

The Henry Fund

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NVIDIA CORPORATION (NVDA)

April 15, 2024

Technology

Stock Rating

HOLD

Investment Thesis

NVIDIA is the industry leader in graphic processing units (GPUs), a special type of computer chip optimized for training and deploying artificial intelligence (AI) systems. We expect NVIDIA to profit tremendously as AI systems proliferate and integrate into every sector of the economy. We believe NVIDIA's foray into virtualized GPUs will further increase its total addressable market and improve margins over the long term. We recommend a HOLD rating with a target price range of \$875 - \$900.

Drivers of Thesis

- **Data Center Growth:** Data Center revenues are projected to grow at a CAGR of 24.8%, largely propelled by the widespread adoption of generative AI technologies and the deployment of NVIDIA's DGX Cloud platform.
- **Automotive Growth:** The Automotive sector is forecasted to experience a CAGR of 40.9%, signaling our confidence in the development and adoption of autonomous driving systems.
- **Improving Margins:** NVIDIA's growing emphasis on software sales, particularly through platforms like DGX Cloud, will lead to enhanced profitability margins. This shift toward high-margin software offerings, due to their lower production and distribution costs compared to hardware, is expected to significantly improve the company's financial performance.

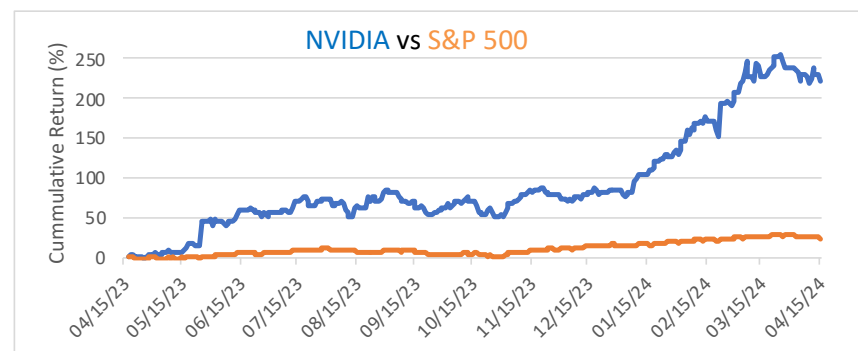
Risks to Thesis

- **Export Control Risks:** Export controls restrict NVIDIA's sales to China, significantly impacting potential revenue from a key market. Chinese sales peaked at 26.1% of total revenue in FY22.
- **Supply Chain Vulnerabilities:** Geopolitical tensions and dependencies on a few key fabricators, like TSMC and Samsung, expose NVIDIA to potential production disruptions. This risk is compounded by the fact that major suppliers are located in geopolitically sensitive regions. 90% of all chips are made in the Asia-Pacific region.

Earnings Estimates

Year	2022	2023	2024	2025E	2026E	2027E
EPS	\$3.91	\$1.76	\$12.05	\$25.14	\$30.30	\$33.43
HF est.				\$22.21	\$31.68	\$48.60
Growth	61.1%	0.2%	125.9%	73.9%	45.2%	33.3%

12 Month Performance



Target Price

\$875 - \$900

Henry Fund DCF	\$884
Henry Fund DDM	\$571
Relative Multiple	\$870

Price Data

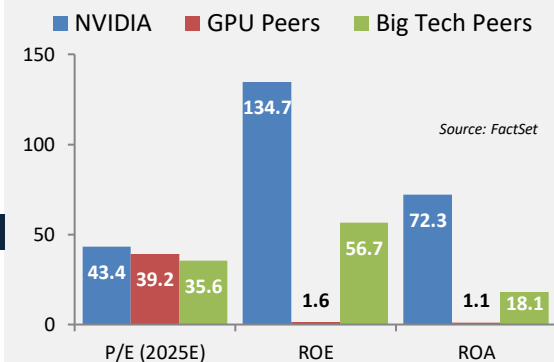
Current Price	\$860
52wk Range	\$262 - \$974
Consensus 1yr Target	\$985

Key Statistics

Market Cap (B)	\$2,206
Shares Outstanding (M)	2,500
Institutional Ownership	68%
Beta	1.92
Dividend Yield	0.02%
Est. 5Y Revenue CAGR	41.1%
Price/Earnings (TTM)	73.3
Price/Earnings (FY1)	30.4
Price/Sales (TTM)	25.0
Price/Book (mrq)	34.9

Profitability

Operating Margin	61.6%
Profit Margin	48.9%
Return on Assets (TTM)	38.6%
Return on Equity (TTM)	91.5%



Company Description

NVIDIA is the leader in designing and developing GPU hardware and software. Firms that create or incorporate AI systems into their operations depend on NVIDIA chips and its DGX Cloud platform.

NVIDIA operates a fabless business model relying on a limited number of third-party fabricators to produce its chips. The firm adds value through the research and development of advanced chip architecture.

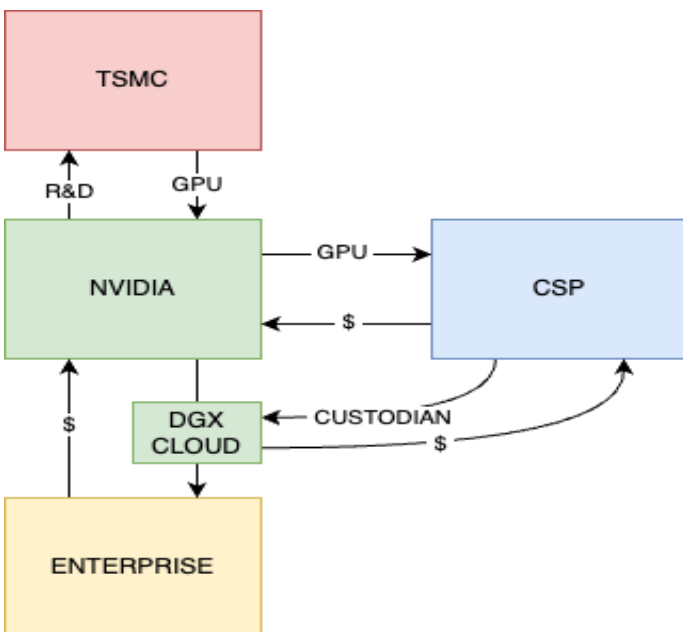
COMPANY DESCRIPTION

NVIDIA Corporation

NVIDIA is a computing and AI company with expertise in graphics processing units (GPUs). Software solutions that build, train, and deploy AI systems at scale are increasingly becoming a part of its core business. NVIDIA GPUs are also used for gaming, graphic design, virtual and augmented reality, and other computationally intensive tasks.

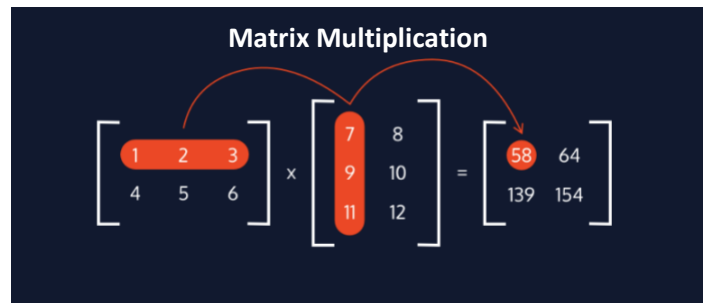
NVIDIA strategically invests in research and development to improve its GPU architecture while outsourcing manufacturing to third-party fabricators like Taiwan Semiconductor Manufacturing Company (TSMC). NVIDIA retains control over the sales process, primarily targeting cloud service providers (CSPs) such as Amazon Web Services, Google Cloud, Microsoft Azure, and Oracle Cloud for its highest-end GPUs

Leveraging these relationships, NVIDIA offers a software-as-a-service (SaaS) platform called DGX Cloud. This platform gives customers access to supercomputing capabilities through a web browser, eliminating the need for physical hardware on-site. CSPs play a key custodial role by managing NVIDIA's GPU hardware in their data centers. NVIDIA monetizes DGX Cloud directly with customers and pays the CSP a fee. NVIDIA's control of the underlying hardware gives its AI software platform an incredible competitive moat.



Explained: GPUs and Generative AI

GPUs use thousands of small, efficient cores to solve multiple calculations simultaneously. This type of problem-solving is called parallel computation. CPUs execute linear or serial computation. In the image below, a GPU performs the operations concurrently, whereas the CPU multiplies 1x7, then 2x9, then 3x11 before summing up the results. Each additional problem adds a proportional amount of time to solve the equation using linear computation. Speed matters when considering the technology behind generative AI.



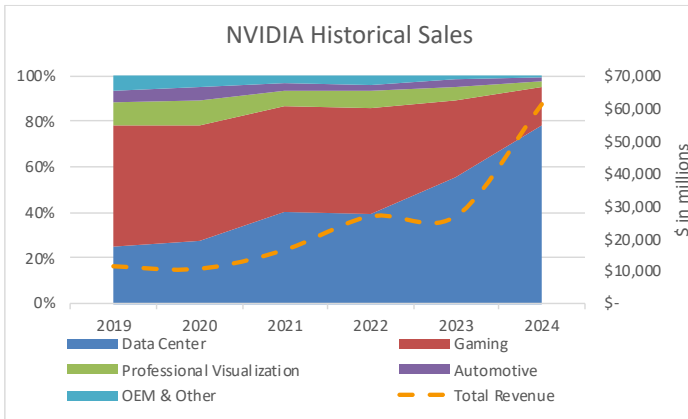
Source: [Codecademy](https://www.codecademy.com)

Generative AI is similar to the problem-solving in the image above, but the matrices are far larger and comprised of many layers of weighted averages. Input data is processed against the model's weights to make predictions or decisions, such as guessing the following letter or word in a sentence, like ChatGPT. Generative AI can also create visuals, videos, audio, and more.

Training generative AI models require significant computational power. Models begin with matrices comprised of random weights and are refined using vast amounts of data. The model adjusts these weights whenever it makes an incorrect prediction, essentially learning from its mistakes. Over time, through trial and error, the model's weights are fine-tuned. Achieving the necessary levels of refinement may involve trillions of calculations. Due to their parallelism, GPUs make this process faster and more efficient. For AI systems operating at scale, this is imperative.

Market Segments

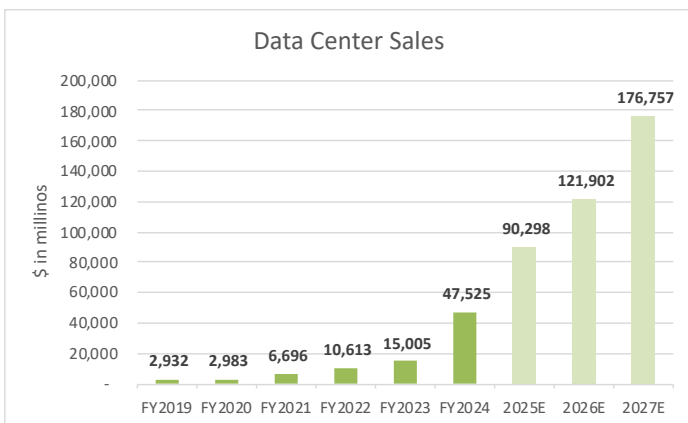
NVIDIA categorizes GPU sales based on specialized markets. These markets include Data Center, Gaming, Professional Visualization, Automotive, and OEM & Other.



Source: [NVIDIA 10-K, 2019-2024](#)

Data Center: Data center sales comprised 78% of revenue in 2024. It is traditionally a business-to-business (B2B) market. Data centers are facilities comprising a vast array of interconnected GPUs providing abundant and scalable computational resources. Cloud service providers (CSPs) such as Amazon Web Services, Microsoft Azure, Google Cloud, and Oracle Cloud, as well as OEMs and other enterprises, use GPUs in their data centers.

In fiscal year 2024, data center sales grew 217% YoY. Consensus estimates expect this growth to continue at a 23% CAGR through 2029. We agree with this sentiment. The global AI market is anticipated to be \$1.9 trillion in 2030, growing at a CAGR of 36.6%.³ This projection may be conservative, given the exponential improvement of the technology. NVIDIA stands to capture a substantial share of the economic value generated by AI.



Source: : [NVIDIA 10-K, 2019-2024](#)

Software comprises an increasing share of data center revenue, with NVIDIA's DGX Cloud platform emerging as a significant growth driver. DGX Cloud offers a supercomputing-as-a-service that users can access

through a web browser, starting at \$36,999 per month. This service provides virtual access to NVIDIA GPUs, enabling users to train and deploy their AI models cost-effectively. DGX Cloud also includes a variety of foundational AI models that users can fine-tune with their proprietary data, eliminating the time and expense of developing models from scratch. The DGX Cloud platform is also optimized to run on NVIDIA hardware, improving performance and further reducing training times.

