

## Zscaler

# Maintain a positive stock view despite weakening billing trends

Reiterate Rating: BUY | PO: 145.00 USD | Price: 134.13 USD

## Solid 2Q results, long term thesis intact

Strong 2Q23 results but the billing trends were weak. Revenue/EPS of \$387mn/37c above Street's \$365mn/29c, with 390bps YoY increase in operating margin. However, billings growth of 34% coming in 300bps below market expectations due to worsening sales cycles, lower deal close rates and a rise of staggered deals at Enterprise level. We also believe management's 4Q billing growth targets are likely too high and assume certain normality in the market that we currently don't observe. Nevertheless, we look through the next few quarters and reiterate our Buy rating and \$145 PO, mainly due to strong underlying long term fundamentals and a unique competitive positioning.

## Negatives: macro headwinds, billing weakness

Despite the strong revenue trends, Zscaler has noted further elongation of sales cycle, lower deal close rates and an increase in the number of staggered/ramp deals, which push the recognition of billings over multiple quarters versus upfront. Management's guidance for billings growth calls for -9% QoQ growth in 3Q and +46% in 4Q. While the 46% is inline with normal seasonality, we believe this estimate would have to decline for two reasons. First, the environment is weaker than previous years and other companies reported on muted year-end budget flush. In addition, contribution of new customers to the revenue growth declined from 50% to only 35% sequentially, demonstrating the difficulty to sign on new deals. As such, reaching normal billing seasonality implicitly assumes stronger-than-seasonal growth of existing customers, given the apparent change in the customer contribution mix, which we think could ultimately drive another downward revision to the billings estimate.

## Positives: strong fundamentals, improved 2H visibility

Zscaler's underlying fundamentals remain solid, ZPA grew 74% YoY, the pipeline build remains healthy, and the anticipated step up of ramp deals and July's federal refreshes improve the 2H visibility. Margins remain healthy, supported by 3% workforce reduction and slower hiring plans that help keep FCF margin stable at 20%. On competition, despite the difference between Palo Alto's strong NGS ARR growth and Zscaler's weaker trends, we don't interpret this as a sign of competitive losses given Palo Alto's greater ability to sell to existing customers. We also do not see any change in the underlying growth drivers, and believe the technology remains disruptive, unique and very needed.

Estimates (Jul) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	0.52	0.69	1.52	2.11	2.80
GAAP EPS	(1.93)	(2.77)	(1.36)	(0.66)	(0.03)
EPS Change (YoY)	116.7%	32.7%	120.3%	38.8%	32.7%
Consensus EPS (Bloomberg)			1.24	1.66	2.23
DPS	0	0	0	0	0
Valuation (Jul)					
P/E	257.9x	194.4x	88.2x	63.6x	47.9x
GAAP P/E	NM	NM	NM	NM	NM
Dividend Yield	0%	0%	0%	0%	0%
EV / EBITDA*	178.9x	126.6x	72.2x	49.2x	34.1x
Free Cash Flow Yield*	0.8%	1.3%	1.7%	2.7%	3.4%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 14.

03 March 2023

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## Stock Data

Price	134.13 USD
Price Objective	145.00 USD
Date Established	12-Jan-2023
Investment Opinion	C-1-9
52-Week Range	99.64 USD - 256.41 USD
Mrkt Val (mn) / Shares Out (mn)	19,343 USD / 144.2
Average Daily Value (mn)	303.25 USD
BofA Ticker / Exchange	ZS / NAS
Bloomberg / Reuters	ZS US / ZS.OQ
ROE (2023E)	37.5%
Net Dbt to Eqty (Jul-2022A)	-7.8%
ESGMeter <sup>TM</sup>	Medium

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"](#).

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Refer to important disclosures on page 15 to 17. Analyst Certification on page 13. Price Objective Basis/Risk on page 13.

