

## Autodesk

## 4Q24 Wrap: Core business healthy

Reiterate Rating: NEUTRAL | PO: 300.00 USD | Price: 258.17 USD

## Model for growth coming into focus

Autodesk provided more details on its transaction model transition and updated guidance for FY25. Management expects roughly \$600mn in contra revenue to move to S&M over the next 2+ years with an ~\$50mn impact from the transaction model change in FY25. Guidance for 9% to 11% revenue growth in FY25 was better than projected and normalizes to 9.5% to 11.5% excluding the impact from EBAs, acquisitions, FX and the transaction model change. 4Q results and commentary removed some of the opaqueness and uncertainty that existed since FY3Q24 results.

## 4Q24 rev/FCF beat, FY25 guidance noisy but solid

ADSK reported 4Q24 total revenue of \$1.469bn (+11.5% y/y), above our estimate of \$1.434bn. Total billings of \$1.710bn (-19% y/y) was above consensus of \$1.687bn. Management introduced FY25 revenue guidance of \$5.990bn-\$6.090bn (+9% to 11%), as compared to us/consensus at \$6.022bn/\$5.963bn. The company also introduced FY25 adjusted OpM, FCF, and billings guidance at roughly 35.5% (Street at 35.9%), \$1.465bn (Street at \$1.462bn), and \$5.885bn (Street at \$5.831bn).

## Raising rev ests, lowering OpMs to reflect model change

We are increasing our FY25 and FY26 revenue estimates by 0.2%/2.5% to reflect solid results, guidance, and management commentary regarding the financial impact of ADSK's new transaction model. We are also lowering our FY25/FY26 OpM estimates by 100bps/280bps primarily due to the new transaction model, resulting in slightly lower operating income estimates.

## Reiterate Neutral, but raising PO to \$300 from (\$280)

Our Neutral rating is based on our constructive view of longer-term industry growth and expansion into new verticals counterbalanced by a cautious assessment of macro headwinds. Our new \$300 PO is based on an EV/EBITDA multiple of 26x our CY25 EBITDA estimate of \$2.5bn (from 26x CY24E, we roll forward our multiple and adjust for a more favorably growth outlook). The 26x multiple is slightly above the design software peer group average of 24x. We believe a slight premium multiple is warranted by ADSK's durable business model, high revenue visibility and favorable margin profile.

Estimates (Jan) (US\$)	2023A	2024A	2025E	2026E	2027E
EPS	6.64	7.60	8.03	9.04	10.09
GAAP EPS	3.78	4.19	4.57	5.53	6.41
EPS Change (YoY)	31.0%	14.5%	5.7%	12.6%	11.6%
Consensus EPS (Bloomberg)			8.15	9.13	NA
DPS	0	0	0	0	0
Valuation (Jan)					
P/E	38.9x	34.0x	32.2x	28.6x	25.6x
GAAP P/E	68.3x	61.6x	56.5x	46.7x	40.3x
EV / EBITDA*	29.5x	27.1x	25.3x	22.6x	20.3x
Free Cash Flow Yield*	3.6%	2.3%	2.7%	3.3%	4.5%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 9.

29 February 2024

## Equity

## Key Changes

(US\$)	Previous	Current
Price Obj.	280.00	300.00
2025E Rev (m)	6,021.5	6,034.0
2026E Rev (m)	6,785.7	6,953.8
2027E Rev (m)	NA	7,662.4
2025E EPS	8.14	8.03
2026E EPS	9.45	9.04
2027E EPS	NA	10.09

**Michael J. Funk**  
Research Analyst  
BofAS  
+1 646 855 5664  
[michael.j.funk@bofa.com](mailto:michael.j.funk@bofa.com)

**Matt Bullock**  
Research Analyst  
BofAS  
+1 646 556 2903  
[mattthew.bullock2@bofa.com](mailto:mattthew.bullock2@bofa.com)

## Stock Data

Price	258.17 USD
Price Objective	300.00 USD
Date Established	29-Feb-2024
Investment Opinion	B-2-9
52-Week Range	188.38 USD - 269.53 USD
Mkt Val (mn) / Shares Out (mn)	55,765 USD / 216.0
Free Float	99.8%
Average Daily Value (mn)	302.49 USD
BofA Ticker / Exchange	ADSK / NAS
Bloomberg / Reuters	ADSK US / ADSK.OQ
ROE (2025E)	66.0%
Net Dbt to Eqty (Jan-2024A)	21.1%
ESGMeter <sup>TM</sup>	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".

**BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Refer to important disclosures on page 10 to 12. Analyst Certification on page 7. Price Objective Basis/Risk on page 7.**

12666056

Timestamp: 29 February 2024 09:07PM EST

# iQprofile<sup>SM</sup> Autodesk

## iQmethod<sup>SM</sup> – Bus Performance\*

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Return on Capital Employed	28.5%	29.3%	28.3%	26.1%	23.6%
Return on Equity	144.9%	109.5%	66.0%	45.5%	35.3%
Operating Margin	35.7%	35.7%	35.1%	34.3%	34.8%
Free Cash Flow	2,031	1,282	1,480	1,825	2,489

## iQmethod<sup>SM</sup> – Quality of Earnings\*

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Cash Realization Ratio	1.4x	0.8x	0.9x	1.0x	1.2x
Asset Replacement Ratio	0.3x	0.2x	0.2x	0.3x	0.3x
Tax Rate	17.0%	18.0%	18.0%	18.0%	18.0%
Net Debt-to-Equity Ratio	29.2%	21.1%	-30.3%	-53.9%	-72.5%
Interest Cover	NA	NA	NA	NA	NA

## Income Statement Data (Jan)

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Sales	5,005	5,497	6,034	6,954	7,662
% Change	14.1%	9.8%	9.8%	15.2%	10.2%
Gross Profit	4,624	5,080	5,553	6,413	7,077
% Change	14.1%	9.9%	9.3%	15.5%	10.4%
EBITDA	1,935	2,101	2,256	2,527	2,807
% Change	25.2%	8.6%	7.4%	12.0%	11.1%
Net Interest & Other Income	(44)	40	0	0	0
<b>Net Income (Adjusted)</b>	<b>1,445</b>	<b>1,642</b>	<b>1,736</b>	<b>1,958</b>	<b>2,189</b>
<b>% Change</b>	<b>28.3%</b>	<b>13.6%</b>	<b>5.8%</b>	<b>12.8%</b>	<b>11.8%</b>

## Free Cash Flow Data (Jan)

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Net Income from Cont Operations (GAAP)	1,445	1,642	1,736	1,958	2,189
Depreciation & Amortization	150	139	139	139	138
Change in Working Capital	692	(311)	(234)	(117)	311
Deferred Taxation Charge	0	0	0	0	0
Other Adjustments, Net	(216)	(157)	(127)	(116)	(105)
Capital Expenditure	(40)	(31)	(34)	(39)	(43)
<b>Free Cash Flow</b>	<b>2,031</b>	<b>1,282</b>	<b>1,480</b>	<b>1,825</b>	<b>2,489</b>
<b>% Change</b>	<b>37.7%</b>	<b>-36.9%</b>	<b>15.4%</b>	<b>23.3%</b>	<b>36.4%</b>
Share / Issue Repurchase	(977)	(665)	105	100	99
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	(350)	0	0	0	0

## Balance Sheet Data (Jan)

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Cash & Equivalents	1,947	1,892	3,315	5,083	7,515
Trade Receivables	961	876	957	1,106	1,213
Other Current Assets	433	811	833	836	883
Property, Plant & Equipment	NA	NA	NA	NA	NA
Other Non-Current Assets	6,097	6,333	6,228	6,128	6,034
<b>Total Assets</b>	<b>9,438</b>	<b>9,912</b>	<b>11,334</b>	<b>13,154</b>	<b>15,644</b>
Short-Term Debt	0	0	300	0	500
Other Current Liabilities	4,000	4,351	4,631	4,875	5,366
Long-Term Debt	2,281	2,284	1,984	2,284	1,784
Other Non-Current Liabilities	2,012	1,422	1,011	803	776
<b>Total Liabilities</b>	<b>8,293</b>	<b>8,057</b>	<b>7,926</b>	<b>7,962</b>	<b>8,426</b>
<b>Total Equity</b>	<b>1,145</b>	<b>1,855</b>	<b>3,408</b>	<b>5,193</b>	<b>7,219</b>
<b>Total Equity &amp; Liabilities</b>	<b>9,438</b>	<b>9,912</b>	<b>11,334</b>	<b>13,154</b>	<b>15,644</b>

\* For full definitions of iQmethod<sup>SM</sup> measures, see page 9.

## Company Sector

Server & Enterprise Software

## Company Description

Autodesk is a design software and services company providing a range of solutions for customers in architectural, engineering, construction, manufacturing, geospatial mapping and digital media markets. The company sells 2D horizontal design solutions like AutoCAD and AutoCAD LT 3D model-based design solutions that are widely used design software tools. Autodesk products allow users to simulate and analyze real world performance by creating digital prototypes early in the design process.

## Investment Rationale

We rate ADSK Neutral. Positive secular tailwinds including digitization and growth in new verticals is offset by near term macroeconomic and negative estimate revision risk in our view. Valuation is largely in line with design software peers and a premium to vertical SaaS and <20% growers which reflects a resilient business model and profitability.

## Stock Data

Average Daily Volume 1,171,689

## Quarterly Earnings Estimates

	2024	2025
Q1	1.55A	1.77E
Q2	1.91A	1.99E
Q3	2.07A	2.12E
Q4	2.09A	2.15E

## 4Q24 rev/FCF beat, FY25 guidance noisy but solid

ADSK reported 4Q24 total revenue of \$1.469bn (+11.5% y/y), above our estimate of \$1.434bn. Total billings of \$1.710bn (-19% y/y) was above consensus of \$1.687bn. ADSK's net revenue retention revenue rate (NRR) held steady between 100%-110% (cc), and management expects this range to persist. Adjusted operating margin was reported at 35.5% compared to 36.3% in 4Q23, above our estimate of 34.8% but below consensus of 35.9%. Management introduced FY25 revenue guidance of \$5.990bn-\$6.090bn (+9% to 11%), as compared to us/consensus at \$6.022bn/\$5.963bn. The company also introduced FY25 adjusted OpM, FCF, and billings guidance at roughly 35.5% (Street at 35.9%), \$1.465bn (Street at \$1.462bn), and \$5.885bn (Street at \$5.831bn). ADSK also introduced 1Q25 revenue guidance of \$1.393bn at the mid (consensus \$1.388bn) and non-GAAP EPS guidance of \$1.76 (consensus \$1.77).