The DGX Cloud subscription offers benefits for small firms without the capital or expertise to manage AI infrastructure. The pay-as-you-go model aligns resources with demand, making it economical, especially since AI training demands more computing power than inference tasks. For investors, this model is advantageous as it yields higher margins through ongoing revenue rather than one-time hardware sales.

DGX Cloud primarily competes with CSPs. Competition may emerge from GPU manufacturers over the medium to long term. The advantages described below help offset competitive pressures.

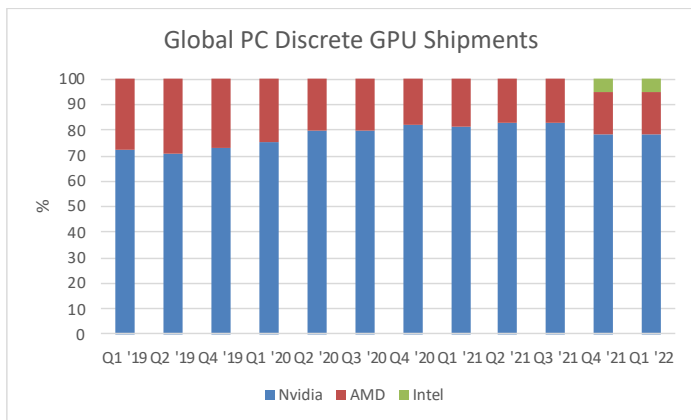
NVIDIA's current monopolistic control over high-performance GPUs gives it significant competitive leverage. CSPs trying to undercut NVIDIA on price may lose access to its industry leading hardware. The competitive advantage may be undermined by future offerings from AMD and Intel. Recently AMD announced the MI300, a GPU with performance comparable to NVIDIA's latest generation chip.²⁵ Irrespective of market power, NVIDIA's integration of hardware and software gives it superior performance compared to the competition.

Businesses choose between CSPs based on specific needs, sometimes using multiple providers. One reason is to hedge against performance issues related to CSP downtime. DGX Cloud's consistent and interoperable service works seamlessly across all major CSPs, giving businesses operational flexibility.

CSPs are already working on internal chip designs. In the short to medium term, we do not see this as a serious risk. NVIDIA's decades of expertise and existing R&D investments give it a lead. Moreover, CSPs lack the supply chain necessary to produce chips at volume.

The threat from other GPU firms, such as AMD and Intel, remains minimal, as they lack NVIDIA’s software expertise. AMD and Intel will likely compete for data center GPU market share, but the real value in our eyes is the platform-as-service subscription model monetizing DGX Cloud.

Gaming: Gaming is the second largest segment and the only other material contributor to total revenue. In 2024, gaming represented 15% of total sales. NVIDIA’s GPU hardware is conducive to the calculations necessary to alter the brightness and color of millions of individual pixels required to render photorealistic visuals. The firm’s GeForce GTX platform is the dominant GPU choice among computer gamers. NVIDIA sells the top ten GPUs relative to performance.⁵ Despite holding a commanding lead with 78% of the discrete PC GPUs market, NVIDIA's position is slipping with the entry of Intel, as seen in the graphic below.



Source: [Statista](#)

The gaming market is expected to grow to \$1.1 trillion in 2032, a CAGR of 13.5%. We expect increasing interest in gaming to buoy GTX sales.⁶

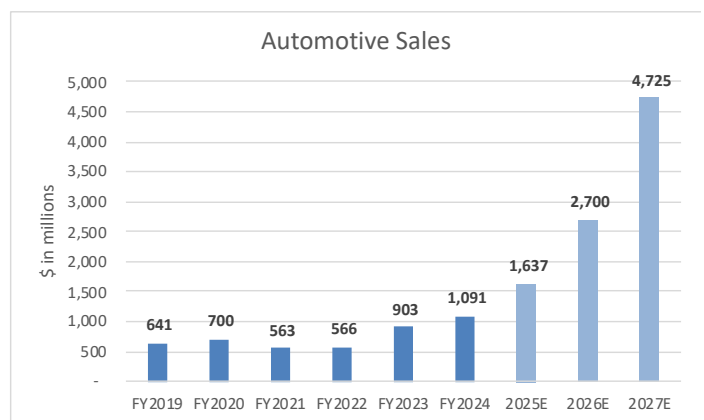
NVIDIA gains exposure to cloud gaming through its GeForce NOW service. GeForce NOW includes over 1,800 games, including studio blockbusters such as Assassin's Creed, Battlefield, and Cyberpunk 2077. Memberships range in both price and performance. The following chart summarizes the available option tiers.⁷ NVIDIA does not publish subscription data. Further discussion of cloud gaming is found in the Industry Trends section below.

NVIDIA GeForce Tiered Subscriptions			
Price	\$0/month	\$9.99/month	\$19.99/month
Session Length	1 hour	6 hours	8 hours
Resolution	N/A	1080p	4K
FPS	N/A	60	120
Ad-Supported	Yes	No	No

Source: [NVIDIA](#)

Professional Visualization: Customers use the processing power of NVIDIA’s RTX platform across various industries, from architectural and industrial design to media and entertainment. Professional Visualization sales contributed 2.5% of total sales in FY24. Popular applications include computer-aided design (CAD), 3D object rendering, and other visual effects. Augmented and virtual reality platforms will carry this segment's growth. The technology requires real-time 3D rendering of virtual objects. See the discussion of ray tracing in the Industry Trends section below. CAD is steadily growing, with an expected CAGR of 4.5% through 2028. 3D animation is expected to grow at a CAGR of 8% through 2026.⁸

Automotive: Automotive GPU demand is driven by efforts to build autonomous and advanced driver assistance systems (ADAS). NVIDIA’s DRIVE Hyperion platform includes the DRIVE AGX computing hardware and sensors. NVIDIA also provides training software and simulation services to complement its automotive hardware. Automotive is an immaterial percentage of total revenue at 1.8% in FY24. We expect self-driving technology to progress rapidly in the medium to long term, facilitating sizeable growth.

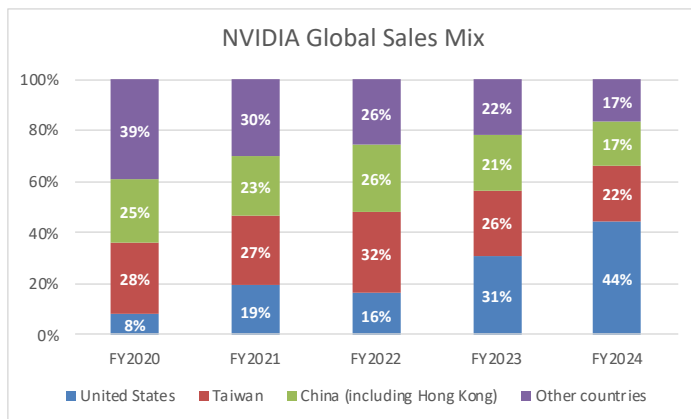


Source: [NVIDIA 10-K, 2019-2024](#)

OEM & Other: The last specialized market is OEM & Other. The specialized market is 0.5% of total sales. OEM & Other is an immaterial contribution to total revenue and expected to remain that way into the future.

Geographic Segments

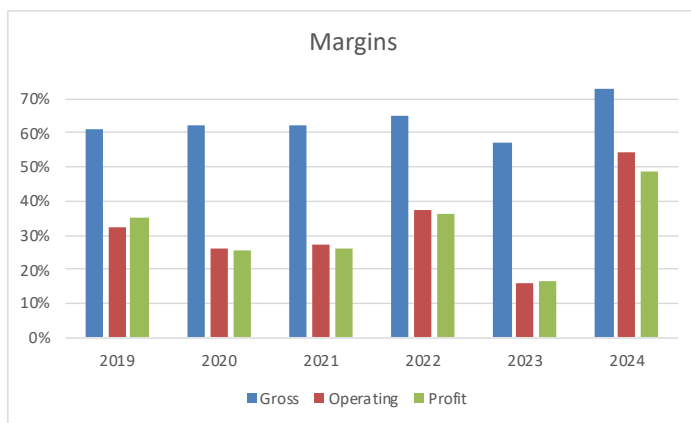
NVIDIA is a global business.⁴ The primary markets for its products include the United States, Taiwan, China (including Hong Kong), and other countries. Chinese sales are decreasing due to the US government's export controls on NVIDIA's most powerful chips. Absent an easing of geopolitical tensions, this trend is expected to continue. The Industry Trends section below further discusses China sales.



Source: [NVIDIA 10-K, 2020 - 2024](#)

Cost Structure

NVIDIA demonstrates an improving cost structure. The company's rallied performance is attributable to its scale and increasing software sales.



Source: [NVIDIA 10-K, 2019-2024](#)

The primary expenses in semiconductor production include wafer fabrication, assembly, testing, packaging, and shipping costs. The supply chain has 57 suppliers, with concentration risk primarily in East Asia.²² Major suppliers, such as TSMC and Samsung, are vulnerable to geopolitical strife.

DGX Cloud will diversify NVIDIA's cost structure as the service expands. Investors should expect increasing data center costs to operate the GPUs. CSPs will be the primary beneficiaries. Overall, margin improvement will continue as software sales drive top-line growth.

Derivatives: NVIDIA enters into cash flow hedges and foreign currency forward contracts to minimize the impact of foreign currency exchange rate movements. In total, NVIDIA holds approximately \$1.8 billion in hedged instruments.¹

Debt Maturity Analysis

NVIDIA carries \$8.5 billion in long-term debt. We do not foresee issues with servicing this debt. Supporting this notion is a 3.44 cash ratio and an A+ rating by S&P, according to FactSet. An increasing mix of digital services provides cash flow redundancy should supply chains break.

Fiscal Year	Effective Int. Rate	Fair Value (\$M)
2024	0.66%	1,250
2026	3.31%	1,000
2028	1.64%	1,250
2030	2.93%	1,500
2031	2.09%	1,250
2040	3.54%	1,000
2050	3.54%	2,000
2060	3.73%	500
Total LT Debt, net		\$8,459

Source: [NVIDIA 10-K, 2024](#)

ESG

ESG measures companies on environment, social, and governance performance. The chart below compares NVIDIA's ESG ratings against those of its GPU and big tech peers. NVIDIA scores extremely well across industry profiles. Relative to semiconductor firms, it ranks fifth. Recent reports indicate NVIDIA is exploring building its own data centers in lieu of CSPs. The energy consumption involved would likely drop its environmental score.

