

Equity Research Report: NVIDIA Corp

ROIC	17.1%	24.6%	11.7%	51.3%
EV/EBITDA	58.62	54.72	81.05	43.45
PE Ratio	75.43	62.68	109.09	51.83
PB Ratio	19.34	22.97	21.56	35.89

Business Overview

NVIDIA Corporation stands at the forefront of the global technology ecosystem, renowned for its pioneering advancements in graphics processing units (GPUs), artificial intelligence (AI), and accelerated computing. Over the past fiscal year, the company has experienced transformative growth, driven by surging demand for AI infrastructure, data center solutions, and next-generation gaming platforms. NVIDIA's product portfolio spans GPUs for professional visualization, automotive systems, and high-performance computing, with its CUDA ecosystem and software stack enabling broad adoption across industries. The company's strategic investments in research and development have yielded innovative architectures and expanded its reach into new verticals, such as autonomous vehicles and edge computing. NVIDIA's robust partner network, including collaborations with major cloud providers and system integrators, has further solidified its market presence. As a result, the company has not only captured significant share in core markets but also positioned itself as a critical enabler of the AI-driven digital transformation. With a commitment to innovation and operational excellence, NVIDIA continues to shape the future of computing.

Market Position

NVIDIA's market position in 2024 is defined by its leadership in accelerated computing and AI-driven solutions, underpinned by a robust financial foundation and expanding global reach. The company's primary end markets include data centers, gaming, professional visualization, and automotive, with significant growth driven by hyperscale cloud providers and blue-chip enterprise customers adopting AI and machine learning at scale. NVIDIA's innovative product lines, such as the Hopper and Ada Lovelace architectures, have enabled it to capture substantial market share in both data center and gaming segments, outpacing competitors in performance and efficiency. The company's global footprint spans North America, Europe, and Asia-Pacific, with a diversified customer base mitigating geographic and sector-specific risks. Strategic alliances with leading technology firms and system integrators have further entrenched NVIDIA's solutions in mission-critical infrastructure worldwide. Supported by a strong balance sheet and disciplined capital allocation, NVIDIA is well-positioned to sustain its market leadership and capitalize on the accelerating adoption of AI and advanced computing across industries.

Operating Results

NVIDIA's operating results for fiscal 2024 reflect exceptional financial performance and operational leverage across its business segments. The company achieved a 114% year-over-year revenue increase, reaching \$130.5 billion, propelled by surging demand in AI, data center, and gaming platforms. Net income soared to \$72.9 billion, with net profit margin expanding to 56%, highlighting robust cost control and pricing power. Segment analysis reveals the core product and service lines nearly quintupled in revenue since FY2023, while innovation-driven segments benefited from record R&D investment, supporting normalized EBITDA growth to \$86.1 billion and EBIT margin expansion. International operations contributed to revenue gains and higher SG&A, signaling effective global expansion. The balance sheet underscores financial strength, with a current ratio of 4.4 and shareholders' equity doubling to \$79.3 billion, positioning NVIDIA for resilient growth. Overall, disciplined expense management, industry-leading profitability, and strong segment execution underscore NVIDIA's status as an operational outperformer with ample capacity for future innovation.

Financial Metrics

FY (USD mn)	2021	2022	2023	2024	2025
Revenue	16675	26914	26974	60922	130497
Revenue Growth	-38.0%	-0.2%	-55.7%	-53.3%	682.6%
Gross Revenue	10396	17475	15356	44301	97858
Gross Margin	0.62	0.65	0.57	0.73	0.75
EBITDA	5691	11351	5986	35583	86137
EBITDA Margin	0.34	0.42	0.22	0.58	0.66
FCF	5822	9108	5641	28090	64089
FCF Conversion	1.34	0.93	1.29	0.94	0.88