### Exhibit 1: ADSK beat our rev estimate by 2.4%

Variance analysis

\$ in millions (except per share data)	BofA Estimates	4Q24 Actuals	Variance
Other	\$92	116	26.4%
Subscriptions & maintenance	\$1,342	1,353	0.8%
<b>Total revenue</b>	<b>\$1,434</b>	<b>1,469</b>	<b>2.4%</b>
Cost of revenues	\$113	106	-5.9%
<b>Gross profit</b>	<b>\$1,321</b>	<b>1,363</b>	<b>3.1%</b>
<b>Operating expenses</b>			
Sales & marketing	\$409	423	3.5%
Research & development	\$281	277	-1.5%
General & administration	\$132	141	6.9%
Amortization of purchased intangibles	\$0	-	NA
Total operating expenses	\$822	841	2.3%
<b>Operating income (loss)</b>	<b>\$500</b>	<b>522</b>	<b>4.5%</b>
Total other income (Expense)	\$9	28	213.9%
Income before Taxes	\$509	550	8.1%
Provision for Income Taxes	(\$92)	(99)	8.1%
<b>Net Income - Pro forma</b>	<b>\$417</b>	<b>451</b>	<b>8.1%</b>
<b>EPS (diluted) - Pro forma</b>	<b>\$1.94</b>	<b>\$2.09</b>	<b>7.6%</b>
<b>Net Income - GAAP</b>	<b>\$213</b>	<b>282</b>	<b>32.2%</b>
<b>EPS (diluted) - GAAP</b>	<b>\$0.99</b>	<b>1.31</b>	<b>31.5%</b>
Shares outstanding (Non-GAAP diluted)	215	216	0.5%
<b>Margin Analysis</b>			
<b>Total gross margin</b>	<b>92.1%</b>	<b>92.8%</b>	<b>0.6%</b>
Sales & marketing	28.5%	28.8%	0.3%
Research & development	19.6%	18.9%	-0.7%
General & administration	9.2%	9.6%	0.4%
Amortization of purchased intangibles	0.0%	0.0%	0.0%
<b>Operating Margin</b>	<b>34.8%</b>	<b>35.5%</b>	<b>0.7%</b>
Pre-tax margin	35.5%	37.4%	2.0%
Tax rate - pro forma	18.0%	18.0%	0.0%
<b>Net Margin</b>	<b>29.1%</b>	<b>30.7%</b>	<b>1.6%</b>
<b>Balance Sheet &amp; Cash Flow Data</b>			
Cash & equivalents	\$2,329	2,246	-3.6%
Deferred revenue	\$4,339	4,264	-1.73%
Cash flow from operations	\$396	437	10.3%
<b>Free cash flow</b>	<b>\$389</b>	<b>\$427</b>	<b>9.8%</b>

Source: BofA Global Research estimates, company filings

BofA GLOBAL RESEARCH



**Exhibit 2: We are increasing our FY25 and FY26 revenue estimates**

Estimate changes

	1Q25E				2025E				2026E			
	Previous Estimate	Previous Y/Y Growth	New Estimate	New Y/Y Growth	Previous Estimate	Previous Y/Y Growth	New Estimate	New Y/Y Growth	Previous Estimate	Previous Y/Y Growth	New Estimate	New Y/Y Growth
Other	\$ 55.8	-10.0%	\$ 67.0	8.0%	\$ 272.5	-10.0%	\$ 361.4	10.5%	\$ 286.1	5.0%	\$ 379.4	5.0%
Subscriptions & Maintenance	\$1,339.8	11.0%	\$ 1,327.7	10.0%	\$5,749.0	11.4%	\$ 5,672.7	9.7%	\$6,499.5	13.1%	\$ 6,574.4	15.9%
<b>Total Revenue</b>	<b>\$1,396</b>	<b>10.0%</b>	<b>1,395</b>	<b>9.9%</b>	<b>\$6,022</b>	<b>10.2%</b>	<b>6,034</b>	<b>9.8%</b>	<b>\$6,786</b>	<b>12.7%</b>	<b>6,954</b>	<b>15.2%</b>
Operating Income	\$469	16.1%	467	15.5%	\$2,174	12.1%	2,117	7.9%	\$2,522	16.0%	2,387	12.8%
Net Income - Pro forma	\$376	12.7%	382	14.4%	\$1,754	9.0%	1,736	5.8%	\$2,041	16.4%	1,958	12.8%
EPS (diluted) - Pro forma	\$1.75	13.2%	\$1.77	14.3%	\$8.14	9.0%	\$8.03	5.6%	\$9.45	16.0%	\$9.04	12.6%