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# iQprofile<sup>SM</sup> Zscaler

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

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	4.8%	6.2%	10.4%	12.4%	8.5%
Return on Equity	14.9%	18.4%	37.5%	38.3%	34.8%
Operating Margin	11.6%	10.2%	13.7%	16.3%	18.4%
Free Cash Flow	154	253	338	521	663

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

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash Realization Ratio	2.7x	3.2x	1.9x	2.1x	1.9x
Asset Replacement Ratio	1.6x	1.7x	1.9x	2.7x	2.4x
Tax Rate	NM	NM	1.3%	14.5%	60.6%
Net Debt-to-Equity Ratio	120.6%	-7.8%	-40.7%	-74.0%	-90.8%
Interest Cover	NA	NA	NA	NA	NA

## Income Statement Data (Jul)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Sales	673	1,091	1,562	1,994	2,549
% Change	56.1%	62.1%	43.1%	27.7%	27.8%
Gross Profit	545	882	1,259	1,601	2,049
% Change	57.9%	62.0%	42.8%	27.1%	28.0%
EBITDA	108	152	267	391	565
% Change	125.8%	41.3%	75.3%	46.7%	44.4%
Net Interest & Other Income	3	(1)	45	53	53
<b>Net Income (Adjusted)</b>	<b>76</b>	<b>102</b>	<b>237</b>	<b>340</b>	<b>470</b>
<b>% Change</b>	<b>132.5%</b>	<b>34.3%</b>	<b>132.6%</b>	<b>43.7%</b>	<b>38.2%</b>

## Free Cash Flow Data (Jul)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Income from Cont Operations (GAAP)	(262)	(390)	(197)	(100)	(5)
Depreciation & Amortization	30	40	52	66	96
Change in Working Capital	46	97	124	328	383
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	389	574	460	407	418
Capital Expenditure	(48)	(69)	(101)	(179)	(229)
<b>Free Cash Flow</b>	<b>154</b>	<b>253</b>	<b>338</b>	<b>521</b>	<b>663</b>
<b>% Change</b>	<b>324.5%</b>	<b>64.2%</b>	<b>33.8%</b>	<b>54.3%</b>	<b>27.1%</b>

## Balance Sheet Data (Jul)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	276	1,013	1,421	1,942	2,605
Trade Receivables	257	400	508	632	784
Other Current Assets	1,315	844	843	902	975
Property, Plant & Equipment	109	161	230	344	477
Other Non-Current Assets	301	415	547	741	996
<b>Total Assets</b>	<b>2,258</b>	<b>2,833</b>	<b>3,550</b>	<b>4,561</b>	<b>5,838</b>
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	720	1,134	1,533	2,101	2,789
Long-Term Debt	914	969	1,141	1,141	1,141
Other Non-Current Liabilities	95	156	187	236	296
<b>Total Liabilities</b>	<b>1,729</b>	<b>2,259</b>	<b>2,861</b>	<b>3,478</b>	<b>4,225</b>
<b>Total Equity</b>	<b>529</b>	<b>573</b>	<b>689</b>	<b>1,083</b>	<b>1,613</b>
<b>Total Equity &amp; Liabilities</b>	<b>2,258</b>	<b>2,833</b>	<b>3,550</b>	<b>4,561</b>	<b>5,838</b>

\* For full definitions of iQmethod<sup>SM</sup> measures, see page 14.

## Company Sector

Cyber Security

## Company Description

Zscaler is a leader in cloud-based Security solutions, which helps protect enterprise traffic. Zscaler benefits from a material market shift from legacy appliance-based approaches to cloud services. The Company's products are uniquely architected to address the higher-growth cloud or software-as-a-service (SaaS) portion of the market and Zscaler's platform is designed to add additional features and solutions that grow the total addressable market.

## Investment Rationale

We believe Zscaler is positioned to gain share in the market's migration to cloud-based security solutions. Zscaler offers a differentiated, next-gen cloud architecture to address growing network complexity. The company's scalable, purpose-built software platform also enables Zscaler to move into new security markets. We expect the company's SaaS model and new offerings to deliver sustainable high growth as the company invests to gain market share.

