



NVIDIA Corp.

Gaming Cycle Leads the Way

Gaming cycle remains robust as expected with strength set to continue in Dec, but the area investors will poke at is Data Center which beat in Sept, but less than expected, and then slows into Dec. Gaming to drive Q4 given strong holiday demand and the company remains supply constrained, but we question whether they'll continue filling the channel into April which is typically seasonally down or whether this guide is the best we will see near-term. On the DC side, Sept beat was driven largely by MLNX (strong sales to Chinese customer) which should reverse in Dec, and while this story is not broken, investors will be concerned on deceleration while bulls likely point to the potential reacceleration in Enterprise next year. Overall, this story is one of the cleanest in the group as NVDA is clearly a leader in AI, but for momentum growth names like these, we do question at what point they start to grow into their high valuations.

Q3 Beat with Record Gaming/DC: Record revenue of \$4.7B (+22% Q/Q) came in well above St. \$4.4B. Gaming had record revenue (\$2.27B vs. St. \$2.06B) driven by strong demand for GeForce RTX 30 GPU series, gaming NBs and console SoC sales (Nintendo Switch). Data Center was ahead (\$1.90B vs. St. \$1.80B) led by ramp of Ampere products and MLNX contributing half of the beat with China pull-in (13% of total revenue). Proviz came in ahead (\$236M vs. St. \$215M). Auto was better (\$125M vs. St. \$110M) due to global auto recovery and increasing AI cockpit sales. OEM & IP came in better at \$194M (vs. St. \$160M). Better revenue and GM (65.5% vs. St. 65.3% -- mix shift toward DC) yielded non-GAAP EPS of \$2.91, ahead St. \$2.58.

Q4 Ahead Led by Gaming: Guided revenue to \$4.8B (+2% Q/Q, 14 week qtr), ahead of St. \$4.4B. Guided Gaming up Q/Q but Data Center guided down slightly Q/Q with meaningful Q/Q declines in MLNX (we model -20% Q/Q), while Computing products expected to grow MSD Q/Q. Proviz and Auto both expected to grow Q/Q, but not yet returning to Y/Y growth. Better revenue and modestly higher GMs (65.5% vs. St. 65.4%) partially offset by higher opex (\$1.18B vs. Street \$1.12B – extra week) yield implied non-GAAP EPS ~\$2.81, above Street \$2.52.

NVDA: Quarterly and Annual EPS (USD)

	2020		2021		2022		Change y/y		
FY Jan	Actual	Old	New	Cons	Old	New	Cons	2021	2022
Q1	0.88A	1.80A	1.80A	1.80A	2.27E	2.51E	2.30E	105%	39%
Q2	1.24A	2.18A	2.18A	2.18A	2.53E	2.76E	2.55E	76%	27%
Q3	1.78A	2.56E	2.91A	2.58E	2.86E	3.15E	2.96E	63%	8%
Q4	1.89A	2.46E	2.81E	2.52E	2.95E	3.23E	3.01E	49%	15%
Year	5.79A	9.00E	9.71E	9.01E	10.61E	11.66E	11.03E	68%	20%
P/E	92.8		55.3			46.1			

Source: Barclays Research.

Consensus numbers are from Bloomberg received on 18-Nov-2020; 13:50 GMT

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Equity Research

Technology | U.S. Semiconductors
19 November 2020

Stock Rating **OVERWEIGHT**
Unchanged

Industry View **NEUTRAL**
Unchanged

Price Target **USD 550.00**
raised 5% from USD 525.00

Price (18-Nov-2020) USD 537.15
Potential Upside/Downside +2.4%
Tickers NVDA

Market Cap (USD mn) 331422
Shares Outstanding (mn) 617.00
Free Float (%) 95.85
52 Wk Avg Daily Volume (mn) 12.2
Dividend Yield (%) 0.12
Return on Equity TTM (%) 27.94
Current BVPS (USD) 22.55

Source: Bloomberg

Price Performance Exchange-Nasdaq
52 Week range USD 589.07-180.68



Source: IDC; Link to Barclays Live for interactive charting

U.S. Semiconductors

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U.S. Semiconductors	Industry View: NEUTRAL
NVIDIA Corp. (NVDA)	Stock Rating: OVERWEIGHT

Income statement (\$mn)	2020A	2021E	2022E	2023E	CAGR	Price (18-Nov-2020)	USD 537.15
Revenue	10,918	16,495	20,039	N/A	N/A	Price Target	USD 550.00
EBITDA (adj)	4,116	7,809	9,605	N/A	N/A	Why Overweight? We believe NVDA has a long-term sustainable position in the Datacenter with further Edge opportunities (Autos, robots, etc) and a competitive moat around a large portion of the market.	
EBIT (adj)	3,735	6,700	8,409	N/A	N/A		
Pre-tax income (adj)	3,860	6,569	8,199	N/A	N/A		
Net income (adj)	3,580	6,097	7,379	N/A	N/A		
EPS (adj) (\$)	5.79	9.71	11.66	N/A	N/A		
Diluted shares (mn)	618	628	633	N/A	N/A	Upside case USD 650.00	
DPS (\$)	0.64	0.64	0.64	N/A	N/A		
Margin and return data					Average	Downside case USD 425.00	
EBITDA (adj) margin (%)	37.7	47.3	47.9	N/A	44.3		
EBIT (adj) margin (%)	34.2	40.6	42.0	N/A	38.9		
Pre-tax (adj) margin (%)	35.4	39.8	40.9	N/A	38.7		
Net (adj) margin (%)	32.8	37.0	36.8	N/A	35.5		
ROA (%)	26.9	35.2	28.0	N/A	30.1	Upside/Downside scenarios	
ROE (%)	38.3	50.0	49.9	N/A	46.0		
Balance sheet and cash flow (\$mn)					CAGR		
Tangible fixed assets	1,674	2,073	1,877	N/A	N/A		
Intangible fixed assets	618	4,193	4,193	N/A	N/A		
Cash and equivalents	10,897	11,428	15,601	N/A	N/A		
Total assets	17,315	26,339	30,467	N/A	N/A		
Short and long-term debt	1,991	6,961	5,963	N/A	N/A		
Other long-term liabilities	775	1,311	1,311	N/A	N/A		
Total liabilities	5,111	11,542	10,637	N/A	N/A		
Net debt/(funds)	-8,906	-4,467	-9,638	N/A	N/A		
Shareholders' equity	12,204	14,797	19,830	N/A	N/A		
Change in working capital	2,678	256	5,691	N/A	N/A		
Cash flow from operations	4,761	5,457	7,576	N/A	N/A		
Capital expenditure	-488	-1,158	-1,000	N/A	N/A		
Free cash flow	4,273	4,299	6,576	N/A	N/A		
Valuation and leverage metrics					Average	<p>Price History Prior 12 months High</p> <p>Price Target Next 12 months Upside</p> <p>589.07</p> <p>Current 537.15</p> <p>650.00</p> <p>Target 550.00</p> <p>425.00</p> <p>180.68 Low</p> <p>Downside</p>	
P/E (adj) (x)	92.8	55.3	46.1	N/A	64.7		
EV/sales (x)	30.2	20.2	16.4	N/A	22.3		
EV/EBITDA (adj) (x)	80.1	42.8	34.2	N/A	52.3		
Equity FCF yield (%)	1.3	1.3	1.9	N/A	1.5		
P/Sales (x)	31.0	20.5	16.9	N/A	22.8		
P/BV (x)	27.2	22.8	17.1	N/A	22.4		
Dividend yield (%)	0.1	0.1	0.1	N/A	0.1		