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

**Exhibit 3: ADSK generated \$5.5bn in FY24 revenues**

Income statement

	Year	Year	Apr-23	Jul-23	Oct-23	Jan-24	Year	Apr-24	Jul-24	Oct-24	Jan-25	Year	Year	Year
\$mn except per share data	FY22A	FY23A	1Q24A	2Q24A	3Q24A	4Q24A	FY24A	1Q25E	2Q25E	3Q25E	4Q25E	FY25E	FY26E	FY27E
<b>Revenues</b>														
Other	250	289	62	61	88	116	327	67	67	99	129	361	379	398
Subscriptions & Maintenance	4,137	4,716	1,207	1,284	1,326	1,353	5,170	1,328	1,410	1,459	1,477	5,673	6,574	7,264
<b>Total Revenue</b>	<b>4,386</b>	<b>5,005</b>	<b>1,269</b>	<b>1,345</b>	<b>1,414</b>	<b>1,469</b>	<b>5,497</b>	<b>1,395</b>	<b>1,477</b>	<b>1,557</b>	<b>1,605</b>	<b>6,034</b>	<b>6,954</b>	<b>7,662</b>
Y/Y rev growth	<b>16%</b>	<b>14%</b>	8%	9%	10.5%	11.5%	<b>9.8%</b>	10%	10%	10%	9%	<b>9.8%</b>	<b>15%</b>	<b>10%</b>
<b>Cost of Revenues</b>														
Other	58	67	17	17	17	17	68	15	15	22	29	82	86	90
Subscriptions & Maintenance	273	309	87	85	85	87	344	90	99	102	103	394	450	490
Amortization of developed technology	2	5	2	-	1	2	5	1	1	1	1	5	5	5
<b>Total Cost of Revenues</b>	<b>332</b>	<b>381</b>	<b>106</b>	<b>102</b>	<b>103</b>	<b>106</b>	<b>417</b>	<b>106</b>	<b>115</b>	<b>126</b>	<b>134</b>	<b>481</b>	<b>541</b>	<b>585</b>
<b>Gross Profit</b>	<b>4,054</b>	<b>4,624</b>	<b>1,163</b>	<b>1,243</b>	<b>1,311</b>	<b>1,363</b>	<b>5,080</b>	<b>1,288</b>	<b>1,362</b>	<b>1,431</b>	<b>1,471</b>	<b>5,553</b>	<b>6,413</b>	<b>7,077</b>
<b>Non-GAAP Operating Expenses</b>														
Sales & Marketing	1,388	1,482	394	375	373	423	1,565	429	414	436	457	1,736	2,108	2,342
Research & Development	893	952	258	269	261	277	1,065	279	291	293	298	1,161	1,317	1,428
General & Administration	376	405	107	109	130	141	487	113	133	143	149	539	600	638
Amortization of purchased intangibles	0.3	-	-	1	-	-	1	-	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>2,657</b>	<b>2,839</b>	<b>759</b>	<b>754</b>	<b>764</b>	<b>841</b>	<b>3,118</b>	<b>822</b>	<b>837</b>	<b>872</b>	<b>905</b>	<b>3,436</b>	<b>4,025</b>	<b>4,408</b>
<b>Total spend</b>	<b>2,989</b>	<b>3,220</b>					<b>3,535</b>					<b>3,917</b>	<b>4,566</b>	<b>4,994</b>
<b>Operating Income</b>	<b>1,397</b>	<b>1,785</b>	<b>404</b>	<b>489</b>	<b>547</b>	<b>522</b>	<b>1,962</b>	<b>467</b>	<b>525</b>	<b>559</b>	<b>567</b>	<b>2,117</b>	<b>2,387</b>	<b>2,669</b>
Operating margin	31.9%	35.7%	31.8%	36.4%	38.7%	35.5%	35.7%	33.5%	35.5%	35.9%	35.3%	35.1%	34.3%	34.8%
Other income (loss) (Interest, net)	(57)	(44)	4	11	(3)	28	40	-	-	-	-	-	-	-
<b>Earnings Before Taxes</b>	<b>1,341</b>	<b>1,741</b>	<b>408</b>	<b>500</b>	<b>544</b>	<b>550</b>	<b>2,002</b>	<b>467</b>	<b>525</b>	<b>559</b>	<b>567</b>	<b>2,117</b>	<b>2,387</b>	<b>2,669</b>
Income taxes	(214)	(296)	(74)	(90)	(97)	(99)	(360)	(85)	(94)	(100)	(102)	(381)	(429)	(480)
<b>Net Income - Pro forma</b>	<b>1,126</b>	<b>1,445</b>	<b>334</b>	<b>410</b>	<b>447</b>	<b>451</b>	<b>1,642</b>	<b>382</b>	<b>430</b>	<b>460</b>	<b>465</b>	<b>1,736</b>	<b>1,958</b>	<b>2,189</b>
<b>EPS (diluted) - Pro forma</b>	<b>\$5.07</b>	<b>\$6.64</b>	<b>\$1.55</b>	<b>\$1.91</b>	<b>\$2.07</b>	<b>\$2.09</b>	<b>\$7.60</b>	<b>\$1.77</b>	<b>\$1.99</b>	<b>\$2.12</b>	<b>\$2.15</b>	<b>\$8.03</b>	<b>\$9.04</b>	<b>\$10.09</b>