Company	Rating	Risk Level
NVIDIA	13.5	Low
AMD	15.0	Low
Intel	17.5	Low
Apple	16.7	Low
Amazon	30.2	High
Alphabet	24.1	Medium
Microsoft	15.2	Low
Meta	33.8	High

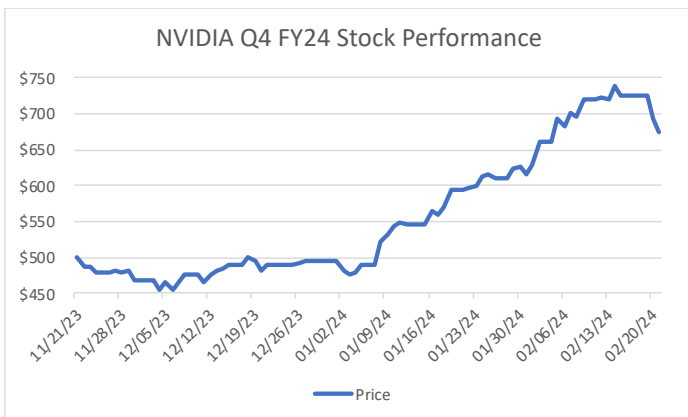
Source: [Morningstar Sustainability](#)

RECENT DEVELOPMENTS

Q4 FY24 Earnings

Released on February 21, 2024, NVIDIA's Q4 FY24 earnings showcased impressive performance. The company reported a quarterly revenue of \$22.1 billion, a 22% increase from the previous quarter and an impressive 265% YoY. This growth was primarily driven by its Data Center segment, which achieved a record \$18.4 billion in revenue, up 27% from Q3 and a substantial 409% year-over-year increase. NVIDIA's revenue soared by 126% for the year to reach \$60.9 billion.⁹

The company's gross margin saw significant improvement, reaching 76% in the fourth quarter, up from 74% in Q3 and considerably higher than the 63% from the previous year. Net income for Q4 stood at \$12.3 billion, representing a 33% increase from Q3 and a staggering 769% increase from the year-ago period. Earnings per share (EPS) also saw robust growth, with GAAP diluted EPS for Q4 at \$4.93, marking a 33% increase from Q3 and a 765% jump from the previous year.⁹



Source: [FactSet](#)

Q1 FY25 Guidance

For Q1 FY25, NVIDIA expects revenue of \$24 billion, plus or minus 2%. Gross margins are projected to be flat at 76%, plus or minus 50 basis points. For the remainder of the year, management projects gross margins to be in the mid-70 percent range. Operating expenditures are expected to grow to the mid-30 percent range, approximately \$3.5 billion for Q1. Lastly, the tax rate for NVIDIA is likely to remain at 17%, with a 1% margin for possible adjustments, excluding discrete items.⁹

INDUSTRY TRENDS

Generative AI

AI is poised to accelerate productivity gains across the entire economy. Today, the most useful application is generative AI, a form of AI that creates new content, including text, images, audio, and video. Large language models (LLMs) such as ChatGPT fall into this category. LLMs respond to a user's natural language inputs. A practical application for LLMs is computer programming. Previously, programming required technical know-how and hours of labor. Today, using an LLM, code can be generated in seconds. The use cases are far greater. Some models create original artwork in response to user descriptions. Video models such as OpenAI's Sora create photorealistic high-definition video.¹⁰

Natural language is the next step forward in computer software. Natural language will overtake graphical user interfaces (GUIs) like GUIs obsoleted command-line interfaces. For example, we foresee a future where a user asks Excel to create a graph specifying certain features rather than navigating a series of menus to achieve the desired result. Beyond productivity gains, the ability to understand and execute natural language instruction will democratize knowledge far beyond the printing press, creating unforeseen externalities. As the adoption of LLMs and generative AI expands, the demand for training will also increase, likely leading to a direct rise in NVIDIA's sales.

NVIDIA's integrated hardware and software offerings position it best to capture the value of AI infrastructure. The firm's edge on performance makes it the most cost-effective and preferred means of training and deploying AI systems. Combined with its supercomputing-as-a-service

platform, DGX Cloud expands the total addressable market for its hardware. Together, this synergistic relationship creates a virtuous cycle of cash generation. Given the total addressable market, we expect competitors to fulfill unmet demand rather than erode NVIDIA's competitive position.

Autonomy

Integrating self-driving technology into the automotive industry significantly boosts the demand for advanced GPUs, essential for processing the extensive data required for machine learning and real-time decision-making while driving. NVIDIA is poised to benefit from this trend. The synergy between self-driving advancements and GPU sales is clear: vehicles becoming more autonomous necessitate increasingly powerful GPUs.

Cloud Gaming

Cloud gaming, or game streaming, allows players to access video games via the internet on various devices without high-end hardware. Games are hosted at remote servers, and gameplay is streamed to the player's device, with inputs returned to the server in real-time. This approach enhances accessibility by reducing the need for hardware upgrades and game installations. A fast, stable internet connection with low latency is necessary for the optimal experience. NVIDIA GeForce Now, Amazon Luna, Microsoft Xbox Cloud Gaming, and Sony PlayStation Now are popular game streaming services.

Cloud gaming is expected to grow at a CAGR of 33.6%, reaching a market value of \$22 billion by 2028.¹¹ For NVIDIA, this will serve as a tailwind for both Data Center and Gaming sales. Data Center sales will rise as Amazon, Microsoft, Sony, and others increase server capacity to accommodate gamers. Gaming will increase through GeForce NOW subscriptions and computer hardware sales.

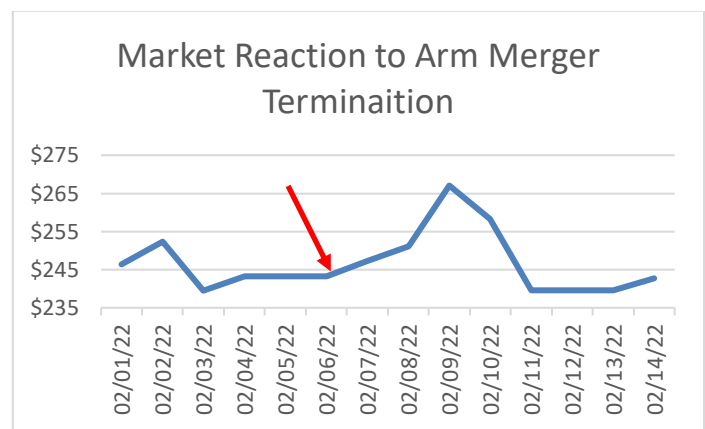
Ray Tracing and Advanced Graphics

Ray tracing is a technique used in computer graphics to simulate the physics of light. This process produces detailed shadows, reflections, and photorealistic images. GPUs are indispensable for this rendering technology due to their parallel architecture, which is well-suited for the

computationally intensive tasks involved in ray tracing. GPUs can process multiple rays simultaneously, significantly speeding up the rendering process and making real-time ray tracing feasible for interactive applications like augmented reality (AR) and virtual reality (VR). For companies like NVIDIA, the increased use of ray tracing in AR and VR applications presents a significant business opportunity. As extended reality (XR) devices (incorporating both AR and VR) amass greater consumer adoption, buoyed by Apple's entrance into the space, investors should expect GPU sales to rise. The XR market is predicted to grow to \$100.8 billion by 2026.¹² Our model forecasts strong growth in fiscal year 2028, resulting from increased XR device sales.

Mergers and Acquisitions

On February 7, 2022, NVIDIA terminated its merger with Arm Limited, a British semiconductor company.¹⁷ NVIDIA recorded a \$1.4 billion fee.¹ Unlike NVIDIA, Arm does not design semiconductors but licenses its proprietary technology to other firms. NVIDIA cited significant regulatory challenges as the impetus for the termination. The Federal Trade Commission's (FTC) complaint alleged the deal would substantially lessen competition and give NVIDIA unfair access to sensitive information provided to Arm by its licensees.¹⁸ The market responded favorably, boosting NVIDIA 9.6% three days after the announcement before falling 10.6%. A week later, the stock jumped on the release of a statement by the FTC regarding the cessation of the acquisition.¹⁹ Given the GPU industry's concentration level and the current administration's hostility towards large corporate mergers, it is reasonable to assume future merger activity will be limited to smaller acquisitions.



Source: [FactSet](#)

Export Controls

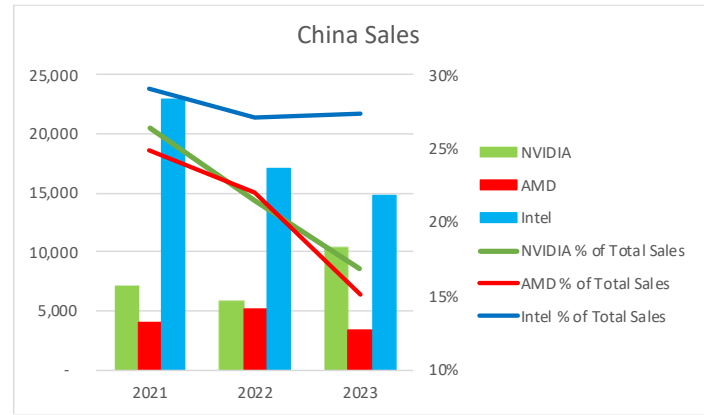
Effective October 2022, the United States government (US) implemented export controls to curb the People's Republic of China's (PRC) access to advanced computing infrastructure. This includes the most advanced GPUs. The export controls impede the PRC's ability to purchase and manufacture high-end chips used in military applications.¹³ Chips for consumer items such as automotive and mobile phones receive a presumption of approval, whereas more powerful semiconductors require a prior notice of sale and licensure.¹⁴ NVIDIA has no license to export its most advanced GPU technology and will not be able to do so for the foreseeable future.

In October 2023, the US updated guidance to close loopholes that circumscribe the export controls. For example, NVIDIA reduced the transfer speeds of its flagship GPU in half to comply with US regulations. The US shifted from interconnected speed to performance density as a threshold parameter to strengthen the rule. The US also expanded restrictions to include subsidiaries of companies headquartered in China, Macau (a semi-autonomous region in China), and other countries subject to arms embargos.¹⁴

The new export control rules will continue to adversely affect Chinese GPU sales. China's GPU sales peaked in FY22 at 26.1% of total sales and are trending downwards. Last year, Chinese sales as a percentage of total revenue declined 4.5% yearly due to trade restrictions. China sales will continue to fall as a percentage of revenue over the short to medium term. Our estimate is the single digits due to rapidly increasing software revenue outside China. Currently, China's access to GTX Cloud services needs to be clarified. If permissible, we expect the trend to reverse.

While an effective short-term solution, export controls may inadvertently prompt China to accelerate its efforts toward self-sufficiency and domestic supply chains for advanced GPUs. A recent report notes that China seeks to replace US technology with domestic alternatives, a directive known as Document 79.¹⁶ If accurate, investors may see Chinese sales decline as a percentage of sales over the long term. China presently lacks a domestic alternative to NVIDIA and will continue to drive sales of lower-tier GPU offerings.

The chart below illustrates a significant downturn in sales from China as a share of total sales due to trade constraints, primarily affecting NVIDIA and AMD. Intel's sales in China have remained more stable, mainly because CPU sales, which fall outside the trade restrictions, have not been impacted.



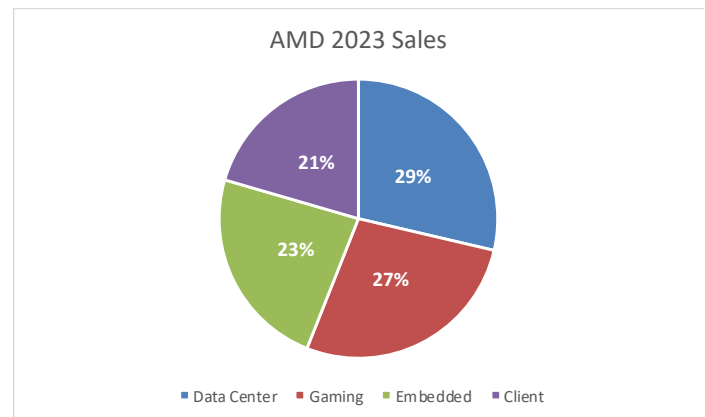
\$ in millions

Source: FactSet

MARKETS AND COMPETITION

GPU Industry

AMD: AMD primarily markets its products to users who balance price with performance. AMD also offers a lineup of CPUs. AMD employs a fabless model, relying on third-party fabricators to manufacture its chips. AMD reports its revenue in four segments: Data Center, Client, Gaming, and Embedded.²⁰

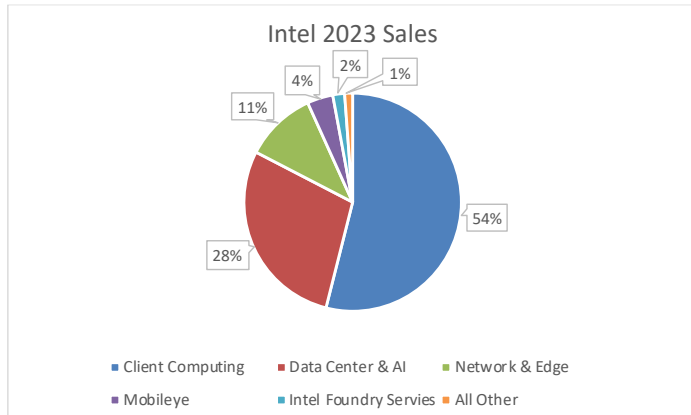


\$5.8B in Revenue

Source: [AMD 10-K, 2023](#)

Intel: Intel vertically integrates the design and manufacture of its GPUs (and CPUs). This integration allows Intel more control over its production processes and hedges against dependency risk. However, vertical

integration requires significant capital investment in facilities and equipment, which increases Intel's asset base and depresses the firm's profitability and operational efficiency. Intel's operating segments include Client Computing Group, Data Center and AI, Network and Edge, Mobileye, Intel Foundry Services, and All Other.²¹



\$14.2B in Revenue

Source: [Intel 10-K, 2023](#)

Industry Financial Metrics

Latest FY	NVIDIA	AMD	Intel
Revenue	\$ 60.9	\$ 22.7	\$ 54.2
EBITDA	\$ 34.6	\$ 3.9	\$ 9.6
Net Income	\$ 29.8	\$ 0.9	\$ 1.7
FCF	\$ 27.0	\$ 2.2	\$ (11.8)
Operating Margin	54.1%	5.5%	9.4%
Profit Margin	48.8%	3.8%	3.1%

\$ in billions

Source: FactSet

Industry Operating Metrics

NVIDIA significantly outperforms its primary competitors, AMD and Intel, across various financial and operational metrics for the latest fiscal year. NVIDIA's revenue of \$60.9 billion far exceeds AMD's \$22.7 billion and closely rivals Intel's \$54.2 billion. Its EBITDA of \$34.6 billion dwarfs AMD's \$3.9 billion and Intel's \$9.6 billion, highlighting superior profitability. NVIDIA's net income stands at \$29.8 billion, in contrast to AMD's \$0.9 billion and Intel's \$1.7 billion. Furthermore, NVIDIA's free cash flow (FCF) of \$27 billion indicates robust cash generation capabilities, while

Intel experienced a negative FCF of \$11.8 billion, suggesting cash management challenges.