## Stock Data

Average Daily Volume 2,260,898

## Quarterly Earnings Estimates

	2022	2023
Q1	0.14A	0.29A
Q2	0.13A	0.37A
Q3	0.17A	0.39E
Q4	0.25A	0.47E

# Financial highlights

## Exhibit 1: Actuals versus estimated results

2Q results beat across the board

A vs. E	2Q22	3Q22	4Q22	1Q23	2Q23A	1Q23E	Delta	QoQ	YoY
\$ mn, except EPS									
<b>Total revenue</b>	<b>\$255,563.0</b>	<b>\$286,807.0</b>	<b>\$318,059.0</b>	<b>\$355,548.0</b>	<b>\$387,598.0</b>	<b>\$366,214.4</b>	<b>\$21,383.6</b>	<b>9.0%</b>	<b>51.7%</b>
y/y	62.7%	62.6%	61.4%	54.2%	51.7%	43.3%			
<b>Total billings</b>	<b>\$367,678.0</b>	<b>\$345,619.0</b>	<b>\$520,439.0</b>	<b>\$340,000.0</b>	<b>\$493,800.0</b>	<b>\$503,997.1</b>	<b>(\$10,197.1)</b>	<b>45.2%</b>	<b>34.3%</b>
y/y	58.5%	53.6%	56.6%	37.2%	34.3%	37.1%			
R&D (Non-GAAP)	\$39,142.0	\$45,132.0	\$44,466.0	\$49,278.0	\$56,187.0	\$50,263.6	\$5,923.4	14.0%	43.5%
S&M (Non-GAAP)	\$127,229.0	\$138,378.0	\$156,545.0	\$173,189.0	\$180,554.0	\$177,172.3	\$3,381.7	4.3%	41.9%
G&A (Non-GAAP)	\$16,831.0	\$20,559.0	\$20,274.0	\$24,883.0	\$26,192.0	\$25,380.7	\$811.3	5.3%	55.6%
Total operating expenses	\$183,202.0	\$204,069.0	\$221,285.0	\$247,350.0	\$262,933.0	\$252,816.6	\$10,116.4	6.3%	43.5%
<b>Operating Income / (Loss) (Non-GAAP)</b>	<b>\$22,344.0</b>	<b>\$27,207.0</b>	<b>\$38,101.0</b>	<b>\$42,101.0</b>	<b>\$48,831.0</b>	<b>\$42,718.5</b>	<b>\$6,112.5</b>		
<b>Operating margin</b>	<b>8.7%</b>	<b>9.5%</b>	<b>12.0%</b>	<b>11.8%</b>	<b>12.6%</b>	<b>11.7%</b>	<b>93.3 bps</b>	<b>75.7 bps</b>	<b>385.5 bps</b>
Other income/Expense (Non-GAAP)	(\$647.0)	(\$1,411.0)	\$1,473.0	\$7,002.0	\$12,450.0	\$7,362.0	\$5,088.0	77.8%	-2024.3%
Earnings before taxes (EBT)	\$21,697.0	\$25,796.0	\$39,574.0	\$49,103.0	\$61,281.0	\$50,080.5	\$11,200.5	24.8%	182.4%
Taxes	\$2,161.0	\$1,064.0	\$3,180.0	\$4,746.0	\$3,692.0	\$4,840.5	(\$1,148.5)	-22.2%	70.8%
Net Income (Non-GAAP)	\$19,536.0	\$24,732.0	\$36,394.0	\$44,357.0	\$57,589.0	\$45,240.0	\$12,349.0	29.8%	194.8%
<b>Non-GAAP EPS</b>	<b>\$0.13</b>	<b>\$0.17</b>	<b>\$0.25</b>	<b>\$0.29</b>	<b>\$0.37</b>	<b>\$0.29</b>	<b>\$0.08</b>	<b>29.4%</b>	<b>183.5%</b>
Total share count	140.515	141.422	142.355	143.476	144.511	145	(\$0.4)	0.7%	2.8%
<b>Margin Analysis</b>									
Gross margins (Non-GAAP)	80.4%	80.6%	81.6%	81.4%	80.7%	80.7%	0.0 bps	-71.0 bps	27.1 bps
R&D (Non-GAAP)	15.3%	15.7%	14.0%	13.9%	14.5%	13.7%	77.1 bps	63.6 bps	-82.0 bps
S&M (Non-GAAP)	49.8%	48.2%	49.2%	48.7%	46.6%	48.4%	-179.7 bps	-212.8 bps	-320.1 bps
G&A (Non-GAAP)	6.6%	7.2%	6.4%	7.0%	6.8%	6.9%	-17.3 bps	-24.1 bps	17.2 bps
Total operating expenses (Non-GAAP)	71.7%	71.2%	69.6%	69.6%	67.8%	69.0%	-119.9 bps	-173.2 bps	-384.9 bps
Operating margins	8.7%	9.5%	12.0%	11.8%	12.6%	11.7%	93.3 bps	75.7 bps	385.5 bps
Tax rate (Non-GAAP)	10.0%	4.1%	8.0%	9.7%	9.7%	9.7%	0.0 bps	0.0 bps	-29.5 bps