**Exhibit 3: ADSK generated \$5.5bn in FY24 revenues**

## Income statement

	Year	Year	Apr-23	Jul-23	Oct-23	Jan-24	Year	Apr-24	Jul-24	Oct-24	Jan-25	Year	Year	Year
Shares Outstanding (Basic)	220	217	215	214	214	214	214	214	214	214	214	214	215	215
Shares Outstanding (Fully diluted)	222	218	216	215	216	216	216	216	216	216	216	216	217	217

Source: BofA Global Research estimates, company filings

BofA GLOBAL RESEARCH

**Exhibit 4: ADSK ended FY24 with \$2.25bn in cash and equivalents**

## Balance sheet

\$ Thousands	Year FY22A	Year FY23A	Year FY24A	Apr-24 1Q25E	Jul-24 2Q25E	Oct-24 3Q25E	Jan-25 4Q25E	Year FY25E	Year FY26E	Year FY27E
<b>Current assets:</b>										
Cash and cash equivalents	1,528,400	1,947,000	1,892,000	2,436,115	2,470,080	3,173,232	3,315,449	3,315,449	5,083,314	7,514,750
Marketable securities	235,700	125,000	354,000	354,000	354,000	354,000	354,000	354,000	354,000	354,000
Accounts receivable, net	716,100	961,000	876,000	511,375	706,359	637,621	957,276	957,276	1,106,396	1,213,005
Prepaid expenses & other	283,600	308,000	457,000	400,208	443,080	461,380	479,321	479,321	482,394	528,876
<b>Total Current Assets</b>	<b>2,763,800</b>	<b>3,341,000</b>	<b>3,579,000</b>	<b>3,701,698</b>	<b>3,973,518</b>	<b>4,626,232</b>	<b>5,106,045</b>	<b>5,106,045</b>	<b>7,026,104</b>	<b>9,610,630</b>
Long term marketable securities	45,400	102,000	234,000	234,000	234,000	234,000	234,000	234,000	234,000	234,000
Computer equipment and furniture	162,500	144,000	121,000	116,314	107,531	94,723	86,229	86,229	49,336	7,576
Operating lease right-of-use asset	304,500	245,000	224,000	224,000	224,000	224,000	224,000	224,000	224,000	224,000
Purchased technologies	493,800	407,000	406,000	388,500	371,000	353,500	336,000	336,000	273,000	220,000
Goodwill, net	3,603,800	3,625,000	3,653,000	3,653,000	3,653,000	3,653,000	3,653,000	3,653,000	3,653,000	3,653,000
Deferred income taxes	740,700	1,014,000	1,093,000	1,093,000	1,093,000	1,093,000	1,093,000	1,093,000	1,093,000	1,093,000
Other Assets	492,300	560,000	602,000	602,000	602,000	602,000	602,000	602,000	602,000	602,000
<b>Total Assets</b>	<b>8,606,800</b>	<b>9,438,000</b>	<b>9,912,000</b>	<b>10,012,512</b>	<b>10,258,050</b>	<b>10,880,455</b>	<b>11,334,274</b>	<b>11,334,274</b>	<b>13,154,441</b>	<b>15,644,207</b>
<b>Current liabilities:</b>										
Accounts Payable	120,800	102,000	100,000	130,078	137,479	150,417	203,908	203,908	196,383	211,373
Accrued Compensation	341,300	358,000	476,000	345,075	351,717	305,203	361,832	361,832	371,799	403,352
Accrued Income Taxes	29,700	33,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000
Deferred Revenue	2,863,300	3,203,000	3,500,000	3,486,650	3,396,944	3,737,184	3,772,442	3,772,442	4,044,687	4,475,102
Operating lease liabilities	86,600	85,000	67,000	67,000	67,000	67,000	67,000	67,000	67,000	67,000
Current Portion of Debt	349,700	-	-	-	300,000	300,000	300,000	300,000	-	500,000
Other Accrued Liabilities	218,000	219,000	172,000	188,969	192,607	174,402	189,962	189,962	159,342	172,865
<b>Total Current Liabilities</b>	<b>4,009,400</b>	<b>4,000,000</b>	<b>4,351,000</b>	<b>4,253,772</b>	<b>4,481,746</b>	<b>4,770,207</b>	<b>4,931,145</b>	<b>4,931,145</b>	<b>4,875,211</b>	<b>5,865,692</b>
Long-term operating lease liabilities	345,800	300,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000
Long-Term Income Taxes Payable	19,800	164,000	168,000	168,000	168,000	168,000	168,000	168,000	168,000	168,000
Long-Term Deferred Income Taxes	29,400	32,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Long-Term Debt	2,277,900	2,281,000	2,284,000	2,284,000	1,984,000	1,984,000	1,984,000	1,984,000	2,284,000	1,784,000
Deferred Revenue	926,500	1,377,000	764,000	627,597	561,234	482,720	353,165	353,165	144,718	117,980
Other Liabilities	148,900	139,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000	190,000
<b>Total Liabilities</b>	<b>7,757,700</b>	<b>8,293,000</b>	<b>8,057,000</b>	<b>7,823,369</b>	<b>7,684,980</b>	<b>7,894,926</b>	<b>7,926,310</b>	<b>7,926,310</b>	<b>7,961,929</b>	<b>8,425,672</b>
<b>Stockholders' Equity</b>										
Common stock	2,923,100	3,325,000	3,802,000	3,980,359	4,168,476	4,377,803	4,596,082	4,596,082	5,413,093	6,281,621
Accumulated OCI	(124,000)	(185,000)	(234,000)	(234,000)	(234,000)	(234,000)	(234,000)	(234,000)	(234,000)	(234,000)
Retained earnings	(1,950,000)	(1,995,000)	(1,713,000)	(1,557,216)	(1,361,406)	(1,158,274)	(954,117)	(954,117)	13,419	1,170,914
<b>Total Stockholders' Equity</b>	<b>849,100</b>	<b>1,145,000</b>	<b>1,855,000</b>	<b>2,189,143</b>	<b>2,573,070</b>	<b>2,985,529</b>	<b>3,407,964</b>	<b>3,407,964</b>	<b>5,192,512</b>	<b>7,218,535</b>
<b>Total liabilities &amp; SE</b>	<b>8,606,800</b>	<b>9,438,000</b>	<b>9,912,000</b>	<b>10,012,512</b>	<b>10,258,050</b>	<b>10,880,455</b>	<b>11,334,274</b>	<b>11,334,274</b>	<b>13,154,441</b>	<b>15,644,207</b>

