

# **NVIDIA** Corporation

# Al inference surge = sustained growth, EPS power now \$45

Reiterate Rating: BUY | PO: 925.00 USD | Price: 674.72 USD

### Raise estimates again on multi-faceted growth

Perhaps the most important new datapoint in NVDA's earnings call was that Al inference contributed nearly 40% of Al computing mix in FY24/CY23. Al inference is correlated with revenue bearing Al which is supposed to be more competitive, as opposed to Al training which NVDA already dominates. Second, we highlight the company's positive commentary around tight supply, low China dependence (only mid-single digit percent of data center sales versus 20%-25% prior to restrictions), new pipeline, rising sovereign demand for Al among others. Overall, we raise CY24/25 EPS by +13%/15% vs. prior to \$23.11/\$29.59. We raise our PO to \$925 (from \$800) on unchanged 31x CY25 PE. Note, as data center growth remains robust from multiple demand drivers, we raise our I-t EPS target (CY27E) to roughly \$45 from \$40 prior. Next catalyst is NVDA's GTC (3/18), where we could get incremental price and/or performance details on attractive pipeline (B100, x100, GB200, BlueField products, etc.). Reiterate Buy.

### Likes: Data center growth, Al customers, cash generation

1) Data center sales growth of +27% QoQ robust across both compute (est. ~25% QoQ) and networking (est. ~30% QoQ), with multitude of product ramps/launches in the coming 12 months (H200, B100, Spectrum-X) capable of supporting strong growth well into CY25, in our view; 2) While focus often remains on large hyperscaler spend (major US/China cloud capex tracking up 20%-25% YoY), NVDA benefits from incremental demand from Tier 2/3 webscalers, enterprises, sovereign nations, and others; 3) NVDA mid-40s FCF margin now on par with industry leader Broadcom (w/ 40%+ of sales related to infra software), supplying ample capital to possibly accelerate buybacks or add unique Al/software assets to the company's portfolio.

# Risks: Gross margin moderation, competition, China

1) NVDA gross margin guide an impressive 77%, though benefits from component costs provided a 2 qtr boost, with GM expected to moderate back towards mid-70s beyond the AprQ; 2) NVDA has established early leadership in the accelerator market, but emerging competition (AMD) and custom ASIC suppliers could impact share gains, and increases headline risk; 3) NVDA has de-risked model from China restrictions, but future growth rate could be impact if NVDA cannot return to multi-\$bn regional runrate (and also could face additional risks if shipment restrictions tighten again).

Estimates (Jan) (US\$)	2023A	2024A	2025E	2026E	2027E
EPS	3.34	12.96	23.11	29.59	36.56
GAAP EPS	1.74	11.94	21.41	27.65	34.40
EPS Change (YoY)	-24.8%	288.0%	78.3%	28.0%	23.6%
Consensus EPS (Bloomberg)			21.59	25.05	NA
DPS	0.16	0.16	0.16	0.16	0.16
Valuation (Jan)					
P/E	202.0x	52.1x	29.2x	22.8x	18.5x
GAAP P/E	387.8x	56.5x	31.5x	24.4x	19.6x
EV / EBITDA*	158.1x	43.3x	23.9x	18.8x	15.3x
Free Cash Flow Yield*	0.2%	1.6%	2.7%	3.7%	4.8%
* For full definitions of <i>iQ</i> method <sup>≤M</sup> measures, see page 11.					

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Refer to important disclosures on page 12 to 14. Analyst Certification on page 10. Price
Objective Basis/Risk on page 10.

Timestamp: 22 February 2024 12:17AM EST

#### 22 February 2024

#### Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	800.00	925.00
2025E Rev (m)	90,457.7	103,921.1
2026E Rev (m)	111,137.6	131,283.2
2027E Rev (m)	138,161.8	159,770.2
2025E EPS	20.46	23.11
2026E EPS	25.72	29.59
2027E EPS	32.71	36.56

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#### Stock Data

Price	674.72 USD
Price Objective	925.00 USD
Date Established	22-Feb-2024
Investment Opinion	C-1-7
52-Week Range	204.21 USD - 746.11 USD
Mrkt Val (mn) / Shares Out	1,678,703 USD / 2,488.0
(mn)	
Free Float	96.1%
Average Daily Value (mn)	34179.82 USD
BofA Ticker / Exchange	NVDA / NAS
Bloomberg / Reuters	NVDA US / NVDA.OQ
ROE (2025E)	86.6%
Net Dbt to Eqty (Jan-2024A)	5.7%
ESGMeter™	High