	NVIDIA	AMD	Intel
ROA	55.7%	1.2%	0.9%
ROE	91.5%	1.5%	1.6%
Inventory Turnover	3.1	3.5	2.7
Asset Turnover	1.1	0.3	0.3

Source: FactSet

The metrics above reveal a stark contrast in operational performance between NVIDIA, AMD, and Intel, attributable to their differing business models. NVIDIA's fabless model yields an ROA of 55.7% and an ROE of 91.5%, underscoring its capability to generate significant profit with minimal assets and equity. Although AMD, also fabless, leads with the highest inventory turnover at 3.5, it does not convert this efficiency into profitability as effectively as NVIDIA. This discrepancy hints at NVIDIA's superior market execution and efficiency in its operations. Intel's traditional fab model manifests in lower ROA and ROE figures alongside a higher debt-to-equity ratio of 44.8%, reflecting its capital-intensive operations. The higher leverage could indicate potential vulnerability to market volatility and interest rate risks. NVIDIA's moderate 22.3% debt-to-equity ratio strikes a balance, facilitating growth without overextending financially. The metrics collectively suggest NVIDIA's fabless approach enhances profitability and affords greater agility, making it the most efficient operator among the three.

Valuation Metrics

3/8/24	NVIDIA	AMD	Intel
Market Cap	\$ 2.3T	\$ 341.5B	\$ 195.1B
EV/EBITDA	43.5	56.4	25.1
Trailing P/E	51.2	77.1	125.3
Forward P/E	30.4	39.4	27.8
P/S	25.0	10.6	3.9
P/B	35.0	4.3	2.0
EV/S	24.6	10.4	4.5

Source: FactSet

NVIDIA's market capitalization of \$1.7 trillion reflects its dominant position in the GPU market. Investors pay a

significant premium for NVIDIA's future earnings, suggesting bullish expectations for continued growth. While much smaller in market capitalization, AMD has a higher trailing P/E ratio. This indicates high market expectations for future growth. Intel appears more modestly valued, suggesting the market holds restrained expectations for its growth compared to its peers. This is likely due to its asset-heavy business model.

The industry-wide valuation metrics reveal a high market optimism towards the GPU sector. Relative to the S&P's P/E of 22.1, the three all trade at a premium.²¹ The high valuations, particularly for NVIDIA and AMD, pose a high risk for investors. Failure to meet growth expectations could lead to stock price volatility.

BUSINESS RISK

Supply Chain Concentration

Photolithography: Photolithography is a critical step in the semiconductor manufacturing process in which ultraviolet light is used to etch nanometer-sized transitions into silicon wafers. ASML, a Dutch firm, primarily produces photolithography machines that make NVIDIA's most advanced chips. No competitors match ASML's state-of-the-art machinery. ASML is a single point of failure in NVIDIA's supply chain. Should an unforeseen event occur that paralyzes ASML's business, NVIDIA will directly suffer. The risk is low. The Netherlands' neighborhood of nations is relatively peaceful, and its NATO membership guarantees security.

Fabrication: Outsourcing manufacturing operations to Asia carries significant geopolitical and supply chain risks. NVIDIA's fabricators, TSMC and Samsung, are both exceptionally vulnerable. If hostilities turn kinetic across the Taiwan Strait or Korean Peninsula, supply will be severely disrupted. As for competition, AMD will also suffer, while Intel's domestic fab operations will ensure a steady supply.

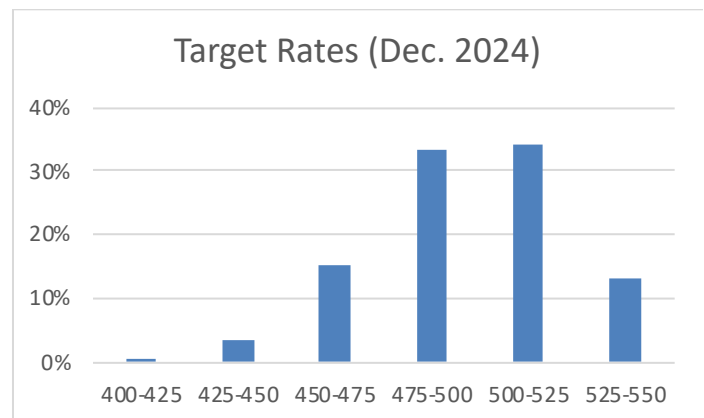
The US CHIPS and Sciences Act supports supply chain redundancy with subsidies for fabrication factories. In March 2024, the White House awarded Intel \$8.5 billion.²³

Despite being a financial burden that impacts its margins and operational efficiency, Intel's capacity to manufacture chips in-house offers a form of redundancy that could

become a competitive edge if NVIDIA's supply chain is disrupted. This scenario suggests that, while Intel's current approach to chip fabrication may weigh on its financial performance, it also positions Intel to capitalize on market share opportunities should NVIDIA face manufacturing constraints due to geopolitical tensions or other disruptions in its reliance on Asian fabricators.

ECONOMIC OUTLOOK

Inflation: The economic outlook for the United States is shadowed by inflationary pressures and the Federal Reserve's monetary policy responses. The surge in inflation to 9.1% in 2022 led to a series of rapid interest rate hikes by the Fed. Recent commentary by Fed Chair Jerome Powell suggests cuts will arrive by the end of the year. While promising, the market is overestimating the rate of reductions. As seen below, the tail of market expectation suggests multiple rate cuts. This is too optimistic. In the best-case scenario, the Fed will cut rates only once in 2024.

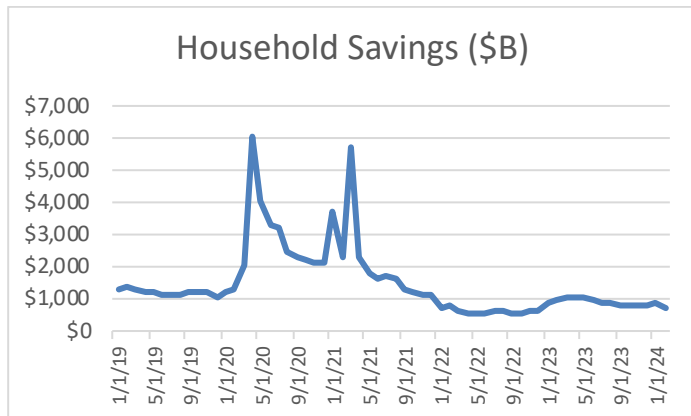


Source: [CMEGroup](#)

Factors such as a robust labor market, increased government spending, and evolving global supply chains are likely to maintain inflation at persistently high levels, warranting an extended period of elevated interest rates. Recent data from March's CPI report provides credence to this theory, with inflation rising 3.5%.²⁴

Consumer Spending: The United States economy appears resilient despite the highest interest rate environment in nearly 20 years.²⁶ Employment remains below 4%, the S&P 500 is at all-time highs, and the economy expanded 2.5% in 2023.^{27,28,29} While seemingly positive, certain headwinds should caution investors. The first concern is consumer spending, the primary driver of recent US GDP growth.

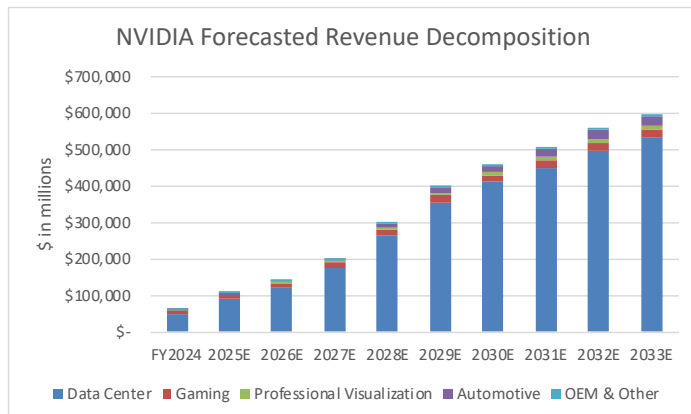
Much of this spending stems from excess savings during the pandemic. Lockdowns and government stimulus boosted total household savings to \$5.7 trillion in 2021.³⁰ Since then, households have steadily depleted these reserves, down to \$745.7 billion. As savings shrink, consumers must either pull back on spending or use debt to sustain their recent ways. This type of growth is unsustainable in the long term. A weakening American consumer would likely reverberate across the economy, possibly bringing the US into recession.



Source: [FRED \(St. Louis Fed\)](#)

VALUATION

Revenue Decomposition



NVIDIA's revenue projections include five product categories: Data Center, Gaming, Professional Visualization, Automotive, and OEM & Other. Revenue growth rates are primarily based on consensus estimates via FactSet. Adjustments are made to optimize the model for our investment thesis. We project a CAGR of 24% over the forecasted period.

Data Center: Data Center sales are the core business and will be the primary driver of top-line growth over the forecasted period. We forecast a CAGR of 24.8% through 2033. AI adoption motivates our growth thesis. Training and inference will stimulate consistent demand for computational resources. Cloud gaming servers will also drive sales. Starting at 90%, growth moderates as supply matches demand. Relative to consensus estimates, we adjust growth upwards, reflecting our positive view of AI adoption and improvement rate.

	2025E	2026E	2027E	2028E	2029E
Henry Fund	90.0%	35.0%	45.0%	50.0%	35.0%
Consensus	95.3%	24.7%	11.3%	11.5%	15.2%
Net	-5.3%	+10.3%	+33.7%	+38.5%	+19.8%

Source: [FactSet](#)

Gaming: Gaming sales are driven by the increasing market size for video games. That market's estimated CAGR is 10.1%. We project NVIDIA's gaming sales to grow at a CAGR of 8.0%. Our growth drivers include cloud gaming subscription fees and PC hardware sales. Cloud gaming's ability to attract new users provides ample runway for growth.

	2025E	2026E	2027E	2028E	2029E
Henry Fund	15.0%	15.0%	12.5%	10.0%	8.0%
Consensus	9.3%	9.4%	1.1%	-7.5%	6.8%
Net	+5.7%	+5.6%	+11.4%	+17.5%	+1.2%

Source: [FactSet](#)

Professional Visualization: Professional Visualization sales are primarily based on consensus estimates and peak at 90% of sales in FY28. This results in a CAGR of 22.9%. The emerging market for XR headsets justifies such growth.

	2025E	2026E	2027E	2028E	2029E
Henry Fund	24.5%	8.8%	24.5%	90.0%	32.3%
Consensus	24.5%	8.8%	24.5%	110.1%	32.3%
Net	0%	0%	0%	-20.1%	0%

Source: [FactSet](#)

Automotive: Automotive is expected to be an increasing source of revenue. In the medium to long term, we expect autonomous driving systems to improve exponentially, driving automotive GPU sales. We estimate a CAGR of 40.9%. While confident, the technology for safe autonomous driving may develop slower than expected or, worse, never materialize.