Source: BofA Global Research estimates, company filings

**Exhibit 5: ADSK generated \$1.31bn in CFO during FY24**

## Cash flow statement

	Year FY22A	Year FY23A	Year FY24A	Apr-24 1Q25E	Jul-24 2Q25E	Oct-24 3Q25E	Jan-25 4Q25E	Year FY25E	Year FY26E	Year FY27E
<b>Operating Activities:</b>										
Net income (loss)	497,000	823,000	906,000	215,134	247,247	262,221	264,476	989,078	1,198,548	1,388,814
Adjustments:										
Depreciation & amortization	148,100	150,000	139,000	32,077	33,969	35,815	36,922	138,783	139,077	137,924
Stock compensation expense	555,400	657,000	703,000	167,359	184,617	196,202	203,872	752,050	772,162	822,765
Net loss on fixed asset disposals	17,600	13,000	-	-	-	-	-	-	-	-
Tax benefits from ESOP	(7,800)	(277,000)	(86,000)	(21,500)	(19,375)	(15,469)	(6,586)	(62,930)	(55,449)	(53,637)
Lease-related asset impairment	103,700	34,000	14,000	-	-	-	-	-	-	-
Restructuring related reserve / other	-	(21,000)	(52,000)	(13,000)	(13,500)	(21,167)	(21,167)	(68,833)	(73,226)	(74,065)
Changes in NWC										
Accounts Receivable	(66,200)	(247,000)	86,000	364,625	(194,983)	68,738	(319,655)	(81,276)	(149,120)	(106,609)
Prepaid expense & other CAs	(133,500)	(3,000)	(77,000)	56,792	(42,871)	(18,300)	(17,941)	(22,321)	(3,073)	(46,482)
AP & accrued liabilities	9,900	(5,000)	(12,000)	(83,878)	17,680	(51,780)	125,680	7,702	(28,178)	60,066
Deferred Revenue	419,400	798,000	(316,000)	(149,753)	(156,069)	261,726	(94,296)	(138,393)	63,798	403,677
Accrued income taxes	(12,300)	149,000	8,000	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
<b>Net cash from operations</b>	<b>1,531,300</b>	<b>2,071,000</b>	<b>1,313,000</b>	<b>567,856</b>	<b>56,714</b>	<b>717,986</b>	<b>171,305</b>	<b>1,513,861</b>	<b>1,864,537</b>	<b>2,532,453</b>
<b>Investing Activities:</b>										
Net sales (purchases) of securities	(299,100)	(352,000)	(1,053,000)	-	-	-	-	-	-	-
Maturities of AFS securities	25,800	405,000	707,000	-	-	-	-	-	-	-
Purchases of restricted instruments	-	-	-	-	-	-	-	-	-	-
Capital expenditures	(56,000)	(40,000)	(31,000)	(9,891)	(7,687)	(5,506)	(10,928)	(34,012)	(39,184)	(43,163)
Acquisitions, net of cash required	(1,250,300)	(96,000)	(70,000)	-	-	-	-	-	-	-
Purchase of software technologies	(10,500)	(6,000)	(30,000)	-	-	-	-	-	-	-
Other investing activities	(4,500)	(54,000)	(25,000)	-	-	-	-	-	-	-
<b>Net cash from investing</b>	<b>(1,594,600)</b>	<b>(143,000)</b>	<b>(502,000)</b>	<b>(9,891)</b>	<b>(7,687)</b>	<b>(5,506)</b>	<b>(10,928)</b>	<b>(34,012)</b>	<b>(39,184)</b>	<b>(43,163)</b>
<b>Financing Activities:</b>										
(Decrease) increase in credit line	-	-	-	-	-	-	-	-	-	-
(Repayment) notes payable	997,000	(350,000)	-	-	-	-	-	-	-	-
Repurchases of common stock	(1,078,500)	(1,101,000)	(795,000)	-	-	-	-	-	-	-
Issuance of common stock	113,700	124,000	130,000	32,500	22,875	28,594	20,992	104,961	100,299	99,400
Taxes paid related to equity awards	(193,500)	(160,000)	(187,000)	(46,750)	(37,938)	(37,922)	(39,152)	(161,762)	(157,785)	(157,254)
Other Financing Activities	(7,300)	-	-	-	-	-	-	-	-	-
<b>Net cash from financing</b>	<b>(168,600)</b>	<b>(1,487,000)</b>	<b>(852,000)</b>	<b>(14,250)</b>	<b>(15,063)</b>	<b>(9,328)</b>	<b>(18,160)</b>	<b>(56,801)</b>	<b>(57,486)</b>	<b>(57,854)</b>
Effect of exchange rate changes	(11,900)	(22,000)	(14,000)	-	-	-	-	-	-	-
<b>Net increase (decrease) in cash</b>	<b>(243,800)</b>	<b>419,000</b>	<b>(55,000)</b>	<b>543,715</b>	<b>33,965</b>	<b>703,152</b>	<b>142,217</b>	<b>1,423,049</b>	<b>1,767,866</b>	<b>2,431,436</b>
Cash - beginning	1,772,200	1,528,400	1,947,400	1,892,400	2,436,115	2,470,080	3,173,232	1,892,400	3,315,449	5,083,315
Cash - ending	<b>1,528,400</b>	<b>1,947,400</b>	<b>1,892,400</b>	<b>2,436,115</b>	<b>2,470,080</b>	<b>3,173,232</b>	<b>3,315,449</b>	<b>3,315,449</b>	<b>5,083,315</b>	<b>7,514,751</b>