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

See page 5 for glossary

# **iQ**profile<sup>™</sup> NVIDIA Corporation

<b>Q</b> method <sup>SM</sup> – <b>Bus Performance*</b>					
(US\$ Millions)	2023A	2024A	2025E	2026E	20271
Return on Capital Employed	21.5%	70.9%	71.0%	53.8%	43.3%
Return on Equity	34.3%	99.3%	86.6%	60.6%	47.0%
Operating Margin	33.5%	61.0%	65.4%	65.8%	66.2%
Free Cash Flow	3,809	27,023	45,350	61,572	80,36
i <b>Q</b> method <sup>™</sup> – <b>Quality of Earnings*</b>					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Cash Realization Ratio	0.7x	0.9x	0.8x	0.9x	0.9
Asset Replacement Ratio	1.2x	0.7x	1.3x	1.2x	1.2:
Tax Rate	NM	12.0%	17.0%	17.0%	17.09
Net Debt-to-Equity Ratio	34.2%	5.7%	-10.5%	-26.5%	-39.19
Interest Cover	NA	NA	NA	NA	N/
ncome Statement Data (Jan)					
US\$ Millions)	2023A	2024A	2025E	2026E	2027
Sales	26,974	60,922	103,921	131,283	159,770
% Change	0.2%	125.9%	70.6%	26.3%	21.79
Gross Profit	15,965	44,958	78,413	98,911	120,772
% Change	-11.1%	181.6%	74.4%	26.1%	22.19
EBITDA	10,584	38,642	70,034	88,969	109,019
% Change	-23.7%	265.1%	81.2%	27.0%	22.59
Net Interest & Other Income	6	611	1,000	1,200	1,400
Net Income (Adjusted)	8,366	32,312	57,233	72,661	88,99
% Change	-25.7%	286.2%	77.1%	27.0%	22.5%
ree Cash Flow Data (Jan) US\$ Millions)	2023A	2024A	2025E	2026E	2027
Net Income from Cont Operations (GAAP)	4,368	29,759	53,025	67,895	83,742
Depreciation & Amortization	1,544	1,508	2,078	2,626	3,19
Change in Working Capital	(2,206)	(3,722)	(11,388)	(10,248)	(7,482
Deferred Taxation Charge	(2,164)	(2,488)	0	0	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Other Adjustments, Net	4,100	3,034	4,233	4,582	4,900
Capital Expenditure	(1,833)	(1,068)	(2,598)	(3,282)	(3,994
Free Cash Flow	3,809	27,023	45,350	61,572	80,36
% Change	-53.2%	609.5%	67.8%	35.8%	30.5%
Share / Issue Repurchase	(9,685)	(9,130)	(10,640)	(10,640)	(10,640
Cost of Dividends Paid	(398)	(396)	(397)	(394)	(390
Change in Debt	(22)	(1,279)	0	0	(
Balance Sheet Data (Jan)					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Cash & Equivalents	3,389	7,280	19,069	49,608	98,939
Trade Receivables	3,827	9,999	20,429	28,651	34,452
Other Current Assets	15,857	27,066	51,411	73,943	96,409
Property, Plant & Equipment	3,807	3,914	4,434	5,090	5,889
Other Non-Current Assets	14,302	17,469	17,469	17,469	17,469
Total Assets	41,182	65,728	112,811	174,761	253,158
Short-Term Debt	1,250	1,250	1,250	1,250	1,250
Other Current Liabilities	5,313	9,381	10,243	10,750	11,536
	0.702	8,459	8,459	8,459	8,459
Long-Term Debt	9,703				3 660
Long-Term Debt Other Non-Current Liabilities	2,815	3,660	3,660	3,660	
Long-Term Debt Other Non-Current Liabilities Total Liabilities	2,815 <b>19,081</b>	3,660 <b>22,750</b>	23,612	24,119	24,905
Long-Term Debt Other Non-Current Liabilities	2,815	3,660			3,660 <b>24,905</b> <b>228,253</b> <b>253,158</b>

### **Company Sector**

Semiconductors

### **Company Description**

Nvidia designs and sell graphics and video processing chips for desktop and notebook gaming PCs, workstations, game consoles, and accelerated computing servers and supercomputers.

### **Investment Rationale**

Our positive view on Nvidia is based on its underappreciated transformation from a traditional PC graphics chip vendor, into a supplier into high-end gaming, enterprise graphics, cloud, accelerated computing and automotive markets. The company has executed consistently and has a solid balance sheet with demonstrated commitment to capital returns.

### Stock Data

Average Daily Volume 50,657,788

### **Quarterly Earnings Estimates**

	2024	2025
Q1	1.09A	5.42E
Q2	2.70A	5.59E
Q3	4.02A	5.93E
Q4	5.16A	6.17E



# **Summary of model changes**

### **Exhibit 1: Summary of estimate changes**

We raise our FY25/26E sales by 15%-18%, EPS by 13%-15%

		Sales (\$mn)		EPS (Non GAAP, ex. options)						
	Old	NEW	delta	Old	NEW	delta				
Apr-24E	\$21,282	\$24,000	\$2,718	\$4.80	\$5.42	\$0.62				
Jul-24E	\$22,373	\$25,377	\$3,005	\$5.07	\$5.59	\$0.53				
Oct-24E	\$23,302	\$26,798	\$3,496	\$5.27	\$5.93	\$0.66				
Jan-25E	\$23,501	\$27,746	\$4,245	\$5.32	\$6.17	\$0.85				
FY25E	\$90,458	\$103,921	\$13,463	\$20.46	\$23.11	\$2.65				
YoY%	53.8%	70.6%	14.9%	66.6%	78.3%	13.0%				
Apr-25E	\$24,535	\$29,194	\$4,659	\$5.59	\$6.49	\$0.90				
Jul-25E	\$27,225	\$31,700	\$4,476	\$6.29	\$7.11	\$0.82				
Oct-25E	\$29,340	\$34,178	\$4,838	\$6.84	\$7.75	\$0.91				
Jan-26E	\$30,039	\$36,212	\$6,173	\$7.01	\$8.25	\$1.25				
FY26E	\$111,138	\$131,283	\$20,146	\$25.72	\$29.59	\$3.88				
YoY%	22.9%	26.3%	18.1%	25.7%	28.1%	15.1%				
Apr-26E	\$31,361	\$37,168	\$5,807	\$7.36	\$8.44	\$1.08				
Jul-26E	\$33,982	\$38,017	\$4,035	\$8.04	\$8.63	\$0.59				
Oct-26E	\$35,955	\$41,042	\$5,086	\$8.55	\$9.42	\$0.87				
Jan-27E	\$36,863	\$43,544	\$6,680	\$8.77	\$10.07	\$1.31				
FY27E	\$138,162	\$159,770	\$21,608	\$32.71	\$36.56	\$3.86				
YoY%	24.3%	21.7%	15.6%	27.2%	23.6%	11.8%				