Source: Company data, Bloomberg, Barclays Research
Note: FY End Jan

Q3 Beat with Record Gaming/DC

Record revenue of \$4.7B (+22% Q/Q) came in well above St. \$4.4B. Gaming had record revenue (\$2.27B vs. St. \$2.06B) driven by strong demand for GeForce RTX 30 GPU series, gaming NBs and console SoC sales (Nintendo Switch). Data Center was ahead (\$1.90B vs. St. \$1.80B) led by ramp of Ampere products and MLNX contributing half of the beat with China pull-in (13% of total revenue). Proviz came in ahead (\$236M vs. St. \$215M). Auto was better (\$125M vs. St. \$110M) due to global auto recovery and increasing AI cockpit sales. OEM & IP came in better at \$194M (vs. St. \$160M). Better revenue and GM (65.5% vs. St. 65.3% -- mix shift toward DC) yielded non-GAAP EPS of \$2.91, ahead St. \$2.58.

FIGURE 1

October Quarter Results

	OCTOBER QUARTER GUIDE				Comments
	Actual	Prior Barclays Ests	Consensus Ests	Guide	
Revenues	\$4.73B	\$4.41B	\$4.41B	\$4.31-4.49B	record revenue driven by gaming/DC; 13% contribution from MLNX
Q/Q	+22.2%	+14.0%	+14.0%	12% to 16%	
GMs (non-GAAP)	65.5%	65.5%	65.3%	65.5% +/- 50bps	product mix shift toward DC
Opex (non-GAAP)	\$1,102M	\$1,090M	\$1,090M	\$1090M	
Tax Rate	5.9%	8.0%		8.0%	
Pro-Forma EPS	\$2.91	\$2.56	\$2.58	\$2.46-2.63	
GAAP EPS	\$2.12	\$1.70	\$1.68	\$1.61-1.77	
Share Count	630M	628M		628M	
Depreciation	\$299M	\$404M			
Capex	\$473M	\$230M		\$225-250	
Segment Revenues:					
Gaming	\$2,271M	\$2,108M	\$2,060M		record quarter; strong demand for GeForce RTX 30 GPU/gaming NBs/console SoC sales
Professional Visualization	\$236M	\$203M	\$215M		strength in NBs partially offset by a decline in DTs (WFH/LFH)
Datacenter	\$1,900M	\$1,834M	\$1,800M		record quarter; ramp of Ampere products; MLNX contributing 1/3 of DC revenue
Automotive	\$125M	\$111M	\$110M		global auto production recovery; strong AI cockpit sales
OEM & IP	\$194M	\$153M	\$160M		higher demand for entry-level laptop GPUs

Source: Company Report, Bloomberg, and Barclays Research

Q4 Ahead Led by Gaming

Guided revenue to \$4.8B (+2% Q/Q, 14 week qtr), ahead of St. \$4.4B. Guided Gaming up Q/Q but Data Center guided down slightly Q/Q with meaningful Q/Q declines in MLNX (we model -20% Q/Q), while Computing products expected to grow MSD Q/Q. Proviz and Auto both expected to grow Q/Q, but not yet returning to Y/Y growth. Better revenue and modestly higher GMs (65.5% vs. St. 65.4%) partially offset by higher opex (\$1.18B vs. Street \$1.12B – extra week) yield implied non-GAAP EPS ~\$2.81, above Street \$2.52.

FIGURE 2
January Quarter Guidance

	JANUARY QUARTER GUIDE			Comments
	Guide	Prior Barclays Ests	Consensus Ests	
Revenues	\$4.70-4.90B	\$4.38B	\$4.40B	gaming remains strong; 14 week quarter computing products grow MSD Q/Q
Q/Q	0% to 4%	-0.7%	-0.2%	
GMs (non-GAAP)	65.5% +/- 50bps	66.2%	65.4%	
Opex (non-GAAP)	\$1180M	\$1,142M	\$1,120M	extra week impact
Tax Rate	8.0%	9.0%		
Implied Pro-Forma EPS	\$2.69-2.87	\$2.46	\$2.52	
Implied GAAP EPS	\$1.83-2.01	\$1.75	\$1.69	
Estimated Share Count	632M	630M		
Depreciation		\$404M		
Capex	\$300-325	\$230M		
Segment Revenues:				
Gaming		\$2,063M	\$1,960M	guided up Q/Q vs. typically seasonally down - ramp of RTX 30 Series
Professional Visualization		\$207M	\$228M	guided up Q/Q
Datacenter		\$1,848M	\$1,930M	guided down slightly Q/Q; MLNX meaningfully down Q/Q (non-reoccurring China OEM)
Automotive		\$122M	\$120M	guided up Q/Q
OEM & IP		\$138M	\$152M	

Source: Company Report, Bloomberg, and Barclays Research

Changes to Estimates & PT

Our FY21 revenue/EPS move to \$16495M/\$9.71 (prior \$15733M/\$9.00), and FY22 moves to \$20039M/\$11.66 (prior \$18660M/\$10.61).