Source: BofA Global Research estimates, company report

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## Exhibit 2: Summary of model changes

We update our estimates to reflect updated guidance

	Revenues			Gross Margin			EPS			Operating Profit			Net Income		
	Old	New	Change	Old	New	Change	Old	New	Change	Old	New	Change	Old	New	Change
<b>FY22E</b>															
F1Q22	\$230,517	\$230,517	\$0.0	80.6%	80.6%	0.00	\$0.14	\$0.14	\$0.00	\$23,949	\$23,949	\$0.0	\$20,995	\$20,995	\$0.00
F2Q22	\$255,563	\$255,563	\$0.0	80.4%	80.4%	0.00	\$0.13	\$0.13	\$0.00	\$22,344	\$22,344	\$0.0	\$19,536	\$19,536	\$0.00
F3Q22	\$286,807	\$286,807	\$0.0	80.6%	80.6%	0.00	\$0.17	\$0.17	\$0.00	\$27,207	\$27,207	\$0.0	\$24,732	\$24,732	\$0.00
F4Q22	\$318,059	\$318,059	\$0.0	81.6%	81.6%	0.00	\$0.25	\$0.25	\$0.00	\$38,101	\$38,101	\$0.0	\$36,394	\$36,394	\$0.00
<b>Total</b>	<b>\$1,090,946</b>	<b>\$1,090,946</b>	<b>\$0.0</b>	<b>80.8%</b>	<b>80.8%</b>	<b>0.00</b>	<b>\$0.69</b>	<b>\$0.69</b>	<b>\$0.00</b>	<b>\$111,601</b>	<b>\$111,601</b>	<b>\$0.0</b>	<b>\$101,657</b>	<b>\$101,657</b>	<b>\$0.00</b>
<b>FY23E</b>															
F1Q23	\$355,548	\$355,548	\$0.0	81.4%	81.4%	0.00	\$0.29	\$0.29	\$0.00	\$42,101	\$42,101	\$0.0	\$44,357	\$44,357	\$0.00
F2Q23E	\$366,214	\$387,598	\$21,383.6	80.7%	80.4%	-0.27	\$0.29	\$0.37	\$0.08	\$42,718	\$48,831	\$6,112.5	\$45,240	\$57,589	\$12,348.99
F3Q23E	\$387,089	\$397,288	\$10,199.3	80.5%	80.5%	0.00	\$0.32	\$0.39	\$0.07	\$46,403	\$56,518	\$10,115.1	\$49,795	\$61,009	\$11,213.77
F4Q23E	\$419,991	\$421,125	\$1,134.0	80.3%	80.3%	0.00	\$0.34	\$0.47	\$0.13	\$50,820	\$66,773	\$15,952.6	\$54,190	\$73,547	\$19,357.35
<b>Total</b>	<b>\$1,528,842</b>	<b>\$1,561,559</b>	<b>\$32,716.9</b>	<b>80.7%</b>	<b>80.6%</b>	<b>-0.07</b>	<b>\$1.24</b>	<b>\$1.52</b>	<b>\$0.28</b>	<b>\$182,042</b>	<b>\$214,223</b>	<b>\$32,180.2</b>	<b>\$193,582</b>	<b>\$236,502</b>	<b>\$42,920.11</b>
<b>FY24E</b>															
F1Q24E	\$457,790	\$459,026	\$1,236.1	80.2%	80.2%	0.00	\$0.35	\$0.48	\$0.13	\$53,740	\$71,255	\$17,515.5	\$55,640	\$75,983	\$20,343.17
F2Q24E	\$478,391	\$479,683	\$1,291.7	80.2%	80.2%	0.00	\$0.37	\$0.50	\$0.13	\$58,335	\$76,565	\$18,229.8	\$59,775	\$80,761	\$20,985.98
F3Q24E	\$507,094	\$508,464	\$1,369.2	80.3%	80.3%	0.00	\$0.40	\$0.54	\$0.14	\$64,968	\$84,112	\$19,144.1	\$65,745	\$87,553	\$21,808.85
F4Q24E	\$545,127	\$546,598	\$1,471.9	80.4%	80.4%	0.00	\$0.44	\$0.58	\$0.14	\$72,417	\$92,900	\$20,482.4	\$72,449	\$95,463	\$23,013.40
<b>Total</b>	<b>\$1,988,402</b>	<b>\$1,993,771</b>	<b>\$5,368.9</b>	<b>80.3%</b>	<b>80.3%</b>	<b>0.00</b>	<b>\$1.56</b>	<b>\$2.11</b>	<b>\$0.55</b>	<b>\$249,460</b>	<b>\$324,831</b>	<b>\$75,371.8</b>	<b>\$253,609</b>	<b>\$339,760</b>	<b>\$86,151.41</b>

