Company	Microsoft (MSFT)	Intel (INTC)	Dell Technologies (DELL)
Market cap	\$3.294 Trillion USD	\$141.24 Billion USD	\$28.8 Billion USD
Beta	-0.6012	0.892	1.126
Debt Ratio	43.1%	48.3%	108.7%

The three companies are very different in size. Microsoft is worth \$3.294 trillion, which shows it is strong against market risks and very stable. This matches research that says big companies handle market problems better and have less price change [7]. On the other hand, Intel is worth \$141.24 billion and Dell is worth \$28.8 billion. Dell's smaller size makes it easier affected by market changes and specific events, which agrees with studies that say smaller size often means more risk [7].

Microsoft has a beta of -0.60, which is rare. This means its stock often moves opposite to the overall market. This defensive feature can help protect investments when the

market is down. Intel has a beta of 0.89, which means it moves closely with the market. Dell has a beta of 1.13, which is the highest. This means it is the most unstable, making market gains and losses larger, so it is the riskiest of the three.

The total debt ratio directly shows a company's borrowing and ability to pay debts. Dell has a very high ratio of 108.7%, meaning it owes more than it owns. This is a warning sign of high financial risk and depending too much on lenders. This puts the company under pressure to repay during bad economic times or when interest rates go up. In comparison, Intel and Microsoft have better ratios

of 48.3% and 43.1%. Microsoft shows especially good financial health and cash management.

3.2 Profitability

Profitability, as a core indicator for evaluating the operational quality and value creation capacity of enterprises, has always been subject to multiple concerns from managers' strategic decisions, investors' valuation judgments, creditors' risk control, and regulatory authorities' policy-making [8]. This study uses three financial measures to

check the profitability of Microsoft, Intel, and Dell: asset turnover, return on assets (ROA), and return on equity (ROE). Asset turnover shows how well a company uses its assets to make sales. A higher ratio usually means better use of assets. ROA measures how good management is at making profit from assets. It is net profit divided by total assets. ROE shows how much profit a company makes from shareholder investments. It directly reflects how efficiently the company uses equity money. More data is in Table 2.

Table 2. Profitability Indicators

Company	Microsoft (MSFT)	Intel (INTC)	Dell Technologies (DELL)
Asset turnover	0.408	0.126	0.251
ROA	5.32%	-0.67%	0.95%
ROE	10.1%	-0.8%	-38.5%

From the table, some important things can be seen. Microsoft does best on all three measures, with the highest asset turnover, ROA, and ROE. This means it uses assets well and management is good at making profit from assets and equity. On the other hand, Intel does poorly, with negative ROA and ROE. This suggests it does not use assets well and cannot make positive returns for shareholders. Dell shows mixed results. Its asset turnover and ROA are positive and better than Intel's, but its ROE is very negative at -38.5%. This means it has big problems making value from equity, probably because of high debt or recent losses that hurt shareholder equity. These differences show that the three companies have very different levels of operating efficiency and financial health, which investors should think about when judging their profitability.

3.3 Market Ratios & Valuation

Market ratios and valuation measures are basic tools investors use to see how the market values a company's stock compared to its financial performance, assets, and future growth. These measures help decide if a stock is cheap, expensive, or fairly priced, and give clues about

market feelings and expectations. Knowing these ratios well is important for making good investment choices because they provide different ways to measure company value and market opinion [9]. To fully analyze Microsoft, Intel, and Dell, this study looks at several key measures: the P/E Ratio, which compares share price to earnings per share and shows what the market expects for future earnings growth; the P/B Ratio, which compares market value to book value and shows if the stock costs more or less than its net assets; the PEG Ratio, which adjusts the P/E ratio for expected growth and gives a better view of value related to growth potential; Dividend Yield, which shows yearly dividend as a percent of stock price and matters to investors who want income; and Intrinsic Value, estimated through Discounted Cash Flow (DCF) analysis, which shows the true theoretical value of the company based on future cash flow potential. Also, this analysis includes the 200-Day Moving Average (MA) Momentum to see price trends, Insider Buying over the last six months to check management confidence, Smart Money participation to see if big institutional investors are interested, and Stock Buybacks to see how the company returns money to shareholders. Table 3 shows these ratios in detail.

Table 3. Market Ratios & Valuation

Indicator	Microsoft (MSFT)	Intel (INTC)	Dell Technologies (DELL)
P/E Ratio	35.2	N/A (Negative)	18.5
P/B Ratio	12.8	0.91	N/A (Negative net assets)
PEG Ratio	1.98	N/A (negative growth)	N/A (negative growth)
Dividend Yield	0.73%	0.85%	1.92%
Intrinsic Value (DCF)	\$485.20	\$32.50	\$72.80
Current Stock Price	\$450	\$33.00	\$78.20
200-Day MA Momentum	\$416.50	\$34.50	\$69.50

Insider Buying (6M)	YES	YES	NO
Smart Money	YES	NO	NO
Stock Buybacks	0.285%	0.775%	3.94%