Our price target of \$550 is based upon 58x our FY22 non-GAAP (incl SBC) EPS of \$9.46. Our prior price target of \$525 was based upon 60x our prior FY22 non-GAAP (incl SBC) EPS of \$8.74.

FIGURE 3
Changes to Estimates

Changes to Revenue and EPS Estimates - New vs. Old vs. Consensus					
		Jan Q	Apr Q	FY21	FY22
NEW	Revenues	\$4,823M	\$4,518M	\$16,495M	\$20,039M
	EPS	\$2.81	\$2.51	\$9.71	\$11.66
OLD	Revenues	\$4,378M	\$4,235M	\$15,733M	\$18,660M
	EPS	\$2.46	\$2.27	\$9.00	\$10.61
CONSENSUS	Revenues	\$4,414M	\$4,192M	\$16,086M	\$18,598M
	EPS	\$2.52	\$2.30	\$9.41	\$10.82

Source: Company Reports, Bloomberg, and Barclays Research

FIGURE 4
NVDA Income Statement

NVIDIA FY Ending: January \$ in millions	Apr-19 1Q	Jul-19 2Q	Oct-19 3Q	Jan-20 4Q	Apr-20 1Q	Jul-20 2Q	Oct-20 3Q	Jan-21 4QE	Apr-21 1QE	Jul-21 2QE	Oct-21 3QE	Jan-22 4QE	2020 FY	2021 FYE	2022 FYE
Revenues	\$2,220.0	\$2,579.0	\$3,013.6	\$3,105.0	\$3,080.0	\$3,866.0	\$4,726.0	\$4,822.6	\$4,517.7	\$4,851.1	\$5,326.9	\$5,343.5	\$10,917.6	\$16,494.6	\$20,039.2
QoQ	0.7%	16.2%	16.9%	3.0%	(0.8%)	25.5%	22.2%	2.0%	(6.3%)	7.4%	9.8%	0.3%			
YoY	(30.8%)	(17.4%)	(5.3%)	40.8%	38.7%	49.9%	56.8%	55.3%	46.7%	25.5%	12.7%	10.8%	(6.8%)	51.1%	21.5%
Cost of Goods	910.0	1,028.0	1,083.4	1,075.0	1,054.0	1,315.0	1,631.0	1,656.3	1,515.9	1,657.6	1,848.8	1,797.5	4,096.4	5,656.3	6,819.7
Gross Profit	\$1,310.0	\$1,551.0	\$1,930.2	\$2,030.0	\$2,026.0	\$2,551.0	\$3,095.0	\$3,166.4	\$3,001.9	\$3,193.4	\$3,478.1	\$3,546.1	\$6,821.2	\$10,838.4	\$13,219.5
R&D	560.0	559.0	571.3	598.0	601.0	769.0	815.0	870.0	875.0	882.1	893.1	904.2	2,288.3	3,055.0	3,554.4
SG&A	193.0	190.0	203.0	212.0	220.0	266.0	287.0	310.0	310.0	313.7	315.4	317.0	798.0	1,083.0	1,256.1
Total Operating Expenses	753.0	749.0	774.3	810.0	821.0	1,035.0	1,102.0	1,180.0	1,185.0	1,195.8	1,208.5	1,221.2	3,086.3	4,138.0	4,810.5
Operating Income	\$557.0	\$802.0	\$1,155.9	\$1,220.0	\$1,205.0	\$1,516.0	\$1,993.0	\$1,986.4	\$1,816.9	\$1,997.6	\$2,269.6	\$2,324.9	\$3,734.9	\$6,700.4	\$8,409.0
Interest Income (Exp)	31.0	35.0	33.0	26.0	8.0	(39.0)	(45.0)	(55.0)	(54.0)	(53.0)	(52.0)	(51.0)	125.0	(131.0)	(210.0)
Profit Before Taxes	588.0	837.0	1,188.9	1,246.0	1,213.0	1,477.0	1,948.0	1,931.4	1,762.9	1,944.6	2,217.6	2,273.9	3,859.9	6,569.4	8,199.0
Taxes	45.0	75.0	86.0	74.0	93.0	111.0	114.0	154.5	176.3	194.5	221.8	227.4	280.0	472.5	819.9
Net Income - Pro Forma	\$543.0	\$762.0	\$1,102.9	\$1,172.0	\$1,120.0	\$1,366.0	\$1,834.0	\$1,776.8	\$1,586.6	\$1,750.2	\$1,995.9	\$2,046.5	\$3,579.9	\$6,096.8	\$7,379.1
EPS - Pro Forma (ex ESO)	\$0.88	\$1.24	\$1.78	\$1.89	\$1.80	\$2.18	\$2.91	\$2.81	\$2.51	\$2.76	\$3.15	\$3.23	\$5.79	\$9.71	\$11.66
EPS - Pro Forma (incl ESO)	\$0.61	\$0.91	\$1.45	\$1.55	\$1.47	\$1.63	\$2.34	\$2.27	\$1.97	\$2.22	\$2.61	\$2.66	\$4.52	\$7.70	\$9.46
EPS - GAAP	\$0.64	\$0.90	\$1.45	\$1.53	\$1.47	\$0.99	\$2.12	\$1.94	\$1.81	\$2.06	\$2.45	\$2.50	\$4.52	\$6.52	\$8.82
Fully Diluted Shares	616.0	616.0	618.0	621.0	622.0	626.0	630.0	632.0	633.0	633.0	633.0	633.0	617.8	627.5	633.0
Dividend per Share	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16	\$0.64	\$0.64	\$0.64
Percent of Sales															
Gross Margin	59.0%	60.1%	64.0%	65.4%	65.8%	66.0%	65.5%	65.7%	66.4%	65.8%	65.3%	66.4%	62.5%	65.7%	66.0%
R&D	25.2%	21.7%	19.0%	19.3%	19.5%	19.9%	17.2%	18.0%	19.4%	18.2%	16.8%	16.9%	21.0%	18.5%	17.7%
SG&A	8.7%	7.4%	6.7%	6.8%	7.1%	6.9%	6.1%	6.4%	6.9%	6.5%	5.9%	5.9%	7.3%	6.6%	6.3%
Operating Margin	25.1%	31.1%	38.4%	39.3%	39.1%	39.2%	42.2%	41.2%	40.2%	41.2%	42.6%	43.5%	34.2%	40.6%	42.0%
Taxes	7.7%	9.0%	7.2%	5.9%	7.7%	7.5%	5.9%	8.0%	10.0%	10.0%	10.0%	10.0%	7.3%	7.2%	10.0%
Net Income	24.5%	29.5%	36.6%	37.7%	36.4%	35.3%	38.8%	36.8%	35.1%	36.1%	37.5%	38.3%	32.8%	37.0%	36.8%
Sequential Change															
R&D	2.2%	(0.2%)	2.2%	4.7%	0.5%	28.0%	6.0%	6.7%	0.6%	0.8%	1.2%	1.2%	12.3%	33.5%	16.3%
SG&A	(6.8%)	(1.6%)	6.8%	4.4%	3.8%	20.9%	7.9%	8.0%	0.0%	1.2%	0.5%	0.5%	1.4%	35.7%	16.0%