Source: BofA Global Research estimates, company filings

## Price objective basis & risk

### Autodesk (ADSK)

Our \$300 PO is based on an EV/EBITDA multiple of 26x our CY25 EBITDA estimate. The 26x multiple is slightly above the design software peer group average of 24x. We believe a slight premium multiple is warranted by the company's near-term growth outlook, durable business model, and favorable margin profile.

Downside risks to our PO are increased competition leading to higher churn, greater than expected headwinds to FCF in association with Autodesk's billing transition, spending reductions in the company's end markets arising from an economic slowdown and lower than expected net subscriber additions.

Upside risks to our PO are better than expected economic activity, greater than projected net subscriber additions and NR3, lower than expected impact of billing transition on FCF and better than expected execution leading to heightened operating margin expansion.

## Analyst Certification

I, Michael J. Funk, 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 - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	8x8	EGHT	EGHT US	Michael J. Funk
	Adobe	ADBE	ADBE US	Brad Sills
	Alarm.com	ALRM	ALRM US	Michael J. Funk
	Amplitude, Inc.	AMPL	AMPL US	Koji Ikeda, CFA
	Asana	ASAN	ASAN US	Michael J. Funk
	BILL	BILL	BILL US	Brad Sills
	Dynatrace	DT	DT US	Koji Ikeda, CFA
	Elastic NV	ESTC	ESTC US	Koji Ikeda, CFA
	GitLab Inc.	GTLB	GTLB US	Koji Ikeda, CFA
	Global-e Online Ltd.	GLBE	GLBE US	Koji Ikeda, CFA
	HubSpot	HUBS	HUBS US	Brad Sills
	Informatica Inc.	INFA	INFA US	Koji Ikeda, CFA
	Intapp Inc.	INTA	INTA US	Koji Ikeda, CFA
	Intuit	INTU	INTU US	Brad Sills
	JFrog Ltd	FROG	FROG US	Koji Ikeda, CFA
	MeridianLink, Inc.	MLNK	MLNK US	Koji Ikeda, CFA
	Microsoft Corporation	MSFT	MSFT US	Brad Sills
	Monday.com	MNDY	MNDY US	Michael J. Funk
	MongoDB Inc.	MDB	MDB US	Brad Sills
	nCino, Inc.	NCNO	NCNO US	Adam Bergere
	NICE Ltd.	NICE	NICE US	Michael J. Funk
	NICE Ltd.	NCSYF	NICE IT	Michael J. Funk
	PagerDuty	PD	PD US	Koji Ikeda, CFA
	PowerSchool Holdings, Inc.	PWSC	PWSC US	Koji Ikeda, CFA
	RingCentral	RNG	RNG US	Michael J. Funk
	Salesforce.com	CRM	CRM US	Brad Sills
	ServiceNow	NOW	NOW US	Brad Sills
	UiPath	PATH	PATH US	Brad Sills
	Unity	U	U US	Michael J. Funk
	Weave	WEAV	WEAV US	Michael J. Funk
	Workday Inc.	WDAY	WDAY US	Brad Sills
	Zeta Global	ZETA	ZETA US	Koji Ikeda, CFA





