

NVIDIA Corp

On The Road With CEO & CFO

Addressing the debates

Near-term commentary was limited, though mgmt did reiterate commentary from CES last week that China re-opening is causing some perturbations in its gaming business. Near-term commentary on data center was limited, but NVDA explicitly suggested that it should still grow even in a compressing capex environment as AI is just hitting an inflection and CSPs are under tremendous pressure to upgrade to Hopper to create some growth headroom amid tightening power budget constraints. We reiterate Buy and note that the best times for the stock are typically in early to mid innings of new product cycles - exactly where we are right now with Ada on the gaming side, Grace Hopper in data center, and a push to more directly monetize its software stack - particularly for enterprises (recent MSFT cloud supercomputer deal should be a watershed moment in this regard).

More details

Regarding recent China trade restrictions, NVDA is pricing the compliant A800 SKU inline w/where pricing was for the now banned A100, but our field checks suggest China cloud customers need at least 50% more A800s for the equivalent performance - ergo, this all seems to be a net positive for NVDA. The penetration of AI into vertical industries remains essentially zero with Generative AI representing an opportunity that will dwarf AI markets today that remain largely related to perception. To that end, mgmt feels that OpenAI/ChatGPT will represent a watershed inflection as it will significantly reduce friction for AI adoption as it is essentially a zero-coding computer and based entirely on ~10k NVDA GPUs. Lastly, NVDA is going to be the first major silicon photonics customer at scale and is (we think) working on its own proprietary protocols and product roadmap (much like InfiniBand).

Equities

Americas

Semiconductors

12-month rating	Buy
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12m price target US\$200.00

Price (10 Jan 2023) US\$159.09

RIC: NVDA.O BBG: NVDA US

Trading data and key metrics

52-wk range	US\$286.56-112.27
Market cap.	US\$396b
Shares o/s	2,489m (COM)
Free float	96%
Avg. daily volume ('000)	49,402
Avg. daily value (m)	US\$7,223.7
Common s/h equity (01/23E) US\$19.9b
P/BV (01/23E)	19.8x
Net debt to EBITDA (01/23E) NM

EPS (UBS, diluted) (US\$)

01/23E	
UBS	Cons.
1.36	1.36
0.51	0.51
0.58	0.58
0.85	0.81
3.30	3.26
4.31	4.31
6.07	5.56
	UBS 1.36 0.51 0.58 0.85 3.30 4.31

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Highlights (US\$m)	01/20	01/21	01/22	01/23E	01/24E	01/25E	01/26E	01/27E
Revenues	10,918	16,675	26,914	26,918	27,744	35,976	44,580	53,323
EBIT (UBS)	3,735	6,804	12,691	8,993	11,487	16,637	21,288	25,449
Net earnings (UBS)	3,580	6,279	11,259	8,303	10,689	15,049	19,148	22,828
EPS (UBS, diluted) (US\$)	1.45	2.50	4.44	3.30	4.31	6.07	7.73	9.25
DPS (net) (US\$)	0.16	0.16	0.16	0.17	0.20	0.23	0.26	0.29
Net (debt) / cash	8,906	4,598	10,262	2,243	1,035	3,518	1,861	1,999
Profitability/valuation	01/20	01/21	01/22	01/23E	01/24E	01/25E	01/26E	01/27E
EBIT (UBS) margin %	34.2	40.8	47.2	33.4	41.4	46.2	47.8	47.7
ROIC (EBIT) %	142.2	127.8	132.9	86.4	108.6	147.3	158.9	164.3
EV/EBITDA (UBS core) x	25.2	31.2	35.8	36.3	30.1	21.4	17.0	14.3
P/E (UBS, diluted) x	31.6	41.9	46.2	48.2	36.9	26.2	20.6	17.2
Equity FCF (UBS) yield %	3.8	1.8	1.6	1.4	2.4	3.3	3.8	5.3
Dividend yield (net) %	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of US\$ 159.09 on 10-Jan-2023

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NVIDIA Corp UBS Research

Jensen Huang (CEO) and Colette Kress (CFO)