Source: Company Reports, Barclays Research Estimates

Reconciliation of Pro Forma to GAAP

SBC	(178.0)	(224.0)	(223.0)	(220.0)	(224.0)	(374.0)	(383.0)	(375.0)	(378.0)	(381.0)	(384.0)	(405.5)	(845.0)	(1,356.0)	(1,548.5)
COGS	(4.0)	(8.0)	(15.0)	(12.0)	(21.0)	(14.0)	(28.0)	(25.0)	(25.0)	(25.0)	(25.0)	(25.0)	(39.0)	(88.0)	(100.0)
R&D	(114.0)	(145.0)	(141.0)	(140.0)	(134.0)	(228.0)	(232.0)	(230.0)	(232.0)	(234.0)	(236.0)	(250.2)	(540.0)	(824.0)	(952.2)
SG&A	(60.0)	(71.0)	(67.0)	(68.0)	(69.0)	(132.0)	(123.0)	(120.0)	(121.0)	(122.0)	(123.0)	(130.4)	(266.0)	(444.0)	(496.4)
Amortization & Other Acquisition Costs	(10.0)	(5.0)	(7.0)	(7.0)	(4.0)	(229.0)	(106.0)	(110.0)	(109.0)	(108.0)	(107.0)	(106.0)	(29.0)	(449.0)	(430.0)
COGS Other	(10.0)	(2.0)	0.0	(3.0)	(1.0)	(262.0)	(107.0)	(112.0)	0.0	0.0	0.0	0.0	(15.0)	(482.0)	0.0
Opex Other	(1.0)	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	(1.0)	1.0	0.0
Interest Other	0.0	0.0	0.0	0.0	(3.0)	(3.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)	0.0	(16.0)	(20.0)
Tax Effect	50.0	21.0	26.0	8.0	29.0	124.0	102.0	48.2	49.2	49.4	49.6	51.7	105.0	303.2	199.9
Net Income - GAAP	\$394.0	\$552.0	\$898.9	\$950.0	\$917.0	\$622.0	\$1,336.0	\$1,223.0	\$1,143.8	\$1,305.6	\$1,549.5	\$1,581.6	\$2,794.9	\$4,098.0	\$5,580.4
GAAP Shares	616.0	616.0	618.0	621.0	622.0	626.0	630.0	632.0	633.0	633.0	633.0	633.0	617.8	627.5	633.0
EPS - GAAP	\$0.64	\$0.90	\$1.45	\$1.53	\$1.47	\$0.99	\$2.12	\$1.94	\$1.81	\$2.06	\$2.45	\$2.50	\$4.52	\$6.53	\$8.82