**Exhibit 2: Summary of model changes**

We update our estimates to reflect updated guidance

	Revenues			Gross Margin			EPS			Operating Profit			Net Income		
<b>FY25E</b>															
F1Q25E	\$588,737	\$590,326	\$1,589.7	80.4%	80.4%	0.00	\$0.57	\$0.72	\$0.15	\$97,896	\$119,044	\$21,147.8	\$95,380	\$118,993	\$23,612.26
F2Q25E	\$609,342	\$610,988	\$1,645.3	80.4%	80.4%	0.00	\$0.52	\$0.67	\$0.15	\$88,325	\$111,091	\$22,766.7	\$86,766	\$111,835	\$25,069.26
F3Q25E	\$636,763	\$638,482	\$1,719.3	80.4%	80.4%	0.00	\$0.50	\$0.66	\$0.16	\$86,352	\$110,594	\$24,242.4	\$84,990	\$111,388	\$26,397.38
F4Q25E	\$706,807	\$708,715	\$1,908.5	80.4%	80.4%	0.00	\$0.58	\$0.75	\$0.17	\$101,462	\$128,350	\$26,888.3	\$98,589	\$127,368	\$28,778.70
<b>Total</b>	<b>\$2,541,649</b>	<b>\$2,548,511</b>	\$6,862.8	<b>80.4%</b>	<b>80.4%</b>	0.00	<b>\$1.93</b>	<b>\$2.52</b>	\$0.58	<b>\$323,605</b>	<b>\$407,147</b>	\$83,541.1	<b>\$320,340</b>	<b>\$413,844</b>	\$93,503.78

Source: BofA Global Research estimates, company report

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## Updated summary of key financials