Source: BofA Global Research, company reports

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# Q4 reported vs. expectations

# Exhibit 2: NVDA Q3 results vs. Street expectations

Q4 sales came in 8% above initial expectations

	Jan-23	Oct-23	1		J	an-24				
			Original Guidance	Consensus	BofA	Reported	Delta vs. Street (%, bps)	Delta vs. Street (\$)	QoQ	YoY
Sales (\$mn)	\$6,051	\$18,120	\$20,000 (+/- 1%)	\$20,412	\$20,000	\$22,103	8.3%	\$1,691	22.0%	265.3%
QoQ%	2.0%	34.2%		12.7%	10.4%	22.0%				
YoY%	-20.8%	205.5%		237.3%	230.5%	265.3%				
Gaming	1,831	2,856		2,720	2,665	2,865	5%	\$145	0%	56%
Pro visualization (Quadro)	226	416		434	445	463	7%	\$29	11%	105%
Data center (Cloud, HPC, GRID)	3,616	14,514		17,329	16,559	18,404	6%	\$1,075	27%	409%
Automotive	294	261		272	261	281	3%	\$9	8%	-4%
OEM (incl. Crypto)	84	73		78	69	90	16%	\$12	23%	7%
Gross Margin % (GAAP)	63.3%	74.0%	74.5% +/- 50b		74.5%	76.0%			202	1262
Gross Profit (Non GAAP, ex options)	3,999	13,583		\$15,397	15,106	16,959	10%	\$1,562	25%	324%
Gross Margin % (Non GAAP, ex options)	66.1%	75.0%	75.5% +/- 50bp	75.4%	75.5%	76.7%	130		177	1064
R&D (GAAP)	1,951	2,294	·		2,460	2,465			7%	26%
SG&A (GAAP)	625	689			710	711			3%	14%
Opex Total (GAAP)	2,576	2,983	\$3,170		3,170	3,176			6%	23%
Opex Total (Non GAAP, ex options)	1,775	2,026	\$2,200	\$2,256	2,200	2,210	-2%	(\$46)	9%	25%
Op. Income (Non GAAP, ex options)	2,224	11,557		\$13,140	12,906	14,749	12%	\$1,609	28%	563%
Op Margin % (Non GAAP, ex options)	36.8%	63.8%		64.4%	64.5%	66.7%	235		295	2997
Interest/other income (Non GAAP)	43	175	200.0		200	232				
Tax rate (Non GAAP)	4%	15%	15% +/- 1%		15%	14%			-29	1020
Net Income (Non GAAP, ex options)	2,174	10,020			11,140	12,839			28%	491%
Diluted EPS (Non GAAP, ex options)	\$0.88	\$4.02		\$4.60	\$4.48	\$5.16	12%	\$0.55	28%	487%
Diluted Shares	2,477	2,494			2,486	2,490			0%	1%

**Source:** BofA Global Research estimates, company report, Bloomberg, Visible Alpha



# Q1 guidance vs. expectations

# Exhibit 3: NVDA Q1 guidance vs. our/Street expectations

NVDA guided Q1 sales more than \$2bn above Street expectations

	Jan-24	Apr-24E								
Guidance v. Expectations	Reported	BofA	Consensus	Guidance	New BofA					
Sales (\$mn)	\$22,103	\$21,282	\$21,897	\$24,000 (+/- 2%)	\$24,000					
QoQ%	22.0%	6.4%	7.3%		8.6%					
Gaming	2,865	2,801	2,528		2,792					
Pro visualization (Quadro)	463	423	426		440					
Data center (Cloud, HPC, GRID)	18,404	17,718	19,050		20,424					
Automotive	281	274	285		267					
OEM (incl. Crypto)	90	66	79		77					
Gross Margin % (GAAP)	76.0%	74.6%		76.3% +/- 50b	76.3%					
Gross Profit (Non GAAP, ex options)	16,959	16,079	\$16,531		18,484					
Gross Margin % (Non GAAP, ex options)	76.7%	75.6%	75.5%	77.0% +/- 50bp	77.0%					
R&D (GAAP)	2,465	2,583			2,734					
SG&A (GAAP)	711	738			764					
Opex Total (GAAP)	3,176	3,321		\$3,500	3,498					
Opex Total (Non GAAP, ex options)	2,210	2,332	\$2,287	\$2,500	2,500					
Op. Income (Non GAAP, ex options)	14,749	13,747	\$14,244		15,984					
Op Margin % (Non GAAP, ex options)	66.7%	64.6%	65.1%		66.6%					
Interest/other income (Non GAAP)	232	250		250.0	250					
Tax rate (Non GAAP)	14%	15%		17% +/- 1%	17%					
Net Income (Non GAAP, ex options)	12,839	11,898			13,474					
Diluted EPS (pf, excl. options)	\$5.16	\$4.80	\$4.93		\$5.42					
Diluted Shares	2,490	2,479			2,485					

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**Source:** BofA Global Research estimates, company report, Bloomberg, Visible Alpha

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# Balance sheet, cash flow snapshot