Al opportunity

- Al is still effectively at zero adoption and will need to generate content if it is ever going to be valuable - "generative AI"
- ChatGPT based on 2-3 yr old technology moves from "perception" to "generation" as the next version comes out
- Every industry now wants to build large AI language models
- NVDA is working with others outside of OpenAI for new industrial domains
- Every application will now have a generative back-end this will open a huge inference opportunity
 - Ability to make queries within applications (e.g. MS PowerPoint, Word, and Illustrator)
- NVDA's competitive advantage is utilization + utility + throughput
- NVDA believes that the AI TAM is even bigger than what they thought it was 12 months ago - ChatGPT is a major inflection
- Prior to OpenAI, MSFT was not a huge GPU consumer because they did not have a lot of internal services requiring AI capabilities

Data center / cloud

- Hopper is in production but customers will only stand up Hopper instances in CQ1
 - 6 Amperes = \$1MM but you can inference much faster with 1 Hopper which is \$350k, so Hopper actually saves \$
- Moore's Law to increase throughput you will also now increase cost and power
- What is still most understood by investors?
 - Data centers are under huge pressure to limit power push towards carbon neutrality places major pressure on cloud growth so the realization is that they need to accelerate everything possible - these limitations are not well understood
 - Al penetration is much earlier than people think
- Vast majority of search queries are on CPU vs. 100% of ChatGPT running on GPU
 - Queries have to know something about the content vs. historical activity this will drive accelerator penetration
 - This is why server accelerator penetration will grow from ~5% today to 100% of servers in 10 years
- Data center capex cloud capex could be down but NVDA should still grow
- CSPs want to partner with NVDA to have NVDA AI running on their infrastructure
 this brings customers to the cloud guys
 - NVDA does not want to be a CSP they want to be a platform for the CSPs
- Sell infrastructure in, rent infrastructure out, then NVDA offers AI as a service
- Grace goal is to build supercomputers at scale was designed to complement
 Grace Hopper for very large data sets
 - Grace is optimized for power limited world and can get the most on a limited power budget
- A800 ASP is equivalent to A100 but you would need more to get the same performance

Autos

- Autos two levels of computing (local and data center) + software
 - NVDA expects to be successful in AI car factories

Quantum computing

- Works good for small data, large compute
- CuQuantum is NVDA's simulator for quantum

• Quantum computers won't really work for ~30yrs but there is a lot of work to come up with a quantum proof crypto algorithm

Gaming

- Seeing demand choppiness for gaming in China
- Connector issue has been resolved AIB partners were using clones to save money rather that parts from approved vendor list

NVIDIA Corp (NVDA.O)