	2025E	2026E	2027E	2028E	2029E
Henry Fund	50.0%	65.0%	75.0%	95.0%	50.0%
Consensus	21.2%	35.7%	51.9%	39.0%	39.5%
Net	+28.8%	+29.3%	+23.1%	+56.0%	+10.5%

Source: [FactSet](#)

OEM & Other:

	2025E	2026E	2027E	2028E	2029E
Henry Fund	14.2%	9.8%	8.7%	8.0%	6.0%
Consensus	14.2%	9.8%	8.7%	-	-
Net	0%	0%	0%	-	-

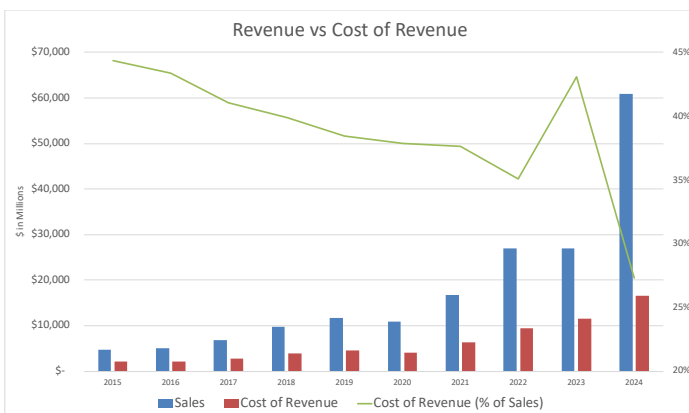
Source: [FactSet](#)

Capital Expenditures

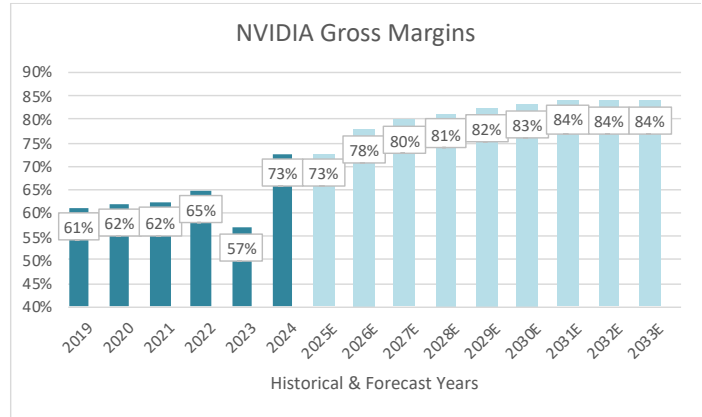
We use management's capital expenditure guidance of \$3.75 billion for fiscal year 2025. The expenditure is adjusted for inflation in 2026 and beyond. Due to NVIDIA's fabless manufacturing model and increasing software business, we do not expect capital expenditures to scale with revenue growth.

Operating Expenditures

Cost of Revenue: We expect COGS to keep falling. Unlike hardware, digital services, like DGX Cloud, benefit from greater scalability and higher profit margins because their distribution costs are marginal. Our closest comparison is Apple's foray into digital services, which elevated gross margins from 38.7% to 44.1% (2019 to 2023). Like Apple, NVIDIA outsources manufacturing and designs software optimized for its product offerings. Over the forecasted period, we project declining costs as DGX Cloud subscriptions amass a greater share of total revenue.

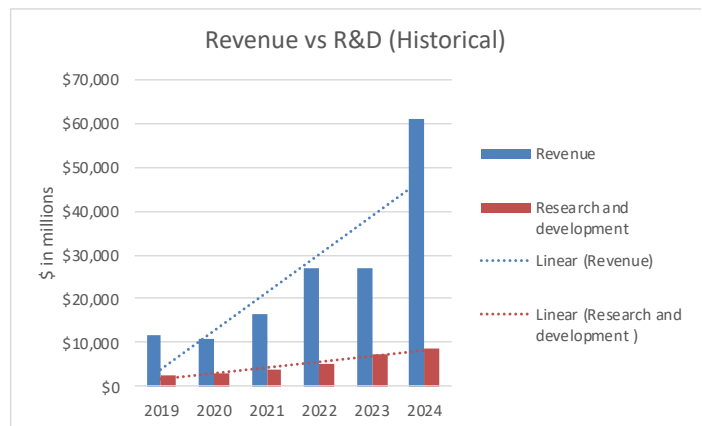


Source: [NVIDIA 10-K, 2015-2024](#)



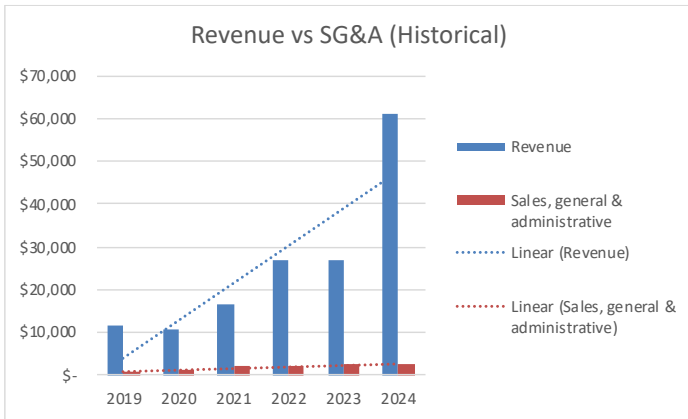
Source: [NVIDIA 10-K, 2019-2024](#)

R&D: R&D as a percentage of sales is also trending downwards. We attribute this to the increasing scale of the business. The disconnect between R&D expenditures and revenue is apparent in the varying growth trendlines in the graphic below. To account for this, we increase R&D spending by \$2 billion through FY28, adjusting each year for inflation. From FY29 onwards, we increase R&D annually by \$4 billion, adjusting for inflation. Overall, we forecast a 17.2% CAGR for R&D.



Source: [NVIDIA 10-K, 2019-2024](#)

SG&A: SG&A, as a percentage of sales, similarly exhibits a downward trend. Like R&D, SG&A expenditures are disconnected from growth in total sales. Our model employs SG&A's three-year average growth of 11.6% to reflect this fact.



Source : [NVIDIA 10-K, 2019-2024](#)

Cost of Capital

The weighted average cost of capital (WACC) is 13.9%. Our estimate incorporates the following assumptions:

- **Risk-Free Rate:** 4.34% yield on the 10Y US Treasury Bond
- **Beta:** 1.92 – 1Y, 2Y, 3Y weekly beta average (Bloomberg)
- **Equity Risk Premium:** 5% – Henry Fund estimate
- **Cost of Equity:** 13.9% – CAPM
- **Equity Weight:** 99.4%
- **Pre-Tax Cost of Debt:** 4.84% YTM on a 10Y NVIDIA corporate bond
- **Marginal Tax Rate:** 16%
- **After-Tax Cost of Debt:** 4.07%
- **Debt Weight:** 0.5%

DCF/EP Model

Our DCF and EP models yielded a share price of \$884. The stock currently trades at \$860. The following assumptions were used:

- **CV Growth of NOPLAT:** 5%, reflecting the large addressable market and its position in a technology-related industry
- **CV Year ROIC:** 172.8% using the ROIC of the last forecasted fiscal year (2033E)

The DCF valuation is highly sensitive to the cost of capital inputs. Changing the discount rate using various levers materially alters the stock price. We attribute this volatility to our CV NOPLAT growth assumption and revenue earned in the terminal years of our forecast.

DCF/EP:	Risk-Free Rate							
	\$ 884.28	3.00%	3.50%	4.00%	4.34%	5.00%	5.50%	6.00%
ERP	3.50%	1,875.66	1,672.36	1,505.17	1,407.52	1,246.74	1,144.95	1,056.69
	4.00%	1,517.75	1,375.94	1,255.79	1,184.09	1,063.48	985.43	916.66
	4.50%	1,264.94	1,160.65	1,070.35	1,015.60	921.99	860.37	805.38
	5.00%	1,077.29	997.55	927.37	884.28	809.67	759.89	715.01
	5.50%	932.80	869.99	813.99	779.27	718.52	677.55	640.29
	6.00%	818.35	767.70	722.07	693.54	643.22	608.96	577.59
	6.50%	725.64	684.00	646.17	622.36	580.06	551.04	524.31

DCF/EP:	WACC							
	\$ 884.28	12.50%	13.00%	13.50%	13.88%	14.00%	14.50%	15.00%
Inflation Rate	1.75%	1,092.05	1,009.46	936.90	886.97	872.67	815.47	764.22
	2.00%	1,090.84	1,008.34	935.85	885.98	871.70	814.56	763.37
	2.25%	1,089.55	1,007.15	934.75	884.94	870.68	813.60	762.47
	2.50%	1,088.20	1,005.90	933.59	883.84	869.60	812.60	761.53
	2.75%	1,086.77	1,004.59	932.37	882.68	868.46	811.53	760.53
	3.00%	1,085.27	1,003.19	931.08	881.46	867.26	810.41	759.48
	3.25%	1,083.67	1,001.72	929.71	880.17	865.98	809.22	758.37

DCF/EP:	CV Growth of NOPLAT							
	\$ 884.28	3.50%	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%
Beta	1.60	987.95	1,027.06	1,071.19	1,121.36	1,178.92	1,245.61	1,323.81
	1.70	922.25	955.89	993.58	1,036.11	1,084.47	1,139.95	1,204.24
	1.80	863.50	892.62	925.04	961.37	1,002.37	1,048.99	1,102.47
	1.92	801.75	826.48	853.84	884.28	918.36	956.75	1,000.36
	2.00	763.00	785.16	809.59	836.64	866.78	900.55	938.66
	2.10	719.73	739.20	760.57	784.12	810.21	839.27	871.83
	2.20	680.31	697.50	716.28	736.88	759.60	784.76	812.78

Relative Valuation (P/E) Model

The relative valuation model compares NVIDIA with its GPU (AMD and Intel) and big tech (Apple, Amazon, Alphabet, Microsoft, Meta Platforms) peers based on their price-to-earnings (P/E) ratios for 2025 and 2026. NVIDIA trades at an appropriate multiple relative to its GPU peers in both years. The average GPU industry multiple estimates NVIDIA's share price to be \$870 in 2025 and \$994 in 2026.

GPU Peers	P/E 25	P/E 26
AMD	38	29
Intel	44	37
Average	41	33

Source: FactSet

Conversely, NVIDIA trades at a premium compared to big tech firms.

Big Tech Peers	P/E 25	P/E 26
Apple	25	23
Amazon	33	25
Alphabet	18	16
Microsoft	31	26
Meta	21	18
Average	26	22

Source: FactSet

NVIDIA trades at \$568 and \$688 relative to big tech P/E valuations in 2025 and 2026.

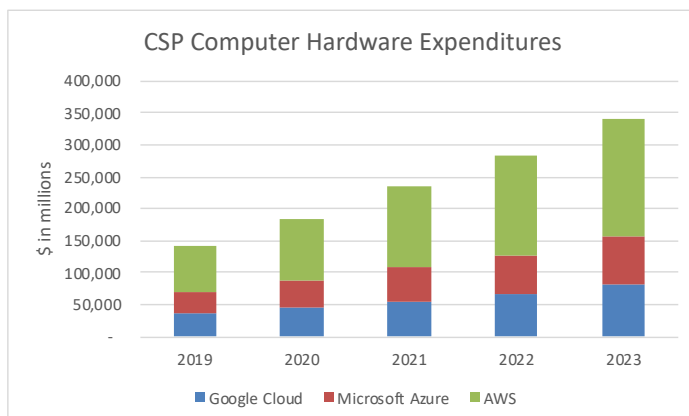
Fundamental P/E Model (DDM)

The DDM estimates NVIDIA's intrinsic value based on future dividend payments and growth prospects. We use a 5% growth rate of EPS, ROE of 24%, and a cost of equity of 14%. We assume a stable dividend per share of \$0.16, consistent with NVIDIA's dividend payout since 2020. It utilizes a projected P/E multiple of 8.9 in the terminal year (2033E), resulting in an intrinsic value of \$555. Today's implied price is \$571. This DDM price is not an accurate reflection of inherent value, given that our low dividend assumption is consistent with current payout trends.

KEYS TO MONITOR

Self-Driving: We project significant growth of autonomous driving systems during the middle years of our forecast. Failure to commercialize this technology would undermine a key revenue contributor to our model.

DGX Cloud Sales: Expanded digital services are a key underlying assumption to our valuation. To justify our price, NVIDIA must continually add DGX Cloud subscriptions. Internally, investors should look at gross margin as a signal since services provide a higher margin. Externally, CSP capital expenditures and revenue growth can provide insight. The chart below is from the last five years and depicts a CAGR of 24.5%. Downturns in investment may signal saturation in the market.



Source: [Alphabet 10-K](#), [Microsoft 10-K](#), [Amazon 10-K](#)

Geopolitics: Investors should remain wary of conflict in the Asia-Pacific region. South Korea and Taiwan, the countries

responsible for manufacturing NVIDIA chips, have hostile neighbors that could disrupt GPU supply. Fortunately, DGX Cloud subscriptions offer a source of cash flow diversification.

