

Report on NVIDIA Corporation. By Archit Lamba

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SELECTION PROCESS

For this stock report, I have selected NVIDIA Corporation, a company listed on the NASDAQ stock exchange in the United States under the ticker symbol NVDA.



(Figure 1: NVIDIA Stock Price Chart for the Past 3 Years: Image from finviz.com)

Websites and data sources used

Analysis

Stock screening → finviz.com

Fundamental and Qualitative analysis → roic.ai, nvidia.com, [nvidia annual review](#)

Technical analysis → tradingview.com

Further Research

Financial news and analysis platforms → Bloomberg, Reuters, and CNBC.

Industry reports and publications → Statista and McKinsey.

Environmental and sustainability reports → company's official website and third-party sustainability databases.

Stock price data → Yahoo Finance and NASDAQ.

INTRODUCTION

Company description

- NVIDIA Corporation was incorporated in 1993 and is headquartered in Santa Clara, California.
- NVIDIA Corporation provides graphics, and compute and networking solutions in the United States, Taiwan, China, and internationally.
- The company's products are used in gaming, professional visualisation, datacenter, and automotive markets.
- NVIDIA Corporation sells its products to original equipment manufacturers, original device manufacturers, system builders, add-in board manufacturers, retailers/distributors, independent software vendors, Internet and cloud service providers, automotive manufacturers and tier-1 automotive suppliers, mapping companies, start-ups, and other ecosystem participants. It has a strategic collaboration with Kroger Co, an American retail company that operates supermarkets and multi-department stores throughout the United States (Source: finance.yahoo.com)
- NVIDIA generated almost \$27 billion in revenue in 2023, of which \$15 billion came from computing and networking and \$11 billion from graphics. Opposite to 2022, where of \$27 billion in revenue, over \$15.8 billion came from Graphics and \$11 billion from computing and networking. With the explosion of AI, the computing segment has become the main driver of NVIDIA's growth.
(Source: fourweekmba.com)

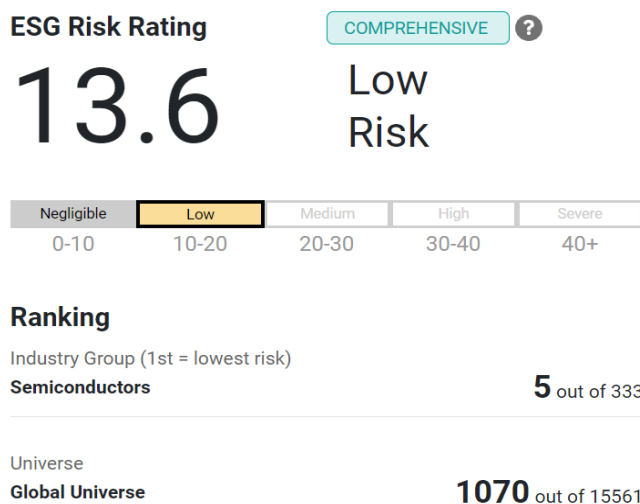
Industry description

- NVIDIA Corporation is classified under the semiconductor and technology industry and as of September 2023, NVIDIA has a market cap of **\$1.027 Trillion**. This makes NVIDIA the world's **6th** most valuable company and puts NVIDIA at the top of the semiconductor industry by market cap. (Source: companiesmarketcap.com)
- In 2021, the sales of semiconductors reached a record \$555.9 billion, up 26.2 percent with sales in China reaching \$192.5 billion, according to the Semiconductor Industry Association. A record 1.15 trillion semiconductor units were shipped in the calendar year. The sale of semiconductors is projected to reach \$ 726.73 billion by 2027.
(Sources: cnbc.com, jestr.org)

ESG IMPACT

Key UN SDG goals impacted

- **Climate action (SDG 13):** NVIDIA is committed to fighting climate change and reducing its environmental impact. Since 2014, the company has reduced its emissions by 15% per employee . NVIDIA has set a goal to have 65% of its global electricity use come from renewable sources by the end of 2025. (Source: sustainabilitymag.com)
- **Sustainable cities and communities (SDG 11):** NVIDIA's technology is used to accelerate climate-disaster management, as demonstrated by its collaboration with the United Nations Satellite Centre . The company's products and solutions help in predicting and mitigating environmental disasters by simulating the effects of climate change. (Source: blogs.nvidia.com)
- **Industry, innovation, and infrastructure (SDG 9):** NVIDIA's innovations in AI, deep learning, and high-performance computing contribute to advancements in various industries, driving economic growth and sustainable development(Source: images.nvidia.com)
- **Decent work and economic growth (SDG 8):** NVIDIA's operations and growth contribute to job creation and economic development. The company has over 13,700 employees worldwide, with more than 60 offices.(Source: sustainabilitymag.com)
- **Responsible consumption and production (SDG 12):** NVIDIA's focus on energy efficiency and renewable energy sources aligns with the goal of promoting sustainable consumption and production (Source: images.nvidia.com)



(Figure 2: NVIDIA's ESG risk rating: Image from sustainalytics.com)

Refer to the following source for more information: ethosesg.com

WHY NVIDIA IS A GOOD FINANCIAL INVESTMENT

Is the Financial Profile of the company attractive?