Source: Company Reports & Barclays Research

FIGURE 5
NVDA Balance Sheet

NVIDIA FY End: January \$ in millions	Apr-19 1Q	Jul-19 2Q	Oct-19 3Q	Jan-20 4Q	Apr-20 1Q	Jul-20 2Q	Oct-20 3Q	Jan-21 4Q	Apr-21 1QE	Jul-21 2QE	Oct-21 3QE	Jan-22 4QE	2020 FY	2021 FYE	2022 FYE
BALANCE SHEET															
Assets															
Cash & Equiv.+ ST Investments	\$7,802	\$8,475	\$9,769	\$10,897	\$16,354	\$10,981	\$10,139	\$11,428	\$12,722	\$13,735	\$13,981	\$15,601	\$10,897	\$11,428	\$15,601
Accounts Receivable	1,242	1,561	1,455	1,657	1,907	2,084	2,546	2,643	2,475	2,658	2,919	2,928	1,657	2,643	2,928
Inventories	1,426	1,204	1,047	979	1,128	1,401	1,495	1,543	1,495	1,726	1,925	1,871	979	1,543	1,871
Other	159	151	149	157	195	215	213	213	213	213	213	213	157	213	213
Total Current Assets	\$10,629	\$11,391	\$12,420	\$13,690	\$19,584	\$14,681	\$14,393	\$15,826	\$16,905	\$18,332	\$19,037	\$20,613	\$13,690	\$15,826	\$20,613
Property and Equipment	1,473	1,484	1,517	1,674	1,715	1,964	2,059	2,073	2,024	1,975	1,926	1,877	1,674	2,073	1,877
Goodwill	618	618	618	618	628	4,193	4,193	4,193	4,193	4,193	4,193	4,193	618	4,193	4,193
Operating lease assets	536	535	527	618	595	701	681	681	681	681	681	681	618	681	681
Intangible Assets	54	49	43	49	80	2,854	2,861	2,747	2,634	2,522	2,411	2,301	49	2,747	2,301
Deferred income tax assets	601	588	569	548	533	630	666	662	658	654	650	646	548	662	646
Other	110	110	116	118	119	157	2,028	157	157	157	157	157	118	157	157
Total Assets	\$14,021	\$14,775	\$15,810	\$17,315	\$23,254	\$25,180	\$26,881	\$26,339	\$27,252	\$28,514	\$29,055	\$30,467	\$17,315	\$26,339	\$30,467
Liabilities															
Account Payable	\$368	\$437	\$591	\$687	\$761	\$893	\$1,097	\$1,092	\$999	\$1,093	\$1,219	\$1,185	\$687	\$1,092	\$1,185
Accrued and Other Current Liabilities	815	880	884	1,097	1,142	1,517	1,574	1,574	1,574	1,574	1,574	1,574	1,097	1,574	1,574
Deferred Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital Lease and Tech License	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Warrant Liability	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Current Portion of Notes Payable	0	0	0	0	0	0	998	998	998	998	0	0	0	998	0
Total Current Liabilities	\$1,183	\$1,317	\$1,475	\$1,784	\$1,903	\$2,410	\$3,669	\$3,664	\$3,571	\$3,665	\$2,793	\$2,759	\$1,784	\$3,664	\$2,759
Notes Payable	1,988	1,989	1,990	1,991	6,959	6,960	5,963	5,963	5,963	5,963	5,963	5,963	1,991	5,963	5,963
Capital Lease, net of current	0	483	469	561	519	611	604	604	604	604	604	604	561	604	604
Other	1,146	650	662	775	774	1,285	1,311	1,311	1,311	1,311	1,311	1,311	775	1,311	1,311
Total Liabilities	\$4,317	\$4,439	\$4,596	\$5,111	\$10,155	\$11,266	\$11,547	\$11,542	\$11,449	\$11,543	\$10,671	\$10,637	\$5,111	\$11,542	\$10,637
Shareholders' Equity															
Convertible Preferred Stock	\$0	\$0	\$0	\$0	\$0	\$0	\$0						\$0	\$0	\$0
Shareholders' Equity	9,704	10,336	11,214	12,204	13,099	13,914	15,334	14,797	15,802	16,971	18,384	19,830	12,204	14,797	19,830
Total Shareholders' Equity	\$9,704	\$10,336	\$11,214	\$12,204	\$13,099	\$13,914	\$15,334	\$14,797	\$15,802	\$16,971	\$18,384	\$19,830	\$12,204	\$14,797	\$19,830
Total Liability and Equity	\$14,021	\$14,775	\$15,810	\$17,315	\$23,254	\$25,180	\$26,881	\$26,339	\$27,252	\$28,514	\$29,055	\$30,467	\$17,315	\$26,339	\$30,467
CHECK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VALUATION RATIOS															
Profitability Ratios															
Return on Invested Capital	37%	53%	80%	95%	94%	62%	52%	40%	44%	51%	59%	59%	69%	109%	53%
Return On Equity	23%	31%	43%	42%	37%	42%	53%	46%	43%	44%	47%	45%	38%	50%	50%
Return On Avg Equity *	37%	30%	28%	33%	35%	38%	40%	44%	44%	43%	43%	41%	33%	45%	43%
Return On Assets	16%	22%	30%	30%	26%	23%	29%	26%	24%	26%	28%	28%	27%	35%	28%
Return On Net Assets	20%	28%	38%	38%	33%	28%	52%	56%	45%	46%	48%	45%	34%	45%	52%
Return On Sales	24%	30%	37%	38%	36%	35%	39%	37%	35%	36%	37%	38%	33%	37%	37%
* Avg Over Last 4 Qtrs															
Efficiency Ratios															
A/R Turnover	7.1	6.6	8.3	7.5	6.5	7.4	7.4	7.3	7.3	7.3	7.3	7.3	6.6	6.2	6.8
A/R Days Sales Out	51	55	44	49	56	49	49	50	50	50	50	50	55	58	53
Inventory Turns	2.6	3.4	4.2	4.4	3.7	3.8	4.4	4.3	4.1	3.8	3.8	3.8	4.2	3.7	3.6
Days of Inventory	143	107	88	83	97	97	83	85	90	95	95	95	87	100	100
A/P turnover	9.9	9.4	7.4	6.3	5.6	5.9	6.0	6.1	6.1	6.1	6.1	6.1	6.0	5.2	5.8
Days Payable	37	39	50	58	66	62	61	60	60	60	60	60	61	70	63
Liquidity Ratios															
Current Ratio	9.0	8.6	8.4	7.7	10.3	6.1	3.9	4.3	4.7	5.0	6.8	7.5	7.7	4.3	7.5
Quick Ratio	7.8	7.7	7.7	7.1	9.7	5.5	3.5	3.9	4.3	4.5	6.1	6.8	7.1	3.9	6.8
Net Working Capital	\$9,446	\$10,074	\$10,945	\$11,906	\$17,681	\$12,271	\$10,724	\$12,162	\$13,334	\$14,667	\$16,244	\$17,854	\$11,906	\$12,162	\$17,854
Long-term Debt / Equity	20%	24%	22%	21%	57%	54%	43%	44%	42%	39%	36%	33%	21%	44%	33%
Total Debt / Equity	20%	24%	22%	21%	57%	54%	49%	51%	48%	45%	36%	33%	21%	51%	33%
Op Inc / Assets, exc. Cash	35%	48%	73%	73%	65%	38%	44%	48%	44%	47%	53%	55%	223%	164%	199%
Book & Cash Value															
Book Value Per Share	\$15.75	\$16.78	\$18.15	\$19.65	\$21.06	\$22.23	\$24.34	\$23.41	\$24.96	\$26.81	\$29.04	\$31.33	\$19.76	\$23.58	\$31.33
Tangible Book Value per Share	\$14.75	\$15.78	\$17.15	\$18.66	\$20.05	\$15.53	\$17.68	\$16.78	\$18.34	\$20.19	\$22.42	\$24.70	\$18.76	\$16.90	\$24.70
Free Cash Flow per Share	\$0.96	\$1.34	\$2.49	\$2.13	\$1.21	\$2.15	\$1.28	\$2.20	\$2.60	\$2.16	\$2.52	\$3.11	\$6.92	\$6.85	\$10.39
Cash Per Share	\$12.67	\$13.76	\$15.81	\$17.55	\$26.29	\$17.54	\$16.09	\$18.08	\$20.10	\$21.70	\$22.09	\$24.65	\$17.64	\$18.21	\$24.65
Net Cash Per Share	\$9.44	\$9.75	\$11.83	\$13.44	\$14.27	\$5.45	\$4.09	\$6.11	\$8.15	\$9.75	\$11.71	\$14.27	\$13.51	\$6.16	\$14.27