	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23E	4Q23E	1Q24E	2Q24E	3Q24E	4Q24E	1Q25E	2Q25E	3Q25E	4Q25E	FY22	FY23E	FY24E	FY25E
<b>Total revenue</b>	<b>\$230,517</b>	<b>\$255,563</b>	<b>\$286,807</b>	<b>\$318,059</b>	<b>\$355,548</b>	<b>\$387,598</b>	<b>\$397,288</b>	<b>\$421,125</b>	<b>\$459,026</b>	<b>\$479,683</b>	<b>\$508,464</b>	<b>\$546,598</b>	<b>\$590,326</b>	<b>\$610,988</b>	<b>\$638,482</b>	<b>\$708,715</b>	<b>\$1,090,946</b>	<b>\$1,561,559</b>	<b>\$1,993,771</b>	<b>\$2,548,511</b>
YoY%Chg	61.7%	62.7%	62.6%	61.4%	54.2%	51.7%	38.5%	32.4%	29.1%	23.8%	28.0%	29.8%	28.6%	27.4%	25.6%	29.7%	62.1%	43.1%	27.7%	27.8%
Cost of goods sold	44,794	50,017	55,531	58,673	66,097	75,834	77,471	82,962	90,887	94,977	100,167	107,133	115,704	119,754	125,143	138,908	209,015	302,364	393,165	499,508
<b>Total gross profit</b>	<b>\$185,723</b>	<b>\$205,546</b>	<b>\$231,276</b>	<b>\$259,386</b>	<b>\$289,451</b>	<b>\$311,764</b>	<b>\$319,817</b>	<b>\$338,164</b>	<b>\$368,139</b>	<b>\$384,706</b>	<b>\$408,296</b>	<b>\$439,465</b>	<b>\$474,622</b>	<b>\$491,234</b>	<b>\$513,340</b>	<b>\$569,807</b>	<b>\$881,931</b>	<b>\$1,259,195</b>	<b>\$1,600,606</b>	<b>\$2,049,003</b>
Gross margin	80.6%	80.4%	80.6%	81.6%	81.4%	80.4%	80.5%	80.3%	80.2%	80.2%	80.3%	80.4%	80.4%	80.4%	80.4%	80.4%	80.8%	80.6%	80.3%	80.4%
Sales & Marketing	110,152	127,229	138,378	156,545	173,189	180,554	178,748	187,686	206,454	214,713	225,448	241,230	248,467	268,344	285,786	317,223	532,304	720,177	887,845	1,119,819
Research & Development	36,646	39,142	45,132	44,466	49,278	56,187	57,311	56,738	61,844	63,699	67,521	72,248	73,693	77,377	80,472	86,106	165,386	219,513	265,312	317,648
General & Administrative	14,976	16,831	20,559	20,274	24,883	26,192	27,240	26,967	28,585	29,729	31,215	33,088	33,419	34,422	36,487	38,129	72,640	105,282	122,617	142,456
<b>Operating Income / (Loss)</b>	<b>\$23,949</b>	<b>\$22,344</b>	<b>\$27,207</b>	<b>\$38,101</b>	<b>\$42,101</b>	<b>\$48,831</b>	<b>\$56,518</b>	<b>\$66,773</b>	<b>\$71,255</b>	<b>\$76,565</b>	<b>\$84,112</b>	<b>\$92,900</b>	<b>\$119,044</b>	<b>\$111,091</b>	<b>\$110,594</b>	<b>\$128,350</b>	<b>\$111,601</b>	<b>\$214,223</b>	<b>\$324,831</b>	<b>\$469,080</b>
Operating margin	10.4%	8.7%	9.5%	12.0%	11.8%	12.6%	14.2%	15.9%	15.5%	16.0%	16.5%	17.0%	20.2%	18.2%	17.3%	18.1%	10.2%	13.7%	16.3%	18.4%
Interest & Other	(475)	(647)	(1,411)	1,473	7,002	12,450	12,810	13,170	13,170	13,170	13,170	13,170	13,170	13,170	13,170	13,170	(1,060)	45,432	52,680	52,680
Taxes	2,479	2,161	1,064	3,180	4,746	3,692	8,319	6,395	8,443	8,973	9,728	10,607	13,221	12,426	12,376	14,152	8,884	23,153	37,751	52,176
<b>Net Income</b>	<b>\$20,995</b>	<b>\$19,536</b>	<b>\$24,732</b>	<b>\$36,394</b>	<b>\$44,357</b>	<b>\$57,589</b>	<b>\$61,009</b>	<b>\$73,547</b>	<b>\$75,983</b>	<b>\$80,761</b>	<b>\$87,553</b>	<b>\$95,463</b>	<b>\$118,993</b>	<b>\$111,835</b>	<b>\$111,388</b>	<b>\$127,368</b>	<b>\$101,657</b>	<b>\$236,502</b>	<b>\$339,760</b>	<b>\$469,584</b>