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Income Statement (US\$m)	01/20	01/21	01/22	01/23E	%ch	01/24E	%ch	01/25E	01/26E	01/27E
Revenues	10,918	16,675	26,914	26,918	0.0	27,744	3.1	35,976	44,580	53,323
Gross profit	6,822	10,948	17,968	15,923	-11.4	18,607	16.9	24,602	31,058	37,059
EBITDA (UBS)	4,116	7,902	13,865	10,517	-24.1	12,687	20.6	17,837	22,488	26,649
Depreciation & amortisation	(381)	(1,098)	(1,174)	(1,524)	-29.8	(1,200)	21.3	(1,200)	(1,200)	(1,200)
EBIT (UBS)	3,735	6,804	12,691	8,993	-29.1	11,487	27.7	16,637	21,288	25,449
Associates & investment income	0	0	0	0	-	0	-	0	0	0
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	125	(120)	(198)	13	-	92	NM	92	92	92
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Pre-tax profit	3,860	6,684	12,493	9,006	-27.9	11,579	28.6	16,729	21,380	25,541
Tax	(280)	(405)	(1,234)	(703)	43.1	(890)	-26.7	(1,680)	(2,232)	(2,714)
Profit after tax	3,580	6,279	11,259	8,303	-26.3	10,689	28.7	15,049	19,148	22,828
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	0	0	0	0	-	0	-	0	0	0
Extraordinary items	(785)	(1,947)	(1,506)	(4,189)	-178.2	(3,489)	16.7	(3,807)	(4,212)	(4,668)
Net earnings (local GAAP)	2,795	4,332	9,753	4,114	-57.8	7,200	75.0	11,242	14,936	18,160
Net earnings (UBS)	3,580	6,279	11,259	8,303	-26.3	10,689	28.7	15,049	19,148	22,828
Tax rate (%)	7.3	6.1	9.9	7.8	-21.0	7.7	-1.5	10.0	10.4	10.6
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Per Share (US\$)	01/20	01/21	01/22	01/23E	%ch	01/24E	%ch	01/25E	01/26E	01/27E
EPS (UBS, diluted)	1.45	2.50	4.44	3.30	-25.6	4.31	30.5	6.07	7.73	9.25
EPS (local GAAP, diluted)	1.13	1.72	3.84	1.64	-57.5	2.90	77.4	4.53	6.03	7.36
EPS (UBS, basic)	1.47	2.55	4.51	3.35	-25.8	4.42	31.8	6.22	7.93	9.49
DPS (net) (US\$)	0.16	0.16	0.16	0.17	4.8	0.20	17.8	0.23	0.26	0.29
Cash EPS (UBS, diluted) 1	1.60	2.94	4.90	3.91	-20.3	4.79	22.6	6.55	8.22	9.74
Book value per share	4.99	6.82	10.62 2,537	8.02	-24.5 -0.8	7.89	-1.7 -1.3	9.34	9.99	10.50
Average shares (diluted)	2,473	2,512	2,557	2,516	-0.0	2,482	-1.5	2,480	2,476	2,468
Balance Sheet (US\$m)	01/20	01/21	01/22	01/23E	%ch	01/24E	%ch	01/25E	01/26E	01/27E
Cash and equivalents	10,897	11,561	21,208	13,193	-37.8	10,735	-18.6	11,968	10,311	9,449
Other current assets	2,793	4,494	7,621	8,144	6.9	8,901	9.3	9,868	13,251	13,653
Total current assets	13,690	16,055	28,829	21,337	-26.0	19,636	-8.0	21,836	23,562	23,102
Net tangible fixed assets	1,674	2,149	2,778	3,893	40.1	3,803	-2.3	4,042	4,402	5,068
Net intangible fixed assets	667	6,930	6,688	6,222	-7.0	6,222	0.0	6,222	6,222	6,222