Source: Company Reports & Barclays Research

FIGURE 6
NVDA Cash Flow Statement

Nvidia															
FY End: January	Apr-19	Jul-19	Oct-19	Jan-20	Apr-20	Jul-20	Oct-20	Jan-21	Apr-21	Jul-21	Oct-21	Jan-22	2020	2021	2022
\$ in millions	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4QE	1QE	2QE	3QE	4QE	FY	FYE	FYE
CASH FLOW															
Cash Flows from Operations															
Net income	\$394	\$553	\$898	\$950	\$917	\$622	\$1,336	\$1,223	\$1,144	\$1,306	\$1,549	\$1,582	\$2,795	\$4,098	\$5,580
Stock-based compensation expense	178	223	223	220	224	374	383	383	383	383	383	383	844	1,364	1,532
Depreciation and amortization	91	92	92	106	107	404	299	299	299	299	299	299	381	1,109	1,196
Deferred income taxes	0	0	0	23	16	(80)	(53)	(53)	(53)	(53)	(53)	(53)	23	(170)	(212)
Other	(44)	18	26	0	4	(8)	2	0	0	0	0	0	0	(2)	0
<i>Changes in Operating Assets and Liabilities:</i>															
Accounts receivable	182	(319)	105	(202)	(249)	44	(463)	(97)	167	(183)	(261)	(9)	(234)	(765)	(285)
Inventories	153	225	153	66	(151)	54	(93)	(48)	48	(231)	(199)	53	597	(238)	(328)
Prepaid expenses and other current assets	5	31	19	22	(8)	42	(443)	0	0	0	0	0	77	(409)	0
Deposits and other assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accounts payable	(123)	78	136	104	71	(8)	225	(5)	(93)	93	126	(34)	195	283	93
Accrued liabilities and other LT liabilities	(116)	35	(12)	176	(22)	122	86	0	0	0	0	0	83	186	0
Net Cash from Operations	\$720	\$936	\$1,640	\$1,465	\$909	\$1,566	\$1,279	\$1,703	\$1,895	\$1,615	\$1,845	\$2,221	\$4,761	\$5,457	\$7,576
Cash Flow from Investing															
PP&E	(\$128)	(\$113)	(\$103)	(\$144)	(\$155)	(\$217)	(\$473)	(\$313)	(\$250)	(\$250)	(\$250)	(\$250)	(\$488)	(\$1,158)	(\$1,000)
Acquisition of Business	0	0	0	0	(34)	(7,137)	(1,353)	0	0	0	0	0	0	(8,524)	0
Proceeds from (Purchases of) Marketable Sec.	1,623	3,660	1,363	2	(860)	(6,135)	(178)	0	0	0	0	0	6,648	(7,173)	0
Other	0	(2)	(4)	(9)	(6)	0	3	0	0	0	0	0	(15)	(3)	0
Net Cash from Investing	\$1,495	\$3,545	\$1,256	(\$151)	(\$1,055)	(\$13,489)	(\$2,001)	(\$313)	(\$250)	(\$250)	(\$250)	(\$250)	\$6,145	(\$16,858)	(\$1,000)
Cash Flows from Financing															
Proceeds from (repurchase of) of common	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$250)	(\$250)	(\$250)	(\$250)	\$0	\$0	(\$1,000)
Proceeds from employee stock plans	83	0	63	2	88	6	96	0	0	0	0	0	148	190	0
Payment of dividends to stockholders	(97)	(98)	(97)	(98)	(98)	(99)	(99)	(101)	(101)	(101)	(101)	(101)	(390)	(397)	(405)
Proceeds from (repayment of) notes	0	0	0	0	4,979	(8)	0	0	0	0	(998)	0	0	4,971	(998)
Payments related to tax on restricted stock	0	0	0	(87)	(222)	(196)	(298)	0	0	0	0	0	(87)	(716)	0
Other	(211)	(50)	(202)	0	(3)	0	0	0	0	0	0	0	(463)	(3)	0
Net Cash from Financing	(\$225)	(\$148)	(\$236)	(\$183)	\$4,744	(\$297)	(\$301)	(\$101)	(\$351)	(\$351)	(\$1,349)	(\$351)	(\$792)	\$4,045	(\$2,403)
Cash and Cash eqv at beginning	\$782	\$2,772	\$7,105	\$9,765	\$10,896	\$15,494	\$3,274	\$2,251	\$3,540	\$4,834	\$5,847	\$6,093	\$782	\$10,896	\$3,540
Net Increase in Cash and Cash eqv.	1,990	4,333	2,660	1,131	4,598	(12,220)	(1,023)	1,289	1,294	1,013	245	1,620	10,114	(7,356)	4,172
Cash and Cash eqv at end	2,772	7,105	9,765	10,896	15,494	3,274	2,251	3,540	4,834	5,847	6,093	7,713	10,896	3,540	7,713
Marketable Securities	5,030	1,370	4	1	860	7,707	7,888	7,888	7,888	7,888	7,888	7,888	1	7,888	7,888
Total Cash and Cash eqv plus MS at end	\$7,802	\$8,475	\$9,769	\$10,897	\$16,354	\$10,981	\$10,139	\$11,428	\$12,722	\$13,735	\$13,981	\$15,601	\$10,897	\$11,428	\$15,601
CHECK	7,802	8,475	9,769	10,897	16,354	10,981	10,139	11,428	12,722	13,735	13,981	15,601	10,897	11,428	15,601
Cash Flow from Operations	\$720	\$936	\$1,640	\$1,465	\$909	\$1,566	\$1,279	\$1,703	\$1,895	\$1,615	\$1,845	\$2,221	\$4,761	\$5,457	\$7,576
Capex	(128)	(113)	(103)	(144)	(155)	(217)	(473)	(313)	(250)	(250)	(250)	(250)	(488)	(1,158)	(1,000)
Free Cash Flow	\$592	\$823	\$1,537	\$1,321	\$754	\$1,349	\$806	\$1,390	\$1,645	\$1,365	\$1,595	\$1,971	\$4,273	\$4,299	\$6,576