### **Exhibit 4: Summary of Balance Sheet and Cash Flow trends**

Net cash increased significantly QoQ

#### **Balance Sheet**

Dululice Sticet							
	Jan-23	Apr-23	Jul-23	Oct-23	Jan-24	QoQ	YoY
Total Cash	\$13,296	\$15,320	\$16,023	\$18,281	\$25,984	42.1%	95.4%
ST Debt	\$1,250	\$1,250	\$1,249	\$1,249	\$1,250		
LT Debt	\$9,703	\$9,704	\$9,497	\$8,457	\$8,459		
Total Debt	\$10,953	\$10,954	\$10,746	\$9,706	\$9,709		
Net Cash	\$2,343	\$4,366	\$5,277	\$8,575	\$16,275	89.8%	594.6%
Net Cash/Share	\$0.95	\$1.75	\$2.11	\$3.44	\$6.54	90.1%	591.0%
DSO	57.6	51.6	47.6	41.7	41.2		
DPO	48.9	40.8	43.4	45.9	46.2		
Inventory \$	\$5,159	\$4,611	\$4,319	\$4,779	\$5,282	10.5%	2.4%
Inventory Turns	1.7	2.2	3.7	4.0	4.0		
Inventory Days	212	165	97	92	91	(1.7)	-121.5
Cash Conversion days	220.9	176.2	101.6	88.2	85.7		
Cash Flow from Ops	\$2,249	\$2,911	\$6,348	\$7,333	\$11,499		
Capex	(\$509)	(\$248)	(\$289)	(\$278)	(\$253)		
Free cash flow	\$1,740	\$2,663	\$6,059	\$7,055	\$11,246		

**Source:** BofA Global Research estimates, company report, Bloomberg



# **Long-term EPS Power**

# **Exhibit 5: Summary of long-term EPS power** We see potential for nearly \$45+ in EPS by CY27E

	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E	FY28E	CY23-25 CAGR	CY25-27 CAGR
	CY20	CY21	CY22	CY23	CY24E	CY25E	CY26E	CY27E		
Sales	\$16,675	\$26,914	\$26,974	\$60,922	\$103,921	\$131,283	\$159,770	\$190,215	47%	20%
YoY %	53%	61%	0%	126%	71%	26%	22%	19%		
Data Center	\$6,696	\$10,613	\$15,005	\$47,525	\$88,673	\$114,530	\$141,156	\$169,490	55%	22%
YoY %	124%	58%	41%	217%	87%	29%	23%	20%		
GPU Accelerators	\$5,065	\$8,490	\$11,554	\$34,515	\$69,337	\$89,579	\$111,522	\$135,359	61%	23%
YoY %	70%	68%	36%	199%	101%	29%	24%	21%		
Networking (Mellanox)	\$1,631	\$2,123	\$3,451	\$11,216	\$16,824	\$21,872	\$26,027	\$29,931	40%	17%
YoY %	-	30%	63%	225%	50%	30%	19%	15%		
Adjacent Products (CPU/DPU), Software				\$1,794	\$2,512	\$3,079	\$3,606	\$4,200	31%	17%
YoY %					40%	23%	17%	16%		
Gaming	\$7,759	\$12,462	\$9,067	\$10,447	\$11,836	\$12,904	\$14,186	\$15,605	11%	10%
YoY %	41%	61%	(27%)	15%	13%	9%	10%	10%		
Pro-Viz (Workstations/Ominverse)	\$1,053	\$2,111	\$1,544	\$1,553	\$1,922	\$2,067	\$2,269	\$2,495	15%	10%
YoY %	(13%)	100%	(27%)	1%	24%	8%	10%	10%		
Automotive	\$536	\$566	\$903	\$1,091	\$1,168	\$1,410	\$1,764	\$2,205	14%	25%
YoY %	(23%)	6%	60%	21%	7%	21%	25%	25%		
Other (non-Gaming PC, IoT, parts of	\$631	\$1,162	\$455	\$306	\$322	\$372	\$396	\$420	10%	6%
Crypto)										
YoY %	25%	84%	(61%)	(33%)	5%	16%	6%	6%		
pf EBIT Margin	40.8%	47.2%	33.5%	61.0%	65.4%	65.8%	66.2%	66.5%		
EBIT\$	\$6,804	\$12,691	\$9,040	\$37,134	\$67,955	\$86,344	\$105,823	\$126,398		
Other Income/Expense	(120)	(198)	6	611	1,000	1,200	1,400	1,600		
pf Pretax Income	\$6,684	\$12,493	\$9,046	\$37,745	\$68,955	\$87,544	\$107,223	\$127,998		
Tax Rate	6.1%	9.9%	7.5%	14.4%	17.0%	17.0%	17.0%	17.0%		
pf Net Income	\$6,278	\$11,259	\$8,366	\$32,312	\$57,233	\$72,661	\$88,995	\$106,238		
pf EPS	\$2.50	\$4.44	\$3.34	\$12.96	\$23.11	\$29.59	\$36.56	\$44.73	51%	26%
YoY %					78%	28%	24%	22%		
Dil Sharecount	2,509	2,536	2,507	2,493	2,477	2,455	2,434	2,375		

Source: BofA Global Research, Mercury, IDC, company reports

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### Glossary

Al: Artificial Intelligence AMD: Advanced Micro Devices

ASIC: Application Specific Integrated Circuit

DC: Data center genAl: generative Al GPU: graphics processor GTC: GPU tech conference