Liquidity Ratios

These measure the ability of a company to pay off its current obligations.

Current Ratio = Current Assets / Current Liabilities → 3.52

A value over 1 (In NVIDIA's case, 3.52) depicts that the company has more than sufficient current assets to cover its current liabilities.

Quick Ratio = (Current Assets – Inventory)/Current Liabilities → 2.61

A good quick ratio is anything above 1. A ratio of 1 would mean the company has the same amount of liquid assets as current liabilities. A higher ratio (In NVIDIA's case, 2.61) indicates NVIDIA could pay off its current liabilities several times over.

Profitability Ratios

These analyse the earning ability of the company. It also helps in understanding the company's operating efficiency of the business.

Operating Profitability Ratio = Earnings Before Interest & Tax/Sales → 15.66%

A good operating profitability ratio is considered to be above 15% and NVIDIA maintains a ratio above 15%.

Net Profit Margin = Net Income/Revenue * 100 → 16.19%

As a general rule given by corporatefinanceinstitute.com, a 10% net profit margin is considered average, a 20% margin is considered high (or “good”), and a 5% margin is low. NVIDIA is, up till now, able to keep their profit margins above 15%. NVIDIA's Profit Margins are forecasted to increase over time. NVIDIA net profit margin as of July 31, 2023 is 31.59%. (Source: www.macrotrends.net)

Return on Equity (ROE) → 19.76%

NVIDIA's Return on Equity has consistently remained above the Return on equity of the Semiconductor industry average. (Source: csimarket.com)

Solvency Ratios

Solvency ratios measure the extent of the number of assets owned by the company to cover its future obligations.

Debt to Equity Ratio = Total debt/Total Equity → 0.50

This means it is a low-debt business and NVIDIA's equity is twice as high as its debts.

Financial Leverage = Total Assets/Equity → 1.86

NVIDIA's ratio has been going up over time which points to a higher financial risk in terms of debt position to finance the company's assets. However, leverage is not necessarily bad in NVIDIA's case. When revenues are growing, payments are made with comfortable surpluses and additional debt is acquired to take advantage of market opportunities. (Source: www.bdc.ca).

(NOTE: Values above are taken from [NVIDIA's Annual report](#) and calculated on stock-analysis-on.net and based on values given at the start of 2023)

Is the Market/Industry attractive?

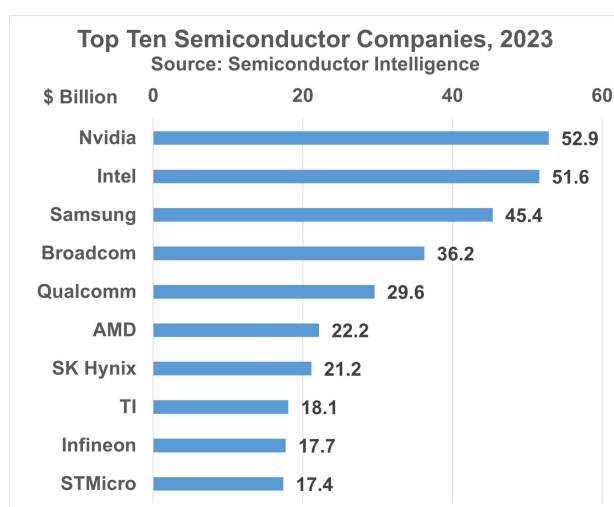
Threat of New Entrants: Low. High capital requirements, strong brand loyalty, and established partnerships create formidable barriers.

Threat of Substitutes: High. Rival semiconductor firms pose substitute threats; NVIDIA counters through continual R&D.

Bargaining Power of Buyers: Low. Highly sought-after, differentiated products and large customer volumes limit individual buyer power.

Bargaining Power of Suppliers: Low. NVIDIA's diverse supplier network and long-term relationships minimise supplier leverage.

Industry Rivalry: Intense. Fierce competition from Intel, AMD, Qualcomm, and others characterises the semiconductor and GPU sector. (Source: www.hivelfr.com)