Source: Company Reports & Barclays Research

FIGURE 7
 NVDA/ARM PF Merger Model

NVDA/ARM Period Ending \$ in millions	Apr-21 1QE	Jul-21 2QE	Oct-21 3QE	Jan-22 4QE	Apr-22 1QE	Jul-22 2QE	Oct-22 3QE	Jan-23 4QE	2022 FYE	2023 FYE	2024 FYE
Revenues (NVDA)	\$4,518	\$4,851	\$5,327	\$5,344	\$5,183	\$5,546	\$6,212	\$6,336	\$20,039	\$23,277	\$26,768
QoQ	-6.3%	7.4%	9.8%	0.3%	-3.0%	7.0%	12.0%	2.0%			
YoY	46.7%	25.5%	12.7%	10.8%	14.7%	14.3%	16.6%	18.6%	21.5%	16.2%	15.0%
Revenues (ARM ex ISG)	\$437	\$416	\$436	\$471	\$434	\$447	\$469	\$516	\$1,761	\$1,865	\$1,958
QoQ	5.0%	-5.0%	5.0%	8.0%	-8.0%	3.0%	5.0%	10.0%			
YoY	-8.5%	5.3%	-3.5%	13.1%	-0.9%	7.5%	7.5%	9.4%	1.1%	5.9%	5.0%
Revenue (Combined)	\$4,955	\$5,267	\$5,763	\$5,815	\$5,617	\$5,993	\$6,680	\$6,852	\$21,800	\$25,141	\$28,726
QoQ	-5.4%	6.3%	9.4%	0.9%	-3.4%	6.7%	11.5%	2.6%			
YoY	39.3%	23.6%	11.3%	11.0%	13.4%	13.8%	15.9%	17.8%	19.5%	15.3%	14.3%
Cost of Goods (NVDA)	1,516	1,658	1,849	1,797	1,762	1,886	2,112	2,154	6,820	7,914	8,833
Cost of Goods (ARM)					26	27	28	31	0	112	117
Cost of Goods (Combined)	1,516	1,658	1,849	1,797	1,788	1,912	2,140	2,185	6,820	8,026	8,951
Gross Profit (NVDA)	3,002	3,193	3,478	3,546	3,421	3,660	4,100	4,182	13,220	15,363	17,935
Gross Profit (ARM)					408	420	441	485	0	1,753	1,840
Gross Profit (Combined w/ Synergies)	3,002	3,193	3,478	3,546	3,828	4,080	4,540	4,666	13,220	17,115	19,775
R&D (NVDA)	875	882	893	904	931	939	941	943	3,554	3,755	4,018
R&D (ARM)					140	143	145	147	0	575	598
R&D (Combined)	875	882	893	904	1,071	1,082	1,086	1,090	3,554	4,330	4,616
SG&A (NVDA)	310	314	315	317	327	331	333	335	1,256	1,324	1,403
SG&A (ARM)					120	122	124	126	0	492	507
SG&A (Combined)	310	314	315	317	447	453	457	461	1,256	1,816	1,910
Opex (NVDA)	1,185	1,196	1,209	1,221	1,258	1,270	1,274	1,278	4,811	5,079	5,422
Opex (ARM)					260	265	269	273	0	1,067	1,105
Opex Synergies					0	10	20	25	0	55	100
Opex (Combined w/ Synergies)	1,185	1,196	1,209	1,221	1,518	1,525	1,523	1,526	4,811	6,091	6,426
EBIT (NVDA)	1,817	1,998	2,270	2,325	2,163	2,391	2,826	2,904	8,409	10,283	12,513
EBIT (ARM)					148	155	172	212	0	686	736
EBIT (Combined w/ Synergies)	1,817	1,998	2,270	2,325	2,311	2,555	3,018	3,141	8,409	11,024	13,349
Interest Inc (Exp) (NVDA)	(54)	(53)	(52)	(51)	(50)	(49)	(48)	(47)	(210)	(194)	(194)
Interest (Less Cash)					(3)	(3)	(3)	(3)	0	(12)	(12)
Total Interest Inc (Exp)	(54)	(53)	(52)	(51)	(53)	(52)	(51)	(50)	(210)	(206)	(206)
PBT (NVDA)	1,763	1,945	2,218	2,274	2,113	2,342	2,778	2,857	8,199	10,089	12,319
PBT (ARM)					148	155	172	212	0	686	736
PBT (Combined w/ Synergies)	1,763	1,945	2,218	2,274	2,258	2,503	2,967	3,091	8,199	10,818	13,143
Taxes (NVDA)	176	194	222	227	211	234	278	286	820	1,009	1,232
Taxes (ARM)					18	19	21	25	0	82	88
Taxes (Combined w/ Synergies)	176	194	222	227	229	253	298	311	820	1,096	1,329
Net Income (NVDA)	1,587	1,750	1,996	2,046	1,902	2,107	2,500	2,571	7,379	9,080	11,087
Net Income (ARM)					130	136	151	186	0	604	647
Net Income (Combined w/ Synergies)	1,587	1,750	1,996	2,046	2,029	2,251	2,668	2,780	7,379	9,723	11,814
Fully Diluted Shares (NVDA)	633	633	633	633	626	626	626	626	633	626	623
Fully Diluted Shares (Combined)	633	633	633	633	670	670	670	670	633	670	667
Pro Forma EPS (NVDA)	\$2.51	\$2.76	\$3.15	\$3.23	\$3.04	\$3.37	\$3.99	\$4.11	\$11.66	\$14.51	\$17.80
Pro Forma EPS (ARM)										\$0.00	\$0.0
Pro Forma EPS (Combined w/ Syn)	\$2.51	\$2.76	\$3.15	\$3.23	\$3.03	\$3.36	\$3.98	\$4.15	\$11.66	\$14.50	\$17.70
Accretion					(\$0.01)	(\$0.01)	(\$0.01)	\$0.04		(\$0.00)	(\$0.09)
Accretion %					(0.4%)	(0.3%)	(0.3%)	1.0%		(0.0%)	(0.5%)
GM (NVDA)	66.4%	65.8%	65.3%	66.4%	66.0%	66.0%	66.0%	67.0%	66.0%	66.0%	67.0%
GM (ARM)	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%		94.0%	94.0%
GM (Synergies)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
GM (Combined)	60.6%	60.6%	60.3%	61.0%	68.2%	68.1%	68.0%	68.1%	60.6%	68.1%	68.8%
R&D (NVDA)	19.4%	18.2%	16.8%	16.9%	18.0%	16.9%	15.2%	14.9%	17.7%	16.1%	15.0%
R&D (ARM)	0.0%	0.0%	0.0%	0.0%	32.3%	32.0%	30.9%	28.5%		30.8%	30.5%
R&D (Combined)	17.7%	16.7%	15.5%	15.6%	19.1%	18.1%	16.3%	15.9%	16.3%	17.2%	16.1%
SG&A (NVDA)	6.9%	6.5%	5.9%	5.9%	6.3%	6.0%	5.4%	5.3%	6.3%	5.7%	5.2%
SG&A (ARM)	0.0%	0.0%	0.0%	0.0%	27.7%	27.3%	26.4%	24.4%		26.4%	25.9%
SG&A (Combined)	6.3%	6.0%	5.5%	5.5%	7.9%	7.6%	6.8%	6.7%	5.8%	7.2%	6.6%
EBIT Margin (NVDA)	40.2%	41.2%	42.6%	43.5%	41.7%	43.1%	45.5%	45.8%	42.0%	44.2%	46.7%
EBIT Margin (ARM)	0.0%	0.0%	0.0%	0.0%	34.0%	34.7%	36.6%	41.1%		36.8%	37.6%
EBIT Margin (Combined w/ Syn)	36.7%	37.9%	39.4%	40.0%	41.1%	42.6%	45.2%	45.8%	38.6%	43.8%	46.5%
Tax Rate (NVDA)	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Tax Rate (ARM)					12.0%	12.0%	12.0%	12.0%		12.0%	12.0%
Tax Rate (Combined)	10.0%	10.0%	10.0%	10.0%	10.1%	10.1%	10.1%	10.1%	10.0%	10.1%	10.1%
Total Synergies	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.0	\$20.0	\$25.0	\$0.0	\$55.0	\$100.0
Annualized Synergies	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$40.0	\$80.0	\$100.0			
Annualized Accretion	\$0.00	\$0.00	\$0.00	\$0.00	(\$0.05)	(\$0.04)	(\$0.05)	\$0.16	\$0.00	(\$0.00)	(\$0.09)