NVDA: Nvidia

TAM: Total Addressable Market



**Table 1: NVDA – Income Statement (\$mn)**NVDA reported \$22.1bn in sales and \$5.16 in EPS

	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE	FY24	FY25E
FY (Jan)	Apr-23	Jul-23	Oct-23	Jan-24	Apr-24E	Jul-24E	Oct-24E	Jan-25E	Apr-25E	Jul-25E	Oct-25E	Jan-26E	Jan-24	Jan-25E
Revenues	\$7,192	\$13,507	\$18,120	\$22,103	\$24,000	\$25,377	\$26,798	\$27,746	\$29,194	\$31,700	\$34,178	\$36,212	\$60,922	\$103,921
QoQ	19%	88%	34%	22%	9%	6%	6%	4%	5%	9%	8%	6%		
YoY	-13%	101%	206%	265%	234%	88%	48%	26%	22%	25%	28%	31%	126%	71%
Cost of Sales (GAAP)	2,544	4,045	4,720	5,312	5,688	6,601	6,989	7,201	7,524	8.140	8.766	9,255	16,621	26,480
Gross profit (GAAP)	4,648	9,462	13,400	16,791	18,312	18,776	19,808	20,545	21,669	23,560	25,412	26,957	44,301	77,441
Gross profit (GAAP, ex options)	4,802	9,614	13,583	16,959	18,484	19,030	20,076	20,823	21,961	23,877	25,754	27,319	44,958	78,413
Gross profit (Nort Grown, ex options)	1,002	3,011	13,303	10,555	10, 10 1	13,030	20,070	20,023	21,501	23,077	25,751	27,515	11,550	70,113
R&D Expense (GAAP)	1875	2040	2294	2465	2734	2816	2900	2987	3256	3386	3437	3575	8674	11437
SG&A Expense (GAAP)	633	622	689	711	764	772	787	795	811	827	844	861	2655	3119
Opex (GAAP)	2508	2662	2983	3176	3498	3588	3688	3782	4067	4214	4281	4435	11329	14556
Opex (Non-GAAP, ex options)	1750	1838	2026	2210	2500	2571	2652	2735	3002	3118	3158	3290	7824	10458
Operating Income (Non-GAAP, ex options)	3052	7776	11557	14749	15984	16459	17424	18088	18959	20759	22596	24029	37134	67955
Interest/other Income (Non-GAAP)	84	120	175	232	250	250	250	250	300	300	300	300	611	1000
Pretax Income (Non-GAAP, ex options)	3136	7896	11732	14981	16234	16709	17674	18338	19259	21059	22896	24329	37745	68955
Tax expense (Non-GAAP)	423	1156	1712	2142	2760	2841	3005	3117	3274	3580	3892	4136	5433	11722
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Net Income (GAAP)	2043	6188	9243	12285	12503	12814	13588	14121	14859	16307	17788	18942	29759	53025
Net Income (Non-GAAP, incl. options)	2033	5994	9137	11971	12619	12997	13782	14322	15071	16539	18039	19209	29135	53719
Net Income (Non-GAAP, ex options)	2713	6740	10020	12839	13474	13868	14670	15220	15985	17479	19004	20193	32312	57233
Diluted EDC (CAAD)	\$0.82	ć2.40	\$3.71	\$4.93	\$5.03	ĆE 17	ĊE 40	\$5.72	\$6.03	\$6.63	בי אר	Ċ7.74	Ċ11 O4	\$21.41
Diluted EPS (GAAP) Diluted EPS (Non-GAAP, incl. options)	\$0.82	\$2.48 \$2.40	\$3.71	\$4.93	\$5.03 \$5.08	\$5.17 \$5.24	\$5.49 \$5.57	\$5.72 \$5.80	\$6.03	\$6.03	\$7.25 \$7.35	\$7.74 \$7.85	\$11.94 \$11.69	\$21.41
Diluted EPS (Non-GAAP ex options)	\$1.09	\$2.70	\$4.02	\$5.16	\$5.42	\$5.59	\$5.93	\$5.80 <b>\$6.17</b>	\$6.49	\$7.11	\$7.75	\$8.25	\$12.96	\$21.09 \$23.11
Diluted El 3 (Non-OAA) ex options)	71.05	<b>J2.70</b>	J4.02	33.10	<b>JJ.72</b>	75.55	75.55	Q0.17	JU.43	77.11	77.73	70.23	\$12.50	<b>723.11</b>
Diluted Shares	2490	2499	2494	2490	2485	2479	2474	2469	2463	2458	2453	2447	2493	2477
Dividend	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.16	\$0.16
Margins (Non-GAAP, ex options)														
Gross Margin	66.8%	71.2%	75.0%	76.7%	77.0%	75.0%	74.9%	75.0%	75.2%	75.3%	75.4%	75.4%	73.8%	75.5%
Opex	24.3%	13.6%	11.2%	10.0%	10.4%	10.1%	9.9%	9.9%	10.3%	9.8%	9.2%	9.1%	12.8%	10.1%
Operating Income	42.4%	57.6%	63.8%	66.7%	66.6%	64.9%	65.0%	65.2%	64.9%	65.5%	66.1%	66.4%	61.0%	65.4%
Tax rate	13.5%	14.6%	14.6%	14.3%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	14.4%	17.0%
Net Income	37.7%	49.9%	55.3%	58.1%	56.1%	54.6%	54.7%	54.9%	54.8%	55.1%	55.6%	55.8%	53.0%	55.1%
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**Source:** BofA Global Research estimates, company report