SUMMARY

NVIDIA is characterized by robust opportunities for growth balanced against significant challenges. The company's emphasis on expanding its Data Center and Automotive sectors is well-poised to capitalize on the accelerating adoption of AI technologies and autonomous driving systems. Notably, NVIDIA's leadership in developing high-performance GPUs and innovative platforms like DGX Cloud is expected to drive substantial revenue growth and enhance profitability margins through a greater mix of software sales.

However, this optimistic outlook is tempered by considerable risks that could impede NVIDIA's growth trajectory. Export controls limiting access to the Chinese market, vulnerabilities in the global supply chain, and regulatory hurdles in automotive advancements present substantial challenges. These factors necessitate careful consideration as they have the potential to significantly impact NVIDIA's business operations and financial performance.

Given these dynamics, our HOLD rating reflects a cautious yet optimistic view of NVIDIA's potential to navigate these complexities. We believe that while NVIDIA is positioned to benefit from major trends in technology and computing. Investors should monitor developments related to geopolitical tensions, regulatory changes, and market adoption of emerging technologies, as these will be critical in shaping NVIDIA's future in the highly competitive tech landscape.

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NVIDIA

Revenue Decomposition

(\$ in millions)

Fiscal Years Ending January 31	FY2022	FY2023	FY2024	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Specialized Markets:												
Data Center	10,613	15,005	47,525	90,298	121,902	176,757	265,136	357,934	411,624	452,786	498,065	532,929
Growth Rate (%)	58.5%	41.4%	216.7%	90.0%	35.0%	45.0%	50.0%	35.0%	15.0%	10.0%	10.0%	7.0%
% of Total Revenue	39.4%	55.6%	78.0%	85.0%	86.5%	88.3%	89.3%	90.1%	90.0%	89.8%	89.9%	90.1%
Gaming	12,462	9,067	10,447	12,014	13,816	15,543	17,097	18,465	19,573	20,552	21,579	22,227
Growth Rate (%)	60.6%	-27.2%	15.2%	15.0%	15.0%	12.5%	10.0%	8.0%	6.0%	5.0%	5.0%	3.0%
% of Total Revenue	46.3%	33.6%	17.1%	11.3%	9.8%	7.8%	5.8%	4.6%	4.3%	4.1%	3.9%	3.8%
Professional Visualization	2,111	1,544	1,553	1,933	2,104	2,619	4,976	6,583	7,571	8,707	9,577	10,056
Growth Rate (%)	100.5%	-26.9%	0.6%	24.5%	8.8%	24.5%	90.0%	32.3%	15.0%	15.0%	10.0%	5.0%
% of Total Revenue	7.8%	5.7%	2.5%	1.8%	1.5%	1.3%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
Automotive	566	903	1,091	1,637	2,700	4,725	9,215	13,822	17,968	21,562	23,718	25,378
Growth Rate (%)	0.5%	59.5%	20.8%	50.0%	65.0%	75.0%	95.0%	50.0%	30.0%	20.0%	10.0%	7.0%
% of Total Revenue	2.1%	3.3%	1.8%	1.5%	1.9%	2.4%	3.1%	3.5%	3.9%	4.3%	4.3%	4.3%
OEM & Other	1,162	455	306	349	399	456	520	594	679	775	885	1,011
Growth Rate (%)	84.2%	-60.8%	-32.7%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%
% of Total Revenue	4.3%	1.7%	0.5%	0.3%	0.3%	0.2%	0.2%	0.1%	0.1%	0.2%	0.2%	0.2%
Total Revenue	26,914	26,974	60,922	106,231	140,921	200,101	296,945	397,399	457,415	504,382	553,825	591,602
Growth Rate (%)	61.1%	0.2%	125.9%	74.4%	32.7%	42.0%	48.4%	33.8%	15.1%	10.3%	9.8%	6.8%

NVIDIA
Balance Sheet
(\$ in millions)

Fiscal Years Ending January 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
ASSETS												
Current assets:												
Cash and cash equivalents	1,990	3,389	7,280	46,003	114,672	222,655	395,037	641,306	942,729	1,290,057	1,680,565	2,109,017
Marketable securities	19,218	9,907	18,704	19,628	20,598	21,615	22,683	23,803	24,979	26,213	27,508	28,867
Accounts receivable, net	4,650	3,827	9,999	16,954	22,490	31,935	47,390	63,422	73,000	80,496	88,386	94,415
Inventories	2,605	5,159	5,282	13,270	17,603	24,996	37,093	49,642	57,139	63,006	69,182	73,901
Prepaid expenses & other current assets	366	791	3,080	3,310	4,391	6,235	9,253	12,383	14,253	15,717	17,257	18,434
Total current assets	28,829	23,073	44,345	99,165	179,754	307,436	511,456	790,556	1,112,100	1,475,488	1,882,899	2,324,634
Property & equipment, net	2,778	3,807	3,914	6,590	8,626	10,399	12,115	13,961	16,126	18,829	22,346	27,059
Operating lease assets	829	1,038	1,346	2,266	2,966	3,576	4,166	4,801	5,546	6,475	7,685	9,305
Goodwill	4,349	4,372	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430
Intangible assets, net	2,339	1,676	1,112	557	296	146	109	100	100	100	100	100
Deferred income tax assets	1,222	3,396	6,081	6,233	6,389	6,549	6,712	6,880	7,052	7,228	7,409	7,594
Other assets	3,841	3,820	4,500	12,684	16,826	23,892	35,455	47,449	54,615	60,223	66,126	70,637
Total assets	44,187	41,182	65,728	131,925	219,287	356,428	574,444	868,177	1,199,969	1,572,773	1,990,994	2,443,760
LIABILITIES AND SHAREHOLDERS' EQUITY												
Current liabilities:												
Accounts payable	1,783	1,193	2,699	5,481	7,270	10,324	15,320	20,503	23,599	26,022	28,573	30,522
Accrued & other current liabilities	2,552	4,120	6,682	12,650	16,781	23,828	35,360	47,322	54,469	60,062	65,950	70,448
Short-term debt	-	1,250	1,250	1,087	1,442	2,047	3,038	4,066	4,680	5,160	5,666	6,052
Total current liabilities	4,335	6,563	10,631	19,218	25,493	36,199	53,718	71,891	82,748	91,245	100,189	107,023
Long-term debt	10,946	9,703	8,459	9,595	12,160	16,232	22,682	29,389	33,614	37,123	40,946	44,268
Long-term operating lease liabilities	741	902	1,119	1,960	2,565	3,092	3,603	4,152	4,796	5,599	6,645	8,047
Other long-term liabilities	1,553	1,913	2,541	6,031	8,001	11,361	16,860	22,563	25,971	28,637	31,445	33,589
Total liabilities	17,575	19,081	22,750	36,803	48,219	66,885	96,863	127,995	147,129	162,604	179,225	192,928
Shareholders' equity:												
Common equity	10,386	11,972	13,134	13,134	13,134	13,134	13,134	13,134	13,134	13,134	13,134	13,134
Treasury stock, at cost	-	-	-	3,525	7,050	10,576	14,101	17,626	21,151	24,676	28,201	31,727
Accumulated other comprehensive income (loss)	(11)	(43)	27	27	27	27	27	27	27	27	27	27
Retained earnings	16,235	10,171	29,817	85,486	164,957	286,958	478,521	744,647	1,060,830	1,421,684	1,826,810	2,269,398
Total shareholders' equity	26,612	22,101	42,978	95,122	171,068	289,543	477,581	740,182	1,052,840	1,410,169	1,811,769	2,250,832
Total liabilities and shareholders' equity	44,187	41,182	65,728	131,925	219,287	356,428	574,444	868,177	1,199,969	1,572,773	1,990,994	2,443,760

NVIDIA

Historical Cash Flow Statement

(\$ in millions)

Fiscal Years Ending January 31	2019	2020	2021	2022	2023	2024
Cash flows from operating activities:						
Net income (loss)	4,141	2,796	4,332	9,752	4,368	29,760
Adjustments to reconcile net income to net cash provided by operating activities:						
Stock-based compensation expense	557	844	1,397	2,004	2,709	3,549
Depreciation and amortization	262	381	1,098	1,174	1,544	1,508
Acquisition termination cost	-	-	-	-	1,353	-
Deferred income taxes	(315)	18	(282)	(406)	(2,164)	(2,489)
Losses (gains) on investments in non-affiliates, net	-	-	-	(100)	45	(238)
Other adjustments	(45)	5	(20)	47	(7)	(278)
Changes in operating assets and liabilities, net of acquisitions:						
Accounts receivable	(149)	(233)	(550)	(2,215)	822	(6,172)
Inventories	(776)	597	(524)	(774)	(2,554)	(98)
Prepaid expenses & other assets	(55)	77	(394)	(1,715)	(1,517)	(1,522)
Accounts payable	(135)	194	363	568	(551)	1,531
Accrued & other current liabilities	256	54	239	581	1,341	2,025
Other long-term liabilities	2	28	163	192	252	514
Net cash flows from operating activities	3,743	4,761	5,822	9,108	5,641	28,090
Cash flows from investing activities:						
Proceeds from maturities of marketable securities	7,232	4,744	8,792	15,197	19,425	9,732
Proceeds from sales of marketable securities	428	3,365	527	1,023	1,806	50
Purchases of marketable securities	(11,148)	(1,461)	(19,308)	(24,787)	(11,897)	(18,211)
Purchases related to property & equipment & intangible assets	(600)	(489)	(1,128)	(976)	(1,833)	(1,069)
Acquisitions, net of cash acquired	-	-	(8,524)	(263)	(49)	(83)
Investments & other, net	-	(14)	(34)	(24)	(77)	(985)
Net cash flows from investing activities	(4,097)	6,145	(19,675)	(9,830)	7,375	(10,566)
Cash flows from financing activities:						
Issuance of debt, net of issuance costs	-	-	4,968	4,977	-	-
Payments related to repurchases of common stock	(1,579)	-	-	-	(10,039)	(9,533)
Proceeds related to employee stock plans	137	149	194	281	355	403
Payments related to tax on restricted stock units	(1,032)	(551)	(942)	(1,904)	(1,475)	(2,783)
Repayment of debt	-	-	-	(1,000)	-	(1,250)
Dividends paid	(371)	(390)	(395)	(399)	(398)	(395)
Principal payments on property & equipment	-	-	(17)	(83)	(58)	(74)
Other financing activities	(5)	-	(4)	(7)	(2)	(1)
Net cash flows from financing activities	(2,866)	(792)	3,804	1,865	(11,617)	(13,633)
Change in cash & cash equivalents	(3,220)	10,114	(10,049)	1,143	1,399	3,891
Cash & cash equivalents at beginning of period	4,002	782	10,896	847	1,990	3,389
Cash & cash equivalents at end of period	782	10,896	847	1,990	3,389	7,280

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Forecasted Cash Flow Statement

(\$ in millions)