Source: Company reports, Barclays Research

*for illustrative purposes only

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Primary Stocks (Ticker, Date, Price)

NVIDIA Corp. (NVDA, 18-Nov-2020, USD 537.15), Overweight/Neutral, CD/CE/J/K/M

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NVIDIA Corp. (NVDA / NVDA)

USD 537.15 (18-Nov-2020)

Stock Rating

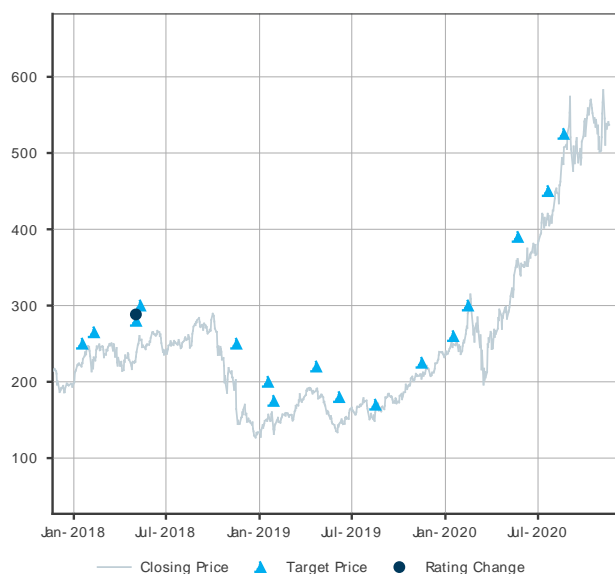
OVERWEIGHT

Industry View

NEUTRAL

Rating and Price Target Chart - USD (as of 18-Nov-2020)

Currency=USD



Publication Date	Closing Price	Rating	Adjusted Price Target
20-Aug-2020	485.64		525.00
20-Jul-2020	420.43		450.00
22-May-2020	361.05		390.00
14-Feb-2020	289.79		300.00
16-Jan-2020	248.93		260.00
15-Nov-2019	204.19		225.00
16-Aug-2019	159.56		170.00
06-Jun-2019	143.78		180.00
22-Apr-2019	188.47		220.00
28-Jan-2019	138.01		175.00
17-Jan-2019	151.72		200.00
16-Nov-2018	164.43		250.00
11-May-2018	254.53		300.00
03-May-2018	232.99	Overweight	280.00
09-Feb-2018	232.08		265.00
17-Jan-2018	224.72		250.00

On 18-Nov-2017, prior to any intra-day change that may have been published, the rating for this security was Equal Weight, and the adjusted price target was 225.00.

Source: Bloomberg, Barclays Research

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Valuation Methodology: Our price target of \$550 is based upon 58x our FY22 non-GAAP (incl SBC) EPS of \$9.46.

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