Total

# **Table 2: NVDA – Segment Model (\$mn)** NVDA FY25 sales on track to reach >\$100bn

	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE	FY24	FY25E	FY26E
FY (Jan)	Apr-23	Jul-23	Oct-23	Jan-24	Apr-24E	Jul-24E	Oct-24E	Jan-25E	Apr-25E	Jul-25E	Oct-25E	Jan-26E	Jan-24	Jan-25E	Jan-26E
Gaming	2240	2486	2856	2865	2792	2912	3176	2956	2961	3163	3423	3357	10447	11836	12904
Pro visualization (Quadro)	295	379	416	463	440	471	508	503	493	518	523	533	1553	1922	2067
Data center (Compute/Networking)	4284	10323	14514	18404	20424	21649	22732	23868	25300	27577	29784	31869	47525	88673	114530
Automotive	296	253	261	281	267	264	296	340	347	351	354	358	1091	1168	1410
OEM & Other	<u>77</u>	<u>66</u>	<u>73</u>	<u>90</u>	<u>77</u>	<u>81</u>	<u>85</u>	<u>79</u>	<u>92</u>	<u>92</u>	<u>93</u>	<u>95</u>	<u>306</u>	<u>322</u>	<u>372</u>
Total	7192	13507	18120	22103	24000	25377	26798	27746	29194	31700	34178	36212	60922	103921	131283
<u>QoQ%</u>															
Gaming	22%	11%	15%	0%	-3%	4%	9%	-7%	0%	7%	8%	-2%			
Pro visualization (Quadro)	31%	28%	10%	11%	-5%	7%	8%	-1%	-2%	5%	1%	2%			
Data center (Compute/Networking)	18%	141%	41%	27%	11%	6%	5%	5%	6%	9%	8%	7%			
Automotive	1%	-15%	3%	8%	-5%	-1%	12%	15%	2%	1%	1%	1%			
OEM & Other	<u>-8%</u>	<u>-14%</u>	<u>11%</u>	<u>23%</u>	<u>-14%</u>	<u>5%</u>	<u>5%</u>	<u>-8%</u>	17%	0%	<u>2%</u>	<u>2%</u>			
Total	19%	88%	34%	22%	9%	6%	6%	4%	5%	9%	8%	6%			
<u>YoY%</u>															
Gaming	-38%	22%	81%	56%	25%	17%	11%	3%	6%	9%	8%	14%	15%	13%	9%
Pro visualization (Quadro)	-53%	-24%	108%	105%	49%	24%	22%	9%	12%	10%	3%	6%	1%	24%	8%
Data center (Compute/Networking)	14%	171%	279%	409%	377%	110%	57%	30%	24%	27%	31%	34%	217%	87%	29%
Automotive	114%	15%	4%	-4%	-10%	4%	13%	21%	30%	33%	20%	5%	21%	7%	21%
OEM & Other	<u>-51%</u>	<u>-53%</u>		<u>7%</u>	<u>0%</u>	<u>23%</u>	<u>17%</u>	<u>-13%</u>	<u>19%</u>	<u>13%</u>	<u>10%</u>	<u>21%</u>	<u>-33%</u>	<u>5%</u>	<u>16%</u>
Total	-13%	101%	206%	265%	234%	88%	48%	26%	22%	25%	28%	31%	126%	71%	26%
% of Sales	044	40-1		400/	4000		40-1		40-4			0.01			
Gaming	31%	18%	16%	13%	12%	11%	12%	11%	10%	10%	10%	9%	17%	11%	10%
Pro visualization (Quadro)	4%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	3%	2%	2%
Data center (Compute/Networking)	60%	76%	80%	83%	85%	85%	85%	86%	87%	87%	87%	88%	78%	85%	87%
Automotive	4%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	1%	1%
OEM & Other	<u>1%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	0%	<u>0%</u>	<u>0%</u>	<u>0%</u>	0%	0%	<u>0%</u>	<u>1%</u>	<u>0%</u>	0%

100%

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**Source:** BofA Global Research estimates, company report

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Exhibit 6: NVDA – Balance Sheet (\$mn)
We model net cash per share strongly expanding over the next several quarters

	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE	FY24	FY25E	FY26E
FY (Jan)	Apr-23	Jul-23	Oct-23	Jan-24	Apr-24E	Jul-24E	Oct-24E	Jan-25E	Apr-25E	Jul-25E	Oct-25E	Jan-26E	Jan-24	Jan-25E	Jan-26E
Assets															
Cash & Equivalents	5,079	5,882	5,519	7,280	2,524	7,039	12,567	19,069	23,470	30,639	39,323	49,608	7,280	19,069	49,608
ST Investments	10,241	10,141	12,762	18,704	26,228	31,228	36,228	41,228	46,228	51,228	56,228	61,228	18,704	41,228	61,228
Accounts receivable	4,080	7,066	8,309	9,999	17,670	18,684	19,730	20,429	23,098	25,082	27,042	28,651	9,999	20,429	28,651
Inventory	4,611	4,319	4,779	5,282	5,610	6,511	6,894	7,103	7,834	8,475	9,126	9,635	5,282	7,103	9,635
Total current assets	24,883	28,797	32,658	44,345	55,113	66,542	78,498	90,909	103,710	118,503	134,799	152,202	44,345	90,909	152,202
PP&E	3,740	3,799	3,844	3,914	4,034	4,161	4,295	4,434	4,580	4,738	4,909	5,090	3,914	4,434	5,090
Goodwill	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430	4,430
Intangible Assets	1,541	1,395	1,251	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112
Other Assets	15,837	16,959	17,646	17,469	17,469	17,469	17,469	17,469	17,469	17,469	17,469	17,469	17,469	17,469	17,469
Total Assets	44,460	49,555	54,148	65,728	76,616	88,172	100,262	112,811	125,759	140,710	157,177	174,761	65,728	112,811	174,761
Liabilities & Shareholders Equity															
Accounts payable	1,141	1,929	2,380	2,699	2,813	3,264	3,456	3,561	3,307	3,578	3,853	4,068	2,699	3,561	4,068
Accrued liabilities	4,869	7,156	5,472	6,682	6,682	6,682	6,682	6,682	6,682	6,682	6,682	6,682	6,682	6,682	6,682
Total current liabilities	7,260	10,334	9,101	10,631	10,745	11,196	11,388	11,493	11,239	11,510	11,785	12,000	10,631	11,493	12,000
Total non-current liabilities	12,680	11,720	11,782	12,119	12,119	12,119	12,119	12,119	12,119	12,119	12,119	12,119	12,119	12,119	12,119
Total shareholders' equity	24,520	27,501	33,265	42,978	53,752	64,857	76,755	89,199	102,400	117,081	133,273	150,642	42,978	89,199	150,642
Total Liab. & Stock Equity	44,460	49,555	54,148	65,728	76,616	88,172	100,262	112,811	125,759	140,710	157,177	174,761	65,728	112,811	174,761
Cash and Liquidity Ratios															
Total Cash	15,320	16,023	18,281	25,984	28,752	38,267	48,795	60,297	69,698	81,867	95,551	110,836	25,984	60,297	110,836
Short-term debt	1,250	1,249	1,249	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
Long-term debt	9,704	9,497	8,457	8,459	8,459	8,459	8,459	8,459	8,459	8,459	8,459	8,459	8,459	8,459	8,459
Total debt	10,954	10,746	9,706	9,709	9,709	9,709	9,709	9,709	9,709	9,709	9,709	9,709	9,709	9,709	9,709
Net Cash	4,366	5,277	8,575	16,275	19,043	28,558	39,086	50,588	59,989	72,158	85,842	101,127	16,275	50,588	101,127
Net cash / share	\$1.75	\$2.11	\$3.44	\$6.54	\$7.66	\$11.52	\$15.80	\$20.49	\$24.35	\$29.36	\$35.00	\$41.32	\$6.53	\$20.43	\$41.19
Cash conversion ratios															
Days Sales Outstanding (DSO)	51.6	47.6	41.7	41.2	67.0	67.0	67.0	67.0	72.0	72.0	72.0	72.0			
Payable Days (DPO)	40.8	43.4	45.9	46.2	45.0	45.0	45.0	45.0	40.0	40.0	40.0	40.0			
Inventory Turns	2.2	3.7	4.0	4.0	4.1	4.1	4.1	4.1	3.8	3.8	3.8	3.8			
Inventory Days (DIO)	165.4	97.4	92.4	90.7	90.0	90.0	90.0	90.0	95.0	95.0	95.0	95.0			
Cash Conversion Days	176.2	101.6	88.2	85.7	112.0	112.0	112.0	112.0	127.0	127.0	127.0	127.0			
Source: BofA Global Research, company reports															