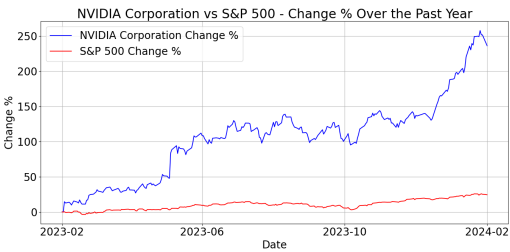
FinRobot

<https://ai4finance.org/>
<https://github.com/AI4Finance-Foundation/FinRobot>
Report date: 2024-02-21

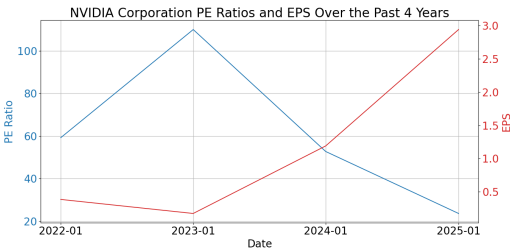
Key data

Rating	buy
Target Price	90.0 - 1400.0 (md. 250.0)
6m avg daily vol (USDmn)	462.83
Closing Price (USD)	69.41
Market Cap (USDmn)	1661111.40
52 Week Price Range (USD)	21.08 - 72.46
BVPS (USD)	1.74

Share Performance



PE & EPS



Risk Assessment

NVIDIA's impressive financial performance in fiscal 2024 is accompanied by several key risks that warrant careful consideration by investors and stakeholders. Foremost among these is the risk associated with the company's aggressive capital allocation strategy. In 2024, NVIDIA generated a robust operating cash flow of \$64.1 billion—more than double the prior year—demonstrating exceptional earnings quality and core business profitability. However, the company also undertook substantial investing outflows totaling \$20.4 billion, driven by significant capital expenditures and net investment activity. This aggressive reinvestment, while essential for sustaining technological leadership, exposes NVIDIA to potential risks if anticipated returns on these investments do not materialize or if market conditions deteriorate, leading to possible write-downs or underutilization of assets. The second major risk pertains to capital return and liquidity management. NVIDIA's financing outflows surged to \$42.4 billion in fiscal 2024, primarily due to heavy stock repurchases (\$33.7 billion) and continued debt repayments. While these actions underscore management's commitment to shareholder value, they also reduce cash reserves and may constrain financial flexibility in a downturn. Although the company's cash balances increased during the period, largely due to strong operational inflows, the scale of buybacks and investment spending warrants close monitoring. Should the company's cash generation falter—due to cyclical headwinds, unexpected competitive pressures, or regulatory changes—NVIDIA may find itself with less room to maneuver, potentially impacting its ability to fund innovation, pursue strategic acquisitions, or weather macroeconomic shocks. A third critical risk is the company's dependence on sustained demand for advanced computing and AI solutions, particularly in its core end markets of data centers, gaming, and automotive. The explosive revenue growth observed in 2024, with total revenue soaring to \$130.5 billion, was driven by rapid adoption of AI infrastructure and next-generation platforms. However, these markets are highly dynamic and subject to abrupt shifts in customer preferences, technological disruption, and competitive intensity. For instance, the entry of new rivals, changes in semiconductor supply chains, or delays in customer adoption of new architectures could materially impact NVIDIA's top-line growth and profitability. Additionally, the company's global footprint—spanning North America, Europe, and Asia-Pacific—exposes it to geopolitical risks, trade policy changes, and regulatory scrutiny, any of which could disrupt operations or limit market access. Further compounding these risks is the ongoing need for substantial research and development investment. NVIDIA's R&D spending reached \$12.9 billion in 2024, reflecting its commitment to innovation and market leadership. While this investment has fueled the development of advanced architectures and expanded the company's addressable markets, it also represents a significant fixed cost that must be supported by continued revenue growth. Any slowdown in the adoption of NVIDIA's solutions, or unexpected setbacks in product development, could pressure margins and limit future growth prospects. In summary, while NVIDIA's financial position is currently strong—with a current ratio of 4.4, zero net debt, and shareholders' equity doubling to \$79.3 billion—the company's aggressive capital allocation, reliance on high-growth markets, and ongoing need for innovation present meaningful risks. Effective risk management, prudent financial oversight, and continued operational excellence will be essential for sustaining NVIDIA's leadership and long-term value creation in the face of these challenges.