Fiscal Years Ending January 31	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Cash & cash equivalents at beginning of period	7,280	46,003	114,672	222,655	395,037	641,306	942,729	1,290,057	1,680,565
CASH FLOWS FROM OPERATING ACTIVITIES									
Net Income	56,074	79,875	122,404	191,966	266,529	316,586	361,255	405,527	442,989
Adjustments to reconcile net income to cash from operating activities:									
Depreciation	1,074	1,808	2,366	2,853	3,324	3,830	4,424	5,165	6,130
Amortization	555	261	150	37	9	-	-	-	-
Changes in Operating Activities:									
Changes in Accounts receivable, net	(6,955)	(5,536)	(9,445)	(15,456)	(16,032)	(9,578)	(7,496)	(7,891)	(6,029)
Changes in Inventories	(7,988)	(4,333)	(7,393)	(12,097)	(12,548)	(7,497)	(5,867)	(6,176)	(4,719)
Changes in Prepaid expenses and other current assets	(230)	(1,081)	(1,844)	(3,018)	(3,130)	(1,870)	(1,463)	(1,541)	(1,177)
Changes in Operating lease assets	(920)	(700)	(610)	(590)	(635)	(745)	(929)	(1,210)	(1,621)
Changes in Deferred income tax assets	(152)	(156)	(160)	(164)	(168)	(172)	(176)	(181)	(185)
Changes in Accounts payable	2,782	1,790	3,053	4,996	5,183	3,096	2,423	2,551	1,949
Changes in Accrued & other current liabilities	5,968	4,131	7,047	11,532	11,962	7,147	5,593	5,888	4,498
Changes in Long-term operating lease liabilities	841	605	527	510	549	644	804	1,046	1,402
Changes in Other long-term liabilities	3,490	1,970	3,360	5,499	5,703	3,408	2,667	2,807	2,145
Net Cash from Operating Activities	54,538	78,633	119,457	186,069	260,746	314,848	361,234	405,986	445,382
INVESTING CASH FLOWS									
Changes in Investing Activities:									
Changes in Marketable securities	(924)	(970)	(1,018)	(1,068)	(1,121)	(1,176)	(1,234)	(1,295)	(1,359)
Changes in Plant & equipment, gross	(3,750)	(3,844)	(4,139)	(4,569)	(5,169)	(5,995)	(7,126)	(8,682)	(10,843)
Changes in Other intangible assets	-	-	-	-	-	-	-	-	-
Changes in Other assets	(8,184)	(4,142)	(7,066)	(11,563)	(11,994)	(7,166)	(5,608)	(5,903)	(4,511)
Net Cash Used for Investing Activities	(12,858)	(8,955)	(12,223)	(17,200)	(18,284)	(14,337)	(13,968)	(15,881)	(16,713)
FINANCING CASH FLOWS									
Changes in Financing Activities:									
Changes in Short-term debt	(163)	355	605	991	1,028	614	480	506	386
Changes in Long-term debt	1,136	2,565	4,073	6,450	6,707	4,225	3,508	3,824	3,322
Changes in Accumulated other comprehensive income	-	-	-	-	-	-	-	-	-
Changes in Common equity	-	-	-	-	-	-	-	-	-
Dividends paid	(404)	(404)	(403)	(403)	(403)	(402)	(402)	(402)	(401)
Changes in Treasury stock, at cost	(3,525)	(3,525)	(3,525)	(3,525)	(3,525)	(3,525)	(3,525)	(3,525)	(3,525)
Net Cash Flows from Financing Activities	(2,957)	(1,009)	749	3,513	3,807	912	62	403	(218)
Cash and cash equivalents at end of period	46,003	114,672	222,655	395,037	641,306	942,729	1,290,057	1,680,565	2,109,017

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Common Size Income Statement

Fiscal Years Ending January 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of revenue	30.7%	37.4%	24.8%	22.8%	20.8%	18.8%	17.8%	16.8%	16.0%	15.0%	15.0%	15.0%
Depreciation	2.3%	3.1%	1.5%	1.0%	1.3%	1.2%	1.0%	0.8%	0.8%	0.9%	0.9%	1.0%
Amortization	2.1%	2.6%	1.0%	0.5%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Gross profit (loss)	64.9%	56.9%	72.7%	75.7%	77.7%	79.9%	81.2%	82.4%	83.2%	84.1%	84.1%	84.0%
Research & development expenses	19.6%	27.2%	14.2%	10.0%	9.0%	7.4%	5.7%	5.3%	5.5%	5.8%	6.1%	6.4%
Sales, general & administrative expenses	8.0%	9.0%	4.4%	2.8%	2.3%	1.8%	1.4%	1.2%	1.1%	1.1%	1.2%	1.2%
Acquisition termination cost	-	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total operating expenses	27.6%	41.3%	18.6%	12.8%	11.4%	9.3%	7.1%	6.4%	6.6%	6.9%	7.2%	7.6%
Income (loss) from operations	37.3%	15.7%	54.1%	62.8%	66.4%	70.7%	74.1%	75.9%	76.6%	77.2%	76.8%	76.3%
Interest income	0.1%	1.0%	1.4%	1.2%	2.3%	3.3%	4.1%	5.2%	7.2%	9.5%	11.7%	14.3%
Interest expense	0.9%	1.0%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%
Other income (expense), net	0.4%	-0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total other income (expense)	-0.4%	-0.2%	1.4%	0.8%	1.9%	3.0%	3.8%	4.9%	6.8%	9.1%	11.4%	13.9%
Income (loss) before income tax	36.9%	15.5%	55.5%	63.6%	68.3%	73.7%	77.9%	80.8%	83.4%	86.3%	88.2%	90.2%
Income tax expense (benefit)	0.7%	-0.7%	6.7%	10.8%	11.6%	12.5%	13.2%	13.7%	14.2%	14.7%	15.0%	15.3%
Net income (loss)	36.2%	16.2%	48.8%	52.8%	56.7%	61.2%	64.6%	67.1%	69.2%	71.6%	73.2%	74.9%

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Common Size Balance Sheet

Fiscal Years Ending January 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
ASSETS												
Current assets:												
Cash and cash equivalents	7.4%	12.6%	11.9%	43.3%	81.4%	111.3%	133.0%	161.4%	206.1%	255.8%	303.4%	356.5%
Marketable securities	71.4%	36.7%	30.7%	18.5%	14.6%	10.8%	7.6%	6.0%	5.5%	5.2%	5.0%	4.9%
Accounts receivable, net	17.3%	14.2%	16.4%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%
Inventories	9.7%	19.1%	8.7%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%
Prepaid expenses & other current assets	1.4%	2.9%	5.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
Total current assets	107.1%	85.5%	72.8%	93.3%	127.6%	153.6%	172.2%	198.9%	243.1%	292.5%	340.0%	392.9%
Property & equipment, net	10.3%	14.1%	6.4%	6.2%	6.1%	5.2%	4.1%	3.5%	3.5%	3.7%	4.0%	4.6%
Operating lease assets	3.1%	3.8%	2.2%	2.1%	2.1%	1.8%	1.4%	1.2%	1.2%	1.3%	1.4%	1.6%
Goodwill	16.2%	16.2%	7.3%	4.2%	3.1%	2.2%	1.5%	1.1%	1.0%	0.9%	0.8%	0.7%
Intangible assets, net	8.7%	6.2%	1.8%	0.5%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deferred income tax assets	4.5%	12.6%	10.0%	5.9%	4.5%	3.3%	2.3%	1.7%	1.5%	1.4%	1.3%	1.3%
Other assets	14.3%	14.2%	7.4%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%
Total assets	164.2%	152.7%	107.9%	124.2%	155.6%	178.1%	193.5%	218.5%	262.3%	311.8%	359.5%	413.1%
LIABILITIES AND SHAREHOLDERS' EQUITY												
Current liabilities:												
Accounts payable	6.6%	4.4%	4.4%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
Accrued & other current liabilities	9.5%	15.3%	11.0%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%	11.9%
Short-term debt	0.0%	4.6%	2.1%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Total current liabilities	16.1%	24.3%	17.5%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%
Long-term debt	40.7%	36.0%	13.9%	9.0%	8.6%	8.1%	7.6%	7.4%	7.3%	7.4%	7.4%	7.5%
Long-term operating lease liabilities	2.8%	3.3%	1.8%	1.8%	1.8%	1.5%	1.2%	1.0%	1.0%	1.1%	1.2%	1.4%
Other long-term liabilities	5.8%	7.1%	4.2%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%
Total liabilities	65.3%	70.7%	37.3%	34.6%	34.2%	33.4%	32.6%	32.2%	32.2%	32.2%	32.4%	32.6%
Shareholders' equity:												
Common equity	38.5%	19.7%	12.4%	9.3%	6.6%	4.4%	3.3%	2.9%	2.6%	2.4%	2.2%	2.2%
Accumulated other comprehensive income (loss)	0.0%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Retained earnings (accumulated deficit)	60.3%	37.7%	48.9%	80.5%	117.1%	143.4%	161.1%	187.4%	231.9%	281.9%	329.9%	383.6%
Total shareholders' equity	98.9%	81.9%	70.5%	89.5%	121.4%	144.7%	160.8%	186.3%	230.2%	279.6%	327.1%	380.5%
Total liabilities and shareholders' equity	164.2%	152.7%	107.9%	124.2%	155.6%	178.1%	193.5%	218.5%	262.3%	311.8%	359.5%	413.1%

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Value Driver Estimation

(\$ in millions)

Fiscal Years Ending January 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
NOPLAT:												
EBITA:												
Revenue	26,914	26,974	60,922	106,231	140,921	200,101	296,945	397,399	457,415	504,382	553,825	591,602
(-) Cost of revenue	8,265	10,075	15,113	24,221	29,312	37,619	52,856	66,763	73,186	75,657	83,074	88,740
(-) Depreciation	611	844	894	1,074	1,808	2,366	2,853	3,324	3,830	4,424	5,165	6,130
(-) Amortization on non-goodwill intangibles	563	699	614	555	261	150	37	9	-	-	-	-
(-) Research and development expenses	5,268	7,339	8,675	10,675	12,725	14,826	16,980	20,980	25,080	29,283	33,590	38,005
(-) Sales, general & administrative expenses	2,166	2,440	2,654	2,962	3,305	3,689	4,117	4,594	5,127	5,722	6,386	7,127
(+) Implied interest on operating leases	34.2	40.1	50.2	65.1	109.7	143.6	173.1	201.7	232.4	268.4	313.4	371.9
EBITA	10,075	5,617	33,022	66,810	93,620	141,594	220,275	301,930	350,424	389,564	425,923	451,971
Implied Marginal Tax Rate	16.4%	20.2%	20.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%
Total Adjusted Taxes:												
Income tax expense	189	(187)	4,058	11,485	16,360	25,071	39,318	54,590	64,843	73,992	83,060	90,733
(+) Tax shield on interest expense	39	53	51	75	83	105	142	199	259	297	327	361
(-) Tax on interest income	5	54	173	205	519	1,069	1,931	3,302	5,257	7,649	10,404	13,501
(-) Tax on non-operating income	18	(10)	47	-	-	-	-	-	-	-	-	-
(+) Tax shield on acquisition termination cost	-	273	271	-	-	-	-	-	-	-	-	-
(+) Tax shield on implied interest on operating leases	6	8	10	10	18	23	28	32	37	43	50	60
Total Adjusted Taxes	211	103	4,169	11,365	15,941	24,130	37,557	51,520	59,882	66,683	73,034	77,653
Change in Deferred Taxes	(406)	(2,164)	(2,489)	152	156	160	164	168	172	176	181	185
NOPLAT	9,458	3,350	26,364	55,597	77,834	117,624	182,882	250,578	290,714	323,058	353,071	374,504
Invested Capital (IC):												
Operating Working Capital:												
Normal cash	1,990	1,994	4,505	7,855	10,420	14,795	21,956	29,383	33,821	37,294	40,949	43,743
(+) Accounts receivable, net	4,650	3,827	9,999	16,954	22,490	31,935	47,390	63,422	73,000	80,496	88,386	94,415
(+) Inventories	2,605	5,159	5,282	13,270	17,603	24,996	37,093	49,642	57,139	63,006	69,182	73,901
(+) Prepaid expenses & other current assets	366	791	3,080	3,310	4,391	6,235	9,253	12,383	14,253	15,717	17,257	18,434
Non-interest bearing operating current assets	9,611	11,771	22,866	41,388	54,904	77,961	115,692	154,830	178,213	196,511	215,775	230,493
Accounts payable	1,783	1,193	2,699	5,481	7,270	10,324	15,320	20,503	23,599	26,022	28,573	30,522
(+) Accrued & other current liabilities	2,552	4,120	6,682	12,650	16,781	23,828	35,360	47,322	54,469	60,062	65,950	70,448
Non-interest bearing operating current liabilities	4,335	5,313	9,381	18,131	24,051	34,152	50,681	67,825	78,069	86,084	94,523	100,971
Net Operating Working Capital	5,276	6,458	13,485	23,258	30,852	43,809	65,012	87,004	100,144	110,427	121,252	129,522
Property & Equipment, net	2,778	3,807	3,914	6,590	8,626	10,399	12,115	13,961	16,126	18,829	22,346	27,059
Other Long-Term Operating Assets:												
Intangible assets, net (non-goodwill)	2,339	1,676	1,112	557	296	146	109	100	100	100	100	100
(+) Operating lease assets	829	1,038	1,346	2,266	2,966	3,576	4,166	4,801	5,546	6,475	7,685	9,305
(+) Other assets	2,222	3,521	4,201	12,385	16,527	23,593	35,156	47,150	54,316	59,924	65,827	70,338
Other Long-Term Operating Assets	5,390	6,235	6,659	15,208	19,789	27,315	39,431	52,051	59,962	66,499	73,612	79,743
Other Long-Term Operating Liabilities:												
Deferred revenue	202	218	218	218	218	218	218	218	218	218	218	218
(+) Licenses payable	77	181	181	181	181	181	181	181	181	181	181	181
(+) Other	49	63	63	63	63	63	63	63	63	63	63	63
Other Long-Term Operating Liabilities	328	462	462	462	462	462	462	462	462	462	462	462
Invested Capital	13,116	16,038	23,596	44,594	58,806	81,061	116,096	152,555	175,770	195,292	216,747	235,862
Free Cash Flow (FCF):												
NOPLAT	9,458	3,350	26,364	55,597	77,834	117,624	182,882	250,578	290,714	323,058	353,071	374,504
(-) Change in invested capital	4,344	2,922	7,557	20,999	14,212	22,255	35,035	36,459	23,215	19,522	21,455	19,115
FCF	5,114	428	18,807	34,598	63,622	95,369	147,847	214,119	267,498	303,536	331,615	355,389
Return on Invested Capital (ROIC):												
NOPLAT	9,458	3,350	26,364	55,597	77,834	117,624	182,882	250,578	290,714	323,058	353,071	374,504
(/) Beginning invested capital	8,772	13,116	16,038	23,596	44,594	58,806	81,061	116,096	152,555	175,770	195,292	216,747
ROIC	107.8%	25.5%	164.4%	235.6%	174.5%	200.0%	225.6%	215.8%	190.6%	183.8%	180.8%	172.8%
Economic Profit (EP):												
Beginning invested capital	13,116	16,038	23,596	23,596	44,594	58,806	81,061	116,096	152,555	175,770	195,292	216,747
(x) ROIC - WACC	93.9%	11.7%	150.5%	221.7%	160.7%	186.1%	211.7%	202.0%	176.7%	169.9%	166.9%	158.9%
EP	12,322	1,870	35,511	52,322	71,644	109,462	171,631	234,464	269,539	298,661	325,964	344,420