**Source:** BofA Global Research, company reports





	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE	FY24	FY25E	FY26E
FY (Jan)	Apr-23	Jul-23	Oct-23	Jan-24	Apr-24E	Jul-24E	Oct-24E	Jan-25E	Apr-25E	Jul-25E	Oct-25E	Jan-26E	Jan-24	Jan-25E	Jan-26E
Operating Activities - Cash Flow															
Net income	2,043	6,188	9,243	12,285	12,503	12,814	13,588	14,121	14,859	16,307	17,788	18,942	29,759	53,025	67,895
Depreciation	384	365	372	387	480	508	536	555	584	634	684	724	1,508	2,078	2,626
Amortization of Intangibles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stock Compensation Expenses	735	842	979	993	1,031	1,050	1,070	1,082	1,101	1,133	1,162	1,185	3,549	4,233	4,582
Deferred income taxes	(1,135)	(746)	(529)	(78)	0	0	0	0	0	0	0	0	(2,488)	0	0
Patents License Payments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other non-cash activity	(20)	(129)	3	(369)	0	0	0	0	0	0	0	0	(515)	0	0
Change In:															
Accounts Receivables	(252)	(2,986)	(1,243)	(1,690)	(7,671)	(1,014)	(1,046)	(699)	(2,670)	(1,983)	(1,960)	(1,609)	(6,171)	(10,430)	(8,222)
Inventories	566	296	(457)	(503)	(328)	(901)	(383)	(209)	(731)	(641)	(651)	(509)	(98)	(1,821)	(2,532)
Prepaid Expenses/Other	(215)	(376)	254	(1,184)	0	0	0	0	0	0	0	0	(1,521)	0	0
Accounts Payable	11	777	461	281	114	452	192	105	(254)	271	275	215	1,530	862	507
Accrued Liabilities	689	1,986	(1,722)	1,072	0	0	0	0	0	0	0	0	2,025	0	0
Cash From Operations	2,911	6,348	7,333	11,499	6,128	12,909	13,957	14,955	12,890	15,720	17,297	18,948	28,091	47,948	64,855
Investing Activities - Cash Flow															
Capex	(248)	(289)	(278)	(253)	(600)	(634)	(670)	(694)	(730)	(793)	(854)	(905)	(1,068)	(2,598)	(3,282)
ST Investment Purchases	(2,801)	(2,542)	(5,345)	(7,524)	(7,524)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(18,212)	(22,524)	(20,000)
ST Investment Maturities	2,512	2,598	2,891	1,781	0	0	0	0	0	0	0	0	9,782	0	0
Cash From Investing	(841)	(447)	(3,169)	(6,109)	(8,124)	(5,634)	(5,670)	(5,694)	(5,730)	(5,793)	(5,854)	(5,905)	(10,566)	(25,122)	(23,282)
Financing Activities - Cash Flow															
Stock Repurchases	0	(3,067)	(3,806)	(2,660)	(2,660)	(2,660)	(2,660)	(2,660)	(2,660)	(2,660)	(2,660)	(2,660)	(9,533)	(10,640)	(10,640)
Common Stock Issuance	0	0	0	(29)	0	0	0	0	0	0	0	0	0	0	0
Proceeds from Emp. Stock Plans	246	1	156	0	0	0	0	0	0	0	0	0	403	0	0
Capital Obligations Payments	0	0	0	(29)	0	0	0	0	0	0	0	0	(29)	0	0
Cash From Financing	(380)	(5,098)	(4,527)	(3,629)	(2,760)	(2,759)	(2,759)	(2,759)	(2,759)	(2,759)	(2,758)	(2,758)	(13,634)	(11,037)	(11,034)
Net Change in Cash/Eqv.	1,690	803	(363)	1,761	(4,756)	4,515	5,527	6,503	4.401	7.169	8.684	10,285	3,891	11,789	30,539
Cash/Eqv. at beginning of period	3,389	5,079	5,882	5,519	7,280	2,524	7,039	12,567	19.069	23,470	30,639	39,323	3,389	7,280	19,069
	5.079	5,079	5,519	7,280	2.524	7,039	12,567	19.069	23.470	30.639	<b>39.323</b>	49.608	7,280	19,069	49.608
Cash/Eqv. at end of period	5,079	3,882	5,519	7,280	2,524	7,039	12,567	19,009	23,470	30,639	39,323	49,008	7,280	19,069	49,008
Free Cash Flow	2,663	6,059	7,055	11,246	5,528	12,274	13,287	14,262	12,160	14,927	16.443	18,043	27,023	45,350	61,572
Trailing 4Q FCF	5,102	10,324	17,517	27,023	29,888	36,103	42,335	45,350	51,982	54,635	57,791	61,572	27,025	15,530	01,572
4Q FCF/Dil Share	\$2.05	\$4.13	\$7.02	\$10.85	\$12.03	\$14.56	\$17.11	\$18.37	\$21.10	\$22.23	\$23.56	\$25.16	\$10.84	\$18.31	\$25.08
Common DefA Clabel December at Street	1 42.03	ųJ	ψJ <u>L</u>	Ų 10.33	, 4.2.03	ŢJU	<b>4.7</b>	Ų.U.J.	, 420	7	725.50	723.10	Ţ.0.0T	Ų 1 U.J 1	723.00