Investments / other assets	1,284	3,657	5,892	7,269	23.4	7,269	0.0	7,269	7,269	7,269
Total assets	17,315	28,791	44,187	38,721	-12.4	36,930	-4.6	39,369	41,455	41,662
Trade payables & other ST liabilities	1,784	2,926	4,335	5,308	22.5	5,557	4.7	5,746	6,306	6,377
Short term debt	0	999	0	1,250	-	1,250	0.0	0	1,000	0
Total current liabilities	1,784	3,925	4,335	6,558	51.3	6,807	3.8	5,746	7,306	6,377
Long term debt	1,991	5,964	10,946	9,700	-11.4	8,450	-12.9	8,450	7,450	7,450
Other long term liabilities	1,336	2,009	2,294	2,583	12.6	2,583	0.0	2,583	2,583	2,583
Preferred shares	. 0	. 0	. 0	. 0	_	. 0	_	. 0	. 0	. 0
Total liabilities (incl pref shares)	5,111	11,898	17,575	18,841	7.2	17,840	-5.3	16,779	17,339	16,410
Common s/h equity	12,204	16,893	26,612	19,880	-25.3	19,090	-4.0	22,590	24,116	25,252
Minority interests	0	0	0	0	-	0	-	0	0	0
Total liabilities & equity	17,315	28,791	44,187	38,721	-12.4	36,930	-4.6	39,369	41,455	41,662
Cash Flow (US\$m)	01/20	01/21	01/22	01/23E	%ch	01/24E	%ch	01/25E	01/26E	01/27E
Net income (before pref divs)	2,795	4,332	9,753	4,114	-57.8	7,200	75.0	11,242	14,936	18,160
Depreciation & amortisation	381	1,098	1,174	1,524	29.8	1,200	-21.3	1,200	1,200	1,200
Net change in working capital	718	(703)	(3,363)	(855)	74.6	(509)	40.5	(778)	(2,823)	(332)
Other operating	867	1,095	1,544	2,452	58.8	2,689	9.7	3,007	3,412	3,868
Operating cash flow	4,761	5,822	9,108	7,234	-20.6	10,580	46.2	14,672	16,725	22,896
Tangible capital expenditure	(488)	(1,128)	(975)	(1,849)	-89.6	(1,110)	40.0	(1,439)	(1,560)	(1,866)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) & disposals	0	0	0	0	-	0		0	0	0
Other investing	6,633	(18,547)	(8,855)	9,702	-	2,000	-79.4	0	0	0
Investing cash flow	6,145	(19,675)	(9,830)	7,853	-	890	-88.7	(1,439)	(1,560)	(1,866)
Equity dividends paid	(390)	(395)	(399)	(415)	-4.1	(478)	-15.1	(550)	(622)	(692)
Share issues / (buybacks)	61	(525)	(1,183)	(12,760)	NM	(10,200)	20.1	(10,200)	(16,200)	(20,200)
Other financing	(463)	0 4.730	(440)	(47)	-	(1.245)	-	(1.245)	0	(005)
Change in debt & pref shares	5 (707)	4,729	3,892	(47)	-	(1,245)	NM 0.8	(1,245)	(46.047)	(995)
Financing cash flow	(787)	3,809	1,870	(13,222)	- (2.4	(11,923)	9.8	(11,995)	(16,817)	(21,887)
Cash flow inc/(dec) in cash	10,119	(10,044)	1,148	1,865	62.4	(453)	- 70.7	1,238	(1,652)	(857)
FX / non cash items	(6,644)	10,708	8,499	(9,880)	-	(2,005)	79.7	(5)	(5)	(5)
Balance sheet inc/(dec) in cash	3,475	664	9,647	(8,015)	-	(2,458)	69.3	1,233	(1,657)	(862)