NVIDIA*Weighted Average Cost of Capital (WACC) Estimation***Cost of Equity:**

Risk-Free Rate	4.34%
Beta	1.92
Equity Risk Premium	5.00%
Cost of Equity	13.93%

ASSUMPTIONS:

10-year Treasury bond (2/22/24)
Average of 1Y, 2Y, 3Y Weekly Raw Beta
Henry Fund ERP estimate

Cost of Debt:

Risk-Free Rate	4.34%
Implied Default Premium	0.50%
Pre-Tax Cost of Debt	4.84%
Marginal Tax Rate	16%
After-Tax Cost of Debt	4.07%

10Y Treasury bond (2/22/24)

YTM on NVIDIA's 10Y corporate bond

Market Value of Common Equity:

Total Shares Outstanding	2,469
Current Stock Price	\$860.01
MV of Equity	2,123,365

MV Weights

99.49%

Market Value of Debt:

Short-Term Debt	1,250
Current Portion of LTD	-
Long-Term Debt	8,459
PV of Operating Leases	1,119
MV of Total Debt	10,828

0.51%

Market Value of the Firm

2,134,193

100.00%

Estimated WACC

13.88%

NVIDIA

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Inputs:

CV Growth of NOPLAT	5.00%
CV Year ROIC	172.78%
WACC	13.88%
Cost of Equity	13.93%
CV NOPLAT	374,504

Fiscal Years Ending January 31	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
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DCF Model:

Free Cash Flow (FCF)	34,598	63,622	95,369	147,847	214,119	267,498	303,536	331,615	355,389
Continuing Value (CV)									4,095,366
PV of FCF	30,381	49,058	64,575	87,907	111,794	122,642	122,202	117,235	1,447,820

Value of Operating Assets: 2,153,614

Non-Operating Adjustments

(+) Excess cash	2,775
(+) Marketable securities	18,704
(-) Total debt	(10,828)
(-) Other long-term liabilities	(2,541)
(-) ESOP	(38,530)

Value of Equity 2,123,195

Shares Outstanding 2,469

Intrinsic Value of Last FYE 859.94

Implied Price as of Today \$ 884.28

EP Model:

Economic Profit (EP)	52,322	71,644	109,462	171,631	234,464	269,539	298,661	325,964	344,420
Continuing Value (CV)									3,878,619
PV of EP	45,945	55,244	74,117	102,048	122,416	123,577	120,240	115,237	1,371,194

Total PV of EP 2,130,019

Invested Capital (last FYE) 23,596

Value of Operating Assets: 2,153,614

Non-Operating Adjustments

(+) Excess cash	2,775
(+) Marketable securities	18,704
(-) Total debt	(10,828)
(-) Other long-term liabilities	(2,541)
(-) ESOP	(38,530)

Value of Equity 2,123,195

Shares Outstanding 2,469

Intrinsic Value of Last FYE 859.94

Implied Price as of Today \$ 884.28

NVIDIA

Relative Valuation Models

Ticker	Company (GPU Peers)	Price	EPS		P/E 25	P/E 26
			2025E	2026E		
AMD	Advanced Micro Devices, Inc.	\$ 192.53	\$ 5.46	\$ 7.16	35.26	26.89
INTC	Intel Corporation	\$ 43.05	\$ 1.00	\$ 1.20	43.05	35.88
Average					39.16	31.38

Ticker	Company (Big Tech Peers)	Price	EPS		P/E 25	P/E 26
			2025E	2026E		
AAPL	Apple, Inc.	\$ 180.75	\$ 7.15	\$ 7.78	25.28	23.23
AMZN	Amazon.com, Inc.	\$ 176.76	\$ 5.37	\$ 6.96	32.92	25.40
GOOGL	Alphabet Inc. (Class A)	\$ 138.46	\$ 7.83	\$ 8.88	17.68	15.59
MSFT	Microsoft Corporation	\$ 413.64	\$ 13.37	\$ 15.75	30.94	26.26
META	Meta Platforms Inc. (Class A)	\$ 490.13	\$ 23.16	\$ 27.05	21.16	18.12
Average					25.60	21.72

As of 2/29/24

NVDA NVIDIA \$ 860.01 \$ 22.21 \$ 31.68 38.7 27.1

Implied Relative Value (GPU Peers):

P/E (EPS25) \$ 869.79

P/E (EPS26) \$ 994.26

Implied Relative Value (Big Tech Peers):

P/E (EPS25) \$ 568.58

P/E (EPS26) \$ 688.16

NVIDIA

Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

Fiscal Years Ending	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	
EPS	\$ 22.21	\$ 31.68	\$ 48.60	\$ 76.30	\$ 106.03	\$ 126.03	\$ 143.91	\$ 161.64	\$ 176.66	
Key Assumptions										
CV growth of EPS	5.00%									
CV Year ROE	24.45%									
Cost of Equity	13.93%									
Future Cash Flows										
P/E Multiple (CV Year)										8.91
EPS (CV Year)										\$ 176.66
Future Stock Price										\$ 1,573.74
Dividends Per Share	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.16	
Discounted Cash Flows	\$ 0.14	\$ 0.12	\$ 0.11	\$ 0.09	\$ 0.08	\$ 0.07	\$ 0.06	\$ 0.06	\$ 554.41	
Intrinsic Value as of Last FYE	\$ 555.15									
Implied Price as of Today	\$ 570.86									

NVIDIA

Key Management Ratios

Fiscal Years Ending January 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Liquidity Ratios:												
Current Ratio <i>Current Assets / Current Liabilities</i>	6.65	3.52	4.17	5.16	7.05	8.49	9.52	11.00	13.44	16.17	18.79	21.72
Quick Ratio <i>(Current Assets - Inventory) / Current Liabilities</i>	6.05	2.73	3.67	4.47	6.36	7.80	8.83	10.31	12.75	15.48	18.10	21.03
Cash Ratio <i>(Cash + Marketable Securities) / Current Liabilities</i>	4.89	2.03	2.44	3.42	5.31	6.75	7.78	9.25	11.69	14.43	17.05	19.98
Asset-Management Ratios:												
Asset Turnover Ratio <i>Sales / Average Total Assets</i>	0.74	0.63	1.14	1.07	0.80	0.70	0.64	0.55	0.44	0.36	0.31	0.27
Inventory Turnover Ratio <i>COGS / Average Inventory</i>	3.73	2.60	2.89	2.61	1.90	1.77	1.70	1.54	1.37	1.26	1.26	1.24
Accounts Receivable Turnover <i>Sales / Average Accounts Receivable</i>	7.60	6.36	8.81	7.88	7.15	7.35	7.49	7.17	6.71	6.57	6.56	6.47
Financial Leverage Ratios:												
Debt-to-Assets Ratio <i>(Short + Long-Term Debt) / Total Assets</i>	0.25	0.27	0.15	0.08	0.06	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Debt-to-Equity Ratio <i>(Short + Long-Term Debt) / Total Shareholder's Equity</i>	0.41	0.50	0.23	0.11	0.08	0.06	0.05	0.05	0.04	0.03	0.03	0.02
Interest Coverage Ratio <i>EBIT / Interest Expense</i>	53.85	(23.76)	8.40	5.92	5.91	5.91	5.90	5.91	5.91	5.91	5.91	5.91
Profitability Ratios:												
Return on Assets <i>Net Income / Total Assets</i>	33.87%	9.89%	72.26%	85.31%	60.55%	55.82%	53.86%	46.40%	36.47%	30.11%	25.78%	22.25%
Return on Equity (NI/Beg TSE) <i>Net Income / Beginning Total Shareholder's Equity</i>	36.65%	16.41%	134.65%	130.47%	83.97%	71.55%	66.30%	55.81%	42.77%	34.31%	28.76%	24.45%
Gross Margin <i>Gross Profit / Sales</i>	64.93%	56.93%	72.72%	75.67%	77.73%	79.94%	81.23%	82.36%	83.16%	84.12%	84.07%	83.96%
Operating Margin <i>Operatin Profit / Sales</i>	37.31%	15.66%	54.12%	62.83%	66.36%	70.69%	74.12%	75.93%	76.56%	77.18%	76.85%	76.34%
Net Margin <i>Net Profit / Sales</i>	36.23%	16.19%	48.85%	52.78%	56.68%	61.17%	64.65%	67.07%	69.21%	71.62%	73.22%	74.88%
Payout Policy Ratios:												
Dividend Payout Ratio <i>Dividend / EPS</i>	4.09%	9.11%	1.33%	0.72%	0.51%	0.33%	0.21%	0.15%	0.13%	0.11%	0.10%	0.09%
Total Payout Ratio <i>Dividend + Share Repurchases / Net Income</i>	4.10%	9.11%	1.33%	0.72%	0.51%	0.33%	0.21%	0.15%	0.13%	0.11%	0.10%	0.09%

NVIDIA*Valuation of Options Granted under ESOP*

Current Stock Price	\$860.01
Risk Free Rate	4.34%
Current Dividend Yield	0.02%
Annualized St. Dev. of Stock Returns	41.53% via Bloomberg (2/29/24)

Range of Outstanding Options	Number of Shares (M)	Average Exercise Price	Average Remaining Life (yrs)	B-S Option Price	Value of Options Granted
Range 1	45	3.79	0.50	\$ 856.22	\$ 38,530
Total	45	\$ 3.79	0.50	\$ 856.30	\$ 38,530

NVIDIA

Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding

Number of Options Outstanding (shares):	45 (in millions)
Average Time to Maturity (years):	0.50
Expected Annual Number of Options Exercised:	45

Current Average Strike Price:	\$ 3.79
Cost of Equity:	13.93%
Current Stock Price:	\$860.01

Fiscal Years Ending January 31	2024	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Increase in Shares Outstanding:	45	0	0	0	0	0	0	0	0	0
Average Strike Price:	\$ 3.79	\$ 3.79	\$ 3.79	\$ 3.79	\$ 3.79	\$ 3.79	\$ 3.79	\$ 3.79	\$ 3.79	\$ 3.79
Increase in Common Stock Account:	171	-	-	-	-	-	-	-	-	-
Share Repurchases (\$)	3,525	3,525	3,525	3,525	3,525	3,525	3,525	3,525	3,525	3,525
Expected Price of Repurchased Shares:	\$ 860.01	\$ 979.65	\$ 1,115.93	\$ 1,271.17	\$ 1,448.01	\$ 1,649.45	\$ 1,878.91	\$ 2,140.30	\$ 2,438.04	\$ 2,777.21
Number of Shares Repurchased:	4	4	3	3	2	2	2	2	1	1
Shares Outstanding (beginning of the year)	2,487	2,528	2,524	2,521	2,518	2,516	2,514	2,512	2,510	2,509
Plus: Shares Issued Through ESOP	45	0	0	0	0	0	0	0	0	0
Less: Shares Repurchased in Treasury	4	4	3	3	2	2	2	2	1	1
Shares Outstanding (end of the year)	2,528	2,524	2,521	2,518	2,516	2,514	2,512	2,510	2,509	2,508