**Source:** BofA Global Research estimates, company report

### Price objective basis & risk

### **NVIDIA Corporation (NVDA)**

Our \$925 PO is based on 31x CY25E PE ex cash, within NVDA's historical 26x-69x forward year PE range, justified given stronger growth opportunities ahead as gaming cycle troughs and data center demand potentially faces strong, long-term demand dynamics.

Downside risks to our price objective are: 1) weakness in consumer driven gaming market, 2) Competition with major public firms, internal cloud projects and other private companies in accelerated computing markets, 3) Larger than expected impact from restrictions on compute shipments to China, or additional restrictions placed on activity in the region, 4) Lumpy and unpredictable sales in new enterprise, data center, and autos markets, 5) Potential for decelerating capital returns.

# **Analyst Certification**

I, Vivek Arya, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

**US - Semiconductors and Semiconductor Capital Equipment Coverage Cluster** 

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Advanced Micro Devices, Inc	AMD	AMD US	Vivek Arya
	Analog Devices Inc.	ADI	ADI US	Vivek Arya
	Applied Materials, Inc.	AMAT	AMAT US	Vivek Arya
	Arm Holdings	ARM	ARM US	Vivek Arya
	Broadcom Inc	AVGO	AVGO US	Vivek Arya
	Cadence	CDNS	CDNS US	Vivek Arya
	Camtek	CAMT	CAMT US	Vivek Arya
	KLA Corporation	KLAC	KLAC US	Vivek Arya
	Lam Research Corp.	LRCX	LRCX US	Vivek Arya
	M/A-Com	MTSI	MTSI US	Vivek Arya
	Marvell Technology Group Ltd.	MRVL	MRVL US	Vivek Arya
	Microchip	MCHP	MCHP US	Vivek Arya
	Micron Technology, Inc	MU	MU US	Vivek Arya
	Nova	NVMI	NVMI US	Vivek Arya
	NVIDIA Corporation	NVDA	NVDA US	Vivek Arya
	NXP Semiconductors NV	NXPI	NXPI US	Vivek Arya
	onsemi	ON	ON US	Vivek Arya
	Synopsys	SNPS	SNPS US	Vivek Arya
NEUTRAL				,
	Advanced Energy Industries	AEIS	AEIS US	Duksan Jang
	Allegro MicroSystems	ALGM	ALGM US	Blake Friedman
	Axcelis Technologies	ACLS	ACLS US	Duksan Jang
	Coherent Corp	COHR	COHRUS	Vivek Arya
	GlobalFoundries	GFS	GFS US	Vivek Arya
	Intel	INTC	INTC US	Vivek Arya
	Lattice Semiconductor	LSCC	LSCC US	Blake Friedman
	Texas Instruments Inc.	TXN	TXN US	Vivek Arya
UNDERPERFORM				,
CITERI ERI VRIVI	Ambarella	AMBA	AMBA US	Vivek Arya
	Credo Technology	CRDO	CRDO US	Vivek Arya
	Lumentum Holdings	LITE	LITE US	Vivek Arya
	Oorvo Inc.	ORVO	QRVO US	Vivek Arya
	Skyworks Solutions, Inc.	SWKS	SWKS US	Vivek Arya
	Teradyne	TER	TER US	Vivek Arya
	Wolfspeed Inc	WOLF	WOLF US	Vivek Arya

### **US - Semiconductors and Semiconductor Capital Equipment Coverage Cluster**

Investment rating Company BofA Ticker Bloomberg symbol Analyst

# *i***@**method<sup>™</sup> Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (1 - Tax Rate) + Goodwill Amortization	Total Assets — Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt - Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
•	Other LT Liabilities	
EV / EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

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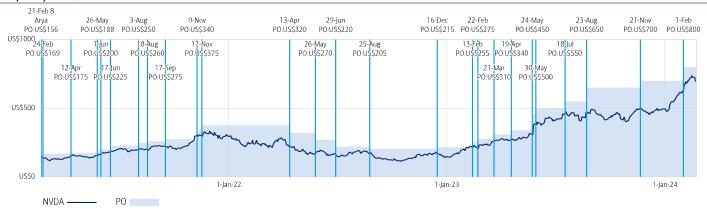
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# **Important Disclosures**

#### **NVIDIA (NVDA) Price Chart**



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

#### Equity Investment Rating Distribution: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

#### Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

R1 Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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# Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster<sup>R2</sup>

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
nderperform	N/A	≥ 20%

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