Competitors Analysis

A comprehensive comparison of NVIDIA and its major competitors—Apple (AAPL), AMD, Intel (INTC), and Alphabet (GOOGL)—over the last four years reveals significant shifts in industry dynamics, operational efficiency, and market valuation. Focusing exclusively on the financial metrics table, we observe that NVIDIA has consistently outperformed its peers in several key areas, particularly in the most recent fiscal year. Starting with EBITDA Margin, NVIDIA's performance has been exceptional. In 2020, its EBITDA Margin was 0.42, already ahead of AMD (0.23), INTC (0.34), and GOOGL (0.3), and comparable to AAPL (0.34). Over the next three years, NVIDIA's margin surged, reaching 0.66 in 2023, while AAPL (0.35), AMD (0.21), INTC (0.27), and GOOGL (0.45) lagged behind. This margin expansion reflects NVIDIA's superior operating leverage and ability to capture value from its technology leadership, particularly as demand for AI and accelerated computing solutions soared. EV/EBITDA, a key indicator of market valuation relative to earnings, tells a nuanced story. NVIDIA's EV/EBITDA was the highest among peers in 2020 (54.72) and peaked at 81.05 in 2021, signaling sky-high market expectations. However, as NVIDIA's operating performance improved, its EV/EBITDA moderated to 33.78 by 2023. While this still represents a premium compared to AAPL (26.97), INTC (14.5), and GOOGL (21.3), it is now lower than AMD's 47.85, suggesting the market is rewarding NVIDIA for its growth and profitability, but with increasing scrutiny as the company matures. Free Cash Flow (FCF) Conversion is another critical metric for operational quality. NVIDIA's FCF Conversion ranged from 0.88 to 1.29 over the four years, indicating strong efficiency in turning earnings into cash. While AMD and INTC occasionally posted higher FCF Conversion rates (notably AMD's 2.7 in 2020 and INTC's 6.79 in 2021), NVIDIA's consistency stands out, especially given its rapid growth and capital reinvestment strategy. AAPL also maintained competitive FCF Conversion, but GOOGL's figures were generally lower, reflecting heavier capital outlays. Gross Margin is where NVIDIA truly excels. In 2023, its Gross Margin hit 0.75, the highest among all companies analyzed. This advantage has been sustained and even widened over time, with AAPL at 0.45, AMD at 0.51, INTC at 0.42, and GOOGL at 0.56 in the same year. Such high margins indicate NVIDIA's pricing power, product differentiation, and efficiency in managing production costs, all contributing to its industry leadership. Return on Invested Capital (ROIC) demonstrates how effectively a company generates returns from its capital base. NVIDIA's ROIC soared from 24.6% in 2020 to a remarkable 75.3% in 2023. In comparison, AAPL's ROIC was also strong, reaching 52.0% in 2023, but AMD (5.4%), INTC (-0.0%), and GOOGL (21.8%) trailed significantly. This highlights NVIDIA's superior capital allocation and the high returns enabled by its innovation-driven business model. Revenue growth further underscores NVIDIA's transformation. From \$26.9 billion in 2020 to \$130.5 billion in 2023, NVIDIA's revenue expansion far outpaced its competitors in percentage terms, though AAPL and GOOGL still command much larger absolute revenue bases. This rapid scaling demonstrates NVIDIA's successful penetration into high-growth markets and its ability to monetize emerging technology trends. In summary, NVIDIA's multi-year performance across these metrics justifies much of its premium valuation, as reflected in its EV/EBITDA ratio. While the company still trades at a notable premium to many peers, its industry-leading margins, capital efficiency, and explosive revenue growth provide a strong foundation for this valuation. However, as the gap narrows and growth moderates, sustained outperformance will be necessary to maintain such a high market multiple.