From Table 3, several important patterns can be seen. Microsoft has a high P/E ratio of 35.2 and a PEG ratio of 1.98, meaning the market thinks highly of its growth potential, but the stock is expensive. Its current stock price is below its intrinsic value, suggesting it might be undervalued based on DCF analysis. Intel's negative earnings make P/E and PEG ratios not applicable, but its low P/B ratio of 0.91 suggests the market may value it below its book value, which could mean it is undervalued or that there are worries about its profitability. Dell has the highest dividend yield at 1.92%, which is good for income investors, and it has the biggest stock buyback program at 3.94%, showing strong confidence in returning money to shareholders. However, its negative net assets make the P/B ratio not useful. Momentum indicators show all three stocks are trading above their 200-day moving averages, meaning prices are trending up. Insider buying happens at Microsoft and Intel but not at Dell, while smart money participation is only important at Microsoft. These differences in market ratios and valuation measures show that the market sees the three technology companies very differently, based on their financial situations and investment features.

4. Asset Selection Analysis

In investment practice, investors usually create different strategies based on their risk tolerance, return goals, and investment beliefs. This shows how complex financial markets are and how investors see value differently. From a behavioral finance view, individual investors are often affected by thinking biases when they understand market information, which leads to very different decisions. For example, prospect theory clearly shows the psychological traits people have when making decisions under uncer-

tainty, including different reactions to gains and losses and changes in risk preference in different situations. These mental factors greatly influence investor choices, making them different from the rational model assumed in traditional economics. This paper will use eight common investor types as a framework to better understand the unique thinking and behavior behind each [10]. Among the many investment styles, eight types of investors are especially common, each showing different stock investment methods based on different thinking and behavior preferences.

Value Investors look for stocks that trade for less than they are really worth. They use basic analysis and measures like low P/B and P/E ratios to find undervalued chances. Income Investors want steady and predictable cash flow. They look for companies with strong dividend histories and good dividend yields to make regular income. PEG Ratio Investors use a growth-adjusted value method, looking at the PEG ratio to find fairly priced growth opportunities. Index Investors use passive investment strategies, copying market index compositions to get returns similar to the market with lower costs. Momentum Investors take advantage of market trends and price movements, investing in stocks that have done well lately and have positive price momentum. DCF Investors use discounted cash flow models to estimate true value, investing when market prices are very different from their calculated fair values. Insider Buying investors watch the trading activities of company leaders and directors, seeing insider buys as signs of confidence in the company's future. Smart Money Buying follows investments by big institutional investors, seeing their involvement as proof of good investment ideas and company potential.

The investment preferences of these eight investor types for the three technology companies are shown in Table 4.

Table 4. Asset Selection by Investor Type

Investor Type	Microsoft	Intel	Dell Technologies
Value Investor	No	Yes	No
Income Investor	No	No	No
PEG Ratio Investor	Yes	No	No
Index Investor	Yes	No	No
Momentum Investor	Yes	No	Yes
DCF Investor	Yes	No	No
Insider Buying	Yes	Yes	No
Smart Money Buying	Yes	No	No

The analysis shows several notable patterns in what investors prefer. Microsoft is the most popular investment choice, attracting six out of eight investor types, including PEG Ratio, Index, Momentum, DCF, Insider Buying, and Smart Money Buying investors. This wide appeal reflects Microsoft's strong market position, growth potential, and trust from big institutions. Intel is liked only by some, mainly Value Investors and Insider Buying investors. This suggests that although the company may have value qualities and internal confidence, it does not attract wide investor interest. Dell is liked by very few, only attracting Momentum Investors. This means that although the stock may have positive price trends, it does not meet the needs of other investment styles. It is important to note that none of the three companies appeal to Income Investors, which shows that the technology sector usually focuses more on growth than dividend income. These results highlight how different investment methods see value in different ways and help us understand how different investor types look at opportunities in the technology sector.

5. Conclusion

This study has conducted a comparative financial analysis of three leading technology companies-Microsoft, Intel, and Dell Technologies-to explore the underlying logic behind different investor preferences in technology stock selection. By examining key indicators across risk, profitability, and market valuation dimensions, the research identifies distinct investor inclinations: Microsoft demonstrates broad appeal to multiple investor types, including PEG, DCF, and smart money investors; Intel primarily attracts value-oriented and insider investors, while Dell is favored mainly by momentum investors. These findings underscore the importance of aligning investment strategies with corporate financial profiles and market behavior, providing practical insights for investors seeking to optimize technology stock allocations in line with their risk and return objectives. Despite these insights, this study has certain limitations. The analysis relies heavily on static financial metrics and market data, which may not fully capture dynamic market conditions or unforeseen macroeconomic shifts. Addition-

ally, the focus on quantitative indicators overlooks qualitative factors such as corporate governance quality, brand influence, and competitive positioning, which can also significantly impact investment decisions. Future research could incorporate more dynamic models and broader contextual factors to enhance the robustness and predictive power of investment analysis.

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