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts. Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

NVIDIA Corp (NVDA.O)

Valuation (x)	01/20	01/21	01/22	01/23E	01/24E	01/25E	01/26E	01/27E
P/E (local GAAP, diluted)	40.5	60.7	53.3	NM	54.8	35.1	26.4	21.6
P/E (UBS, diluted)	31.6	41.9	46.2	48.2	36.9	26.2	20.6	17.2
P/CEPS	28.1	35.0	41.1	40.1	32.4	23.7	18.9	15.9
Equity FCF (UBS) yield %	3.8	1.8	1.6	1.4	2.4	3.3	3.8	5.3
Dividend yield (net) %	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2
P/BV	9.2	15.3	19.3	19.8	20.2	17.0	15.9	15.2
EV/revenues (core)	9.5	NM	NM	NM	NM	NM	8.6	7.2
EV/EBITDA (UBS core)	25.2	31.2	35.8	36.3	30.1	21.4	17.0	14.3
EV/EBIT (core)	27.8	36.2	39.1	42.5	33.3	23.0	17.9	15.0
EV/OpFCF (core)	28.6	36.3	38.5	44.1	33.0	23.3	18.3	15.4
EV/op. invested capital	39.5	46.2	52.0	36.7	36.1	33.8	28.5	24.7
Enterprise value (US\$m)	01/20	01/21	01/22	01/23E	01/24E	01/25E	01/26E	01/27E
• • • • • • • • • • • • • • • • • • • •		256,567	509,467	395,975	395,975	395,975	395,975	395,975
Market cap.	112,223	,			,	,	•	,
Net debt (cash)	(7,170)	(6,752)	(6,752)	(6,752)	(6,752)	(6,752)	(6,752)	(6,752)
Buy out of minorities	0	0	0	0	0	0	0	0
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	105,053	249,815	502,715	389,223	389,223	389,223	389,223	389,223
Non core assets	(1,284)	(3,657)	(5,892)	(7,269)	(7,269)	(7,269)	(7,269)	(7,269)
Core enterprise value	103,769	246,158	496,823	381,954	381,954	381,954	381,954	381,954
Growth (%)	01/20	01/21	01/22	01/23E	01/24E	01/25E	01/26E	01/27E
Revenue	(6.8)	52.7	61.4	0.0	3.1	29.7	23.9	19.6
EBITDA (UBS)	(11.9)	92.0	75.5	(24.1)	20.6	40.6	26.1	18.5
EBIT (UBS)	(15.3)	82.2	86.5	(29.1)	27.7	44.8	28.0	19.5
EPS (UBS, diluted)	(12.7)	72.7	77.6	(25.6)	30.5	40.9	27.4	19.6
Net DPS	5.0	0.1	(0.1)	4.8	17.8	15.2	13.2	11.7
Margins & Profitability (%)	01/20	01/21	01/22	01/23E	01/24E	01/25E	01/26E	01/27E
Gross profit margin	62.5	65.7	66.8	59.2	67.1	68.4	69.7	69.5
EBITDA margin	37.7	47.4	51.5	39.1	45.7	49.6	50.4	50.0
EBIT (UBS) margin	34.2	40.8	47.2	33.4	41.4	46.2	47.8	47.7
Net earnings (UBS) margin	32.8	37.7	41.8	30.8	38.5	41.8	43.0	42.8
ROIC (EBIT)	NM	NM						
ROIC post tax	NM	NM						
ROE (UBS)	33.2	43.2	51.8	35.7	54.9	72.2	82.0	92.5
Capital structure & Coverage (x)	01/20	01/21	01/22	01/23E	01/24E	01/25E	01/26E	01/27E
Net debt / EBITDA	(2.2)	(0.6)	(0.7)	(0.2)	(0.1)	(0.2)	(0.1)	(0.1)
Net debt / total equity %	(73.0)	(27.2)	(38.6)	(11.3)	(5.4)	(15.6)	(7.7)	(7.9)
Net debt / (net debt + total equity) %	NM	(37.4)	(62.8)	(12.7)	(5.7)	(18.4)	(8.4)	(8.6)
Net debt/EV %	(6.8)	(2.7)	(1.5)	(1.6)	(0.4)	(0.6)	(0.7)	(0.5)
Capex / depreciation %	128.1	102.7	83.0	121.3	92.5	119.9	130.0	155.5
Capex / revenue %	4.5	6.8	3.6	6.9	4.0	4.0	3.5	3.5
EBIT / net interest	4.5	56.7	64.1	0.9	4.0	4.0	ر.د -	٥.٥
	9.2	15.9	28.2		22.4	27.4	NM	- NIN 4
Dividend cover (UBS)				20.0				NM
Div. payout ratio (UBS) %	10.9	6.3	3.5	5.0	4.5	3.7	3.2	3.0
Revenues by division (US\$m)	01/20	01/21	01/22	01/23E	01/24E	01/25E	01/26E	01/27E
Others	10,918	16,675	26,914	26,918	27,744	35,976	44,580	53,323
Total	10,918	16,675	26,914	26,918	27,744	35,976	44,580	53,323
EBIT (UBS) by division (US\$m)	01/20	01/21	01/22	01/23E	01/24E	01/25E	01/26E	01/27E
Others	3,735	6,804	12,691	8,993	11,487	16,637	21,288	25.449
Total	3,735	6,804	12,691	8,993	11,487	16,637	21,288	25,449
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Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Forecast returns

Forecast price appreciation	+25.7%
Forecast dividend yield	0.1%
Forecast stock return	+25.8%
Market return assumption	9.2%
Forecast excess return	+16.6%

Company Description

NVIDIA Corp. designs and manufactures graphics processing units, add-in boards, and related low-level software. Its Graphics Processing Unit segment includes GeForce for highend video games and professional graphics workstations; Quadro for designers; DGX and Tesla Accelerator cards for data center and AI scientists; and GRID for cloud-based visual computing users. The Tegra Processors segment provides processors that enable embedded computer vision applications in automotive video surveillance end markets, as well as delivering multimedia experiences on mobile gaming platforms, while consuming minimal power.

Valuation Method and Risk Statement

NVDA: Our price target is based on applying a P/E multiple. NVIDIA company-specific risks include: 1) competition from AMD in graphics processors (GPUs) and professional visualization products (Quadro), which historically have driven the bulk of the company's gross profit, 2) intense competition in ARM-based applications processors (Tegra), where rivals seek to leapfrog NVIDIA's early lead in dual-core technology, 3) emerging competition from Intel with its many-integrated core (MIC) Knights processor family vs. the company's professional GPU computing products (Tesla), where Intel's approach could be more flexible and easier to develop software than for Tesla. In addition, NVIDIA faces the semiconductor sector risk where revenue trends have historically been linked to corporate profitability, which could be challenged for robust growth, as the economic recovery has been more subdued vs. prior deep downturns.