## US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	ZoomInfo	ZI	ZI US	Koji Ikeda, CFA
<b>NEUTRAL</b>				
	Autodesk	ADSK	ADSK US	Michael J. Funk
	Bentley Systems	BSY	BSY US	Michael J. Funk
	BigCommerce Holdings, Inc.	BIGC	BIGC US	Koji Ikeda, CFA
	Coveo	YCVO	CVO CN	Koji Ikeda, CFA
	Datadog Inc	DDOG	DDOG US	Koji Ikeda, CFA
	DocuSign	DOCU	DOCU US	Brad Sills
	Freshworks, Inc.	FRSH	FRSH US	Adam Bergere
	HashiCorp	HCP	HCP US	Brad Sills
	Jamf	JAMF	JAMF US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	LSPD	LSPD US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	YLSPD	LSPD CN	Koji Ikeda, CFA
	Oracle Corporation	ORCL	ORCL US	Brad Sills
	Paycom	PAYC	PAYC US	Adam Bergere
	Paylocity	PCTY	PCTY US	Adam Bergere
	Shopify, Inc.	SHOP	SHOP US	Brad Sills
	Snowflake	SNOW	SNOW US	Brad Sills
	Veeva Systems, Inc.	VEEV	VEEV US	Brad Sills
	Zoom Video Communications	ZM	ZM US	Michael J. Funk
<b>UNDERPERFORM</b>				
	AvidXchange, Inc.	AVDX	AVDX US	Brad Sills
	Blackbaud, Inc.	BLKB	BLKB US	Koji Ikeda, CFA
	BlackLine, Inc.	BL	BL US	Koji Ikeda, CFA
	C3.ai	AI	AI US	Brad Sills
	Confluent	CFLT	CFLT US	Brad Sills
	CS Disco, Inc.	LAW	LAW US	Koji Ikeda, CFA
	Dropbox	DBX	DBX US	Michael J. Funk
	Enfusion, Inc.	ENFN	ENFN US	Koji Ikeda, CFA
	Five9	FIVN	FIVN US	Michael J. Funk
	Guidewire Software, Inc.	GWRE	GWRE US	Michael J. Funk
	Smartsheet	SMAR	SMAR US	Michael J. Funk
	Twilio	TWLO	TWLO US	Michael J. Funk
	Vertex, Inc.	VERX	VERX US	Brad Sills
<b>RSTR</b>				
	CCC Intelligent Solutions	CCCS	CCCS US	Michael J. Funk
	Splunk	SPLK	SPLK US	Brad Sills



## iQmethod<sup>SM</sup> Measures Definitions

### Business Performance

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

### Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

### Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

EV / EBITDA

### Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

### Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash &amp; Equivalents

EBIT

### Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Other LT Liabilities

Enterprise Value

### Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization

Shareholders' Equity

Sales

N/A

N/A

### Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

### Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

Market Cap = Current Share Price × Current Basic Shares

Sales

Basic EBIT + Depreciation + Amortization

iQmethod<sup>SM</sup> is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

iQdatabase<sup>®</sup> is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

iQprofile<sup>SM</sup>, iQmethod<sup>SM</sup> are service marks of Bank of America Corporation. iQdatabase<sup>®</sup> is a registered service mark of Bank of America Corporation.

# Disclosures

## Important Disclosures

### Autodesk (ADSK) Price Chart



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 <sup>R1</sup>	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 <sup>R1</sup>	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%

<sup>R1</sup> 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.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

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%
Underperform	N/A	≥ 20%

<sup>R2</sup> Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the [Price Charts website](#), or call 1-800-MERRILL to have them mailed. BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Autodesk. The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Autodesk. BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Autodesk. The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Autodesk. BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Autodesk. BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: Autodesk. BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: Autodesk.



The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Autodesk. BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

## Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

**'BofA Securities' includes BofA Securities, Inc. ('BofAS') and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. 'BofA Securities' is a global brand for BofA Global Research.**

### Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at [www.bofam.com/BofASEdisclaimer](http://www.bofam.com/BofASEdisclaimer); BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

### General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not



deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BoFA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BoFA or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BoFA or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BoFA Securities, through business units other than BoFA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BoFA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BoFA for the provision of research services for a separate fee, and in connection therewith BoFA may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BoFA has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BoFA). If such recipient uses the services of BoFA in connection with the sale or purchase of a security referred to herein, BoFA may act as principal for its own account or as agent for another person. BoFA is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

#### **BoFA ESGMeter Methodology:**

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at [BoFA ESGMeter methodology](#). ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BoFA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

#### **Copyright and General Information:**

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BoFA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BoFA Securities. BoFA Global Research information is distributed simultaneously to internal and client websites and other portals by BoFA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BoFA Securities.

Materials prepared by BoFA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BoFA Securities, including investment banking personnel. BoFA Securities has established information barriers between BoFA Global Research and certain business groups. As a result, BoFA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BoFA Global Research personnel's knowledge of legal proceedings in which any BoFA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BoFA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BoFA or any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BoFA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BoFA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BoFA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BoFA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BoFA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BoFA Securities is under no obligation to update this information and BoFA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BoFA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BoFA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BoFA or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BoFA Securities nor any officer or employee of BoFA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.