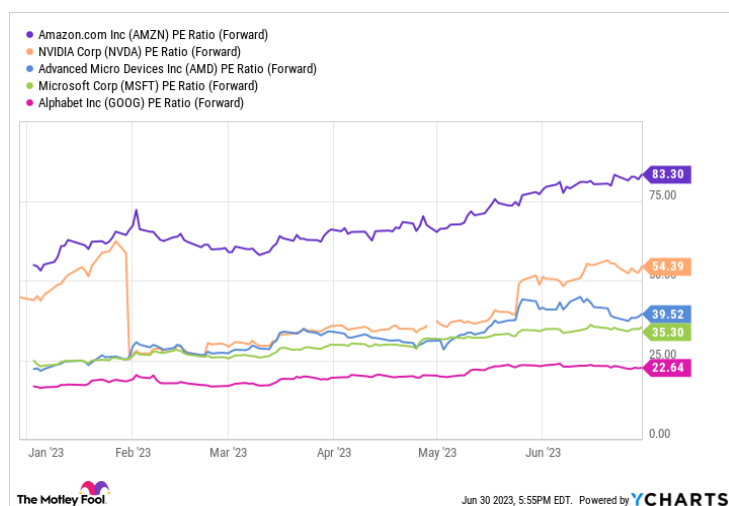


(Figure 3: Top Ten Semiconductor Companies: Source listed in the image)

POTENTIAL RISKS

What aspects of the Company are not attractive?

There are cheaper ways to invest in AI. Nvidia's massive stock boost this year has immensely benefited current investors. However, it has also made its stock far more expensive than other leading names in AI. The chart below illustrates how Nvidia's forward price-to-earnings ratio is significantly higher than those of AMD, Microsoft, and Alphabet, which are all making promising inroads in the market. (Source: www.fool.com)



(Figure 4: Different companies forward P/E ratio: Image from: www.fool.com)

What can go wrong in the future?

Strained relations between the U.S. and China have caused Washington to implement restrictions that make it more difficult for the East Asian country to acquire technology with military applications -- and that includes chips. These restrictions will hit Nvidia particularly hard, with its CEO Jensen Huang saying they had left the company with its "hands tied behind our back," according to a Financial Times report. (Source: www.fool.com)

What are some ESG risks in the Company?

In NVIDIA's sustainability report, NVIDIA fails to specifically address the increase in water withdrawal between FY22 and FY21, only claiming that "through water the buildings are designed to achieve over 40% reduction in domestic water demand and a 50% reduction in potable water use

Scope 3 includes only emissions from fuel and energy related activities and travel, no details from suppliers' even though NVIDIA says that since 2014 they required key suppliers to report their energy usage, GHG emissions data, and reduction goals and objectives. The report does not contain such information. (Source: impakter.com)

RETURN EXPECTATIONS

Revenue and earnings growth over the next 5 years

NVIDIA's revenue has been growing at a compound annual growth rate (CAGR) of almost 23% over the past 5 years, from \$9.7 billion in fiscal 2018 to \$27 billion in fiscal 2023.

In fiscal 2023, NVIDIA's data centre business accounted for 55% of its top line, growing 41% year over year to a record \$15 billion (Source: www.fool.com) . This growth is expected to continue as AI usage becomes more entrenched in the economy. (Source: www.fool.com)

NVIDIA's revenue forecast CAGR (5y) is 33.9%. This further supports the expectation of strong revenue growth in the next 5 years. (Source: finbox.com)

Using the CAGR of 33.9% on the current revenue of 26,974 million, the estimated revenue in 5 years will be 116,104 million.

Current share price and projected share price in 5 years

The current share price of the stock as of 9/30/2023 is **434.99 USD**.

Year	Minimum Price	Maximum Price
2023	\$367	\$396
2024	\$407	\$423
2025	\$499	\$574
2026	\$648	\$721
2027	\$793	\$864
2028	\$935	\$1,005

(Figure 5: NVIDIA stock price prediction and forecast (Optimistic point of view): Image from: fintechguruji.in)

Year	2020	2021	2022	2023	2024	2025	2026	2027	2028
Total Revenue (B)	\$ 10.9	\$ 24.3	\$ 31.5	\$ 36.6	\$ 44.0	\$ 52.8	\$ 63.3	\$ 76.0	\$ 91.2
Net Income (B)	\$ 2.8	\$ 8.2	\$ 10.8	\$ 12.4	\$ 15.5	\$ 19.4	\$ 24.3	\$ 30.3	\$ 37.9
Shares Outstanding (B)	2.52	2.55	2.57	2.60	2.62	2.65	2.68	2.70	2.73
EPS	\$ 1.11	\$ 3.22	\$ 4.21	\$ 4.79	\$ 5.93	\$ 7.33	\$ 9.08	\$ 11.23	\$ 13.90
Forward PE (146)	131.40	67.93	51.98	45.74	36.96	29.86	24.13	19.50	15.75
NVIDIA Stock Price	\$ 91	\$ 290	\$ 337	\$ 383	\$ 415	\$ 513	\$ 545	\$ 674	\$ 834
Market Cap (B)	\$367	\$739	\$866	\$994	\$1,088	\$1,360	\$1,457	\$1,821	\$2,276

(Figure 6: NVIDIA prediction and forecast from 2020 (From a conservative point of view): Image from the video: www.youtube.com*)

*Watch the video to find out more information on the reasoning behind the predictions given.

**The Predictions above may vary due to various circumstances changing in the economy

CONCLUSION: NVIDIA is the most holistic stock in terms of its environmental sustainability, high returns on investment and position in the marketplace