Quantitative Research Review

UBS publishes a quantitative assessment of its analysts' responses to certain questions about the likelihood of an occurrence of a number of short term factors in a product known as the 'Quantitative Research Review'. The views for this month can be found below. Views contained in this assessment on a particular stock reflect only the views on those short term factors which are a different timeframe to the 12-month timeframe reflected in any equity rating set out in this note. For previous responses please make reference to (i) previous UBS research reports; and (ii) where no applicable research report was published that month, the Quantitative Research Review which can be found at https://neo.ubs.com/quantitative, or contact your UBS sales representative for access to the report or the Quantitative Research Team on qa@ubs.com. A consolidated report which contains all responses is also available and again you should contact your UBS sales representative for details and pricing or the Quantitative Research Team on the email above.

NVIDIA Corp

Question	Response
1. Is the industry structure facing the firm likely to improve or deteriorate over the next year? Rate on a scale of 1-5 (1 = getting worse, 3 = no change, 5 = getting better, N/A = no view)	N/A
2. Is the regulatory/government environment facing the firm likely to improve or deteriorate over the next year? Rate on a scale of 1-5 (1 = getting tougher 3 = no change, 5 = getting better, N/A = no view)	N/A
3. Over the last 3-6 months in broad terms have things been improving/no change/getting worse for this stock? Rate on a scale of 1-5 (1 = getting a lot worse, 3 = not much change, 5 = getting a lot better, N/A = no view)	N/A
4. Relative to the current CONSENSUS EPS forecast, is the next company EPS update likely to lead to: (1 = negative surprise vs consensus, 3 = in-line with consensus, 5 = positive surprise vs consensus expectations, N/A = no view)	N/A
5. What's driving the difference?	
6. Relative to YOUR current earnings forecast, is there relatively greater risk at the next earnings result of:(1 = downside skew risk to earnings, 3 = equal upside or downside risk to earnings, 5 = upside skew risk to earnings, N/A = no view)	N/A
7. What's driving the difference?	
8. Is there an upcoming catalyst for the company over the next three months?	Positive Catalyst
9. Is there an actual or approximate date for the catalyst?	
10. Is the catalyst date an actual or approximate date?	Approximate
11. What is the catalyst?	

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12-Month Rating	Definition	Coverage ¹	IB Services ²
Buy	FSR is > 6% above the MRA.	55%	24%
Neutral	FSR is between -6% and 6% of the MRA.	36%	21%
Sell	FSR is > 6% below the MRA.	9%	18%
Short-Term Rating	Definition	Coverage ³	IB Services ⁴
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%

Source: UBS. Rating allocations are as of 31 December 2022.

₩UBS 8

^{1:} Percentage of companies under coverage globally within the 12-month rating category.

^{2:}Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

^{3:} Percentage of companies under coverage globally within the Short-Term rating category.

^{4:}Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

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Company Name	Reuters	12-month rating	Price	Price date
NVIDIA Corp ¹⁶	NVDA.O	Buy	US\$159.09	10 Jan 2023

Source: UBS. All prices as of local market close. Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date.

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NVIDIA Corp (US\$)



Date	Stock Price (US\$)	Price Target (US\$)	Rating
2019-10-10	45.76	48.75	Buy
2019-11-11	52.05	60.00	Buy
2020-01-23	63.22	75.00	Buy
2020-02-13	67.70	80.00	Buy
2020-03-27	63.18	76.25	Buy
2020-04-16	73.68	82.50	Buy

Rating	Price Target (US\$)	Stock Price (US\$)	Date
Buy	100.00	90.26	2020-05-22
Buy	120.00	102.02	2020-07-17
Buy	132.00	121.41	2020-08-20
Buy	156.25	143.47	2020-09-02
Buy	162.50	134.29	2020-11-18
Buy	167.50	133.08	2021-02-25
Buy	184.00	154.88	2021-05-27
Buy	230.00	196.99	2021-08-11
Buy	350.00	303.90	2021-11-14
Buy	280.00	168.98	2022-05-23
Buy	220.00	177.93	2022-08-08
Buy	200.00	143.01	2022-11-07

Source: UBS;as of 10-Jan-2023. All prices as of local market close. Ratings as of date shown.

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