<b>Non-GAAP EPS</b>	<b>\$0.15</b>	<b>\$0.14</b>	<b>\$0.17</b>	<b>\$0.26</b>	<b>\$0.31</b>	<b>\$0.40</b>	<b>\$0.42</b>	<b>\$0.50</b>	<b>\$0.51</b>	<b>\$0.54</b>	<b>\$0.58</b>	<b>\$0.62</b>	<b>\$0.77</b>	<b>\$0.71</b>	<b>\$0.70</b>	<b>\$0.80</b>	<b>\$0.72</b>	<b>\$1.63</b>	<b>\$2.25</b>	<b>\$2.99</b>
<b>GAAP EPS</b>	<b>\$0.14</b>	<b>\$0.13</b>	<b>\$0.17</b>	<b>\$0.25</b>	<b>\$0.29</b>	<b>\$0.37</b>	<b>\$0.39</b>	<b>\$0.47</b>	<b>\$0.48</b>	<b>\$0.50</b>	<b>\$0.54</b>	<b>\$0.58</b>	<b>\$0.72</b>	<b>\$0.67</b>	<b>\$0.66</b>	<b>\$0.75</b>	<b>\$0.69</b>	<b>\$1.52</b>	<b>\$2.11</b>	<b>\$2.80</b>
Total share count	139	141	141	142	143	145	146	147	149	150	152	153	155	156	158	160	141	145	151	157
Net Cash from Operating Activities	93,271	48,262	77,241	103,138	128,457	89,481	128,911	92,096	179,428	161,694	177,827	181,886	181,695	249,820	231,351	229,209	321,912	438,945	700,835	892,075
OCF Margin	40.5%	18.9%	26.9%	32.4%	36.1%	23.1%	32.4%	21.9%	39.1%	33.7%	35.0%	33.3%	30.8%	40.9%	36.2%	32.3%	29.5%	28.1%	35.2%	35.0%
<b>Free cash flow</b>	<b>83,367</b>	<b>29,449</b>	<b>43,745</b>	<b>74,771</b>	<b>95,614</b>	<b>62,818</b>	<b>109,763</b>	<b>54,195</b>	<b>138,116</b>	<b>118,523</b>	<b>132,065</b>	<b>132,692</b>	<b>128,566</b>	<b>194,831</b>	<b>173,888</b>	<b>165,425</b>	<b>231,332</b>	<b>322,390</b>	<b>513,414</b>	<b>662,709</b>
FCF Margin	36.2%	11.5%	15.3%	23.5%	26.9%	16.2%	27.6%	12.9%	30.1%	24.7%	26.0%	24.3%	21.8%	31.9%	27.2%	23.3%	21.2%	20.6%	25.8%	26.0%
Cash & Cash Equivalents	371,696	409,819	594,893	1,013,210	1,084,945	1,257,012	1,366,775	1,420,970	1,559,086	1,677,608	1,809,674	1,942,366	2,070,931	2,265,762	2,439,650	2,605,075	1,013,210	1,420,970	1,942,366	2,605,075
Total debt	927,014	940,692	954,578	968,674	1,139,542	1,140,516	1,140,516	1,140,516	1,140,516	1,140,516	1,140,516	1,140,516	1,140,516	1,140,516	1,140,516	1,140,516	968,674	1,140,516	1,140,516	1,140,516
Net cash	(555,318)	(530,873)	(359,685)	44,536	(54,597)	116,496	226,259	280,454	418,570	537,092	669,158	801,850	930,415	1,125,246	1,299,134	1,464,559	44,536	280,454	801,850	1,464,559
<b>Margin Analysis</b>																				
Total gross profit	81%	80%	81%	82%	81%	81%	81%	80%	80%	80%	80%	80%	80%	80%	80%	80%	81%	81%	80%	80%
Sales & Marketing	48%	50%	48%	49%	49%	47%	45%	45%	45%	45%	44%	44%	42%	44%	45%	45%	49%	46%	45%	44%
Research & Development	16%	15%	16%	14%	14%	14%	14%	13%	13%	13%	13%	13%	12%	13%	13%	12%	15%	14%	13%	12%
General & Administrative	6%	7%	7%	6%	7%	7%	7%	6%	6%	6%	6%	6%	6%	6%	6%	5%	7%	7%	6%	6%
Operating Expenses	70%	72%	71%	70%	70%	68%	66%	64%	65%	64%	64%	63%	60%	62%	63%	62%	71%	67%	64%	62%
<b>Operating Income / (Loss)</b>	<b>10%</b>	<b>9%</b>	<b>9%</b>	<b>12%</b>	<b>12%</b>	<b>13%</b>	<b>14%</b>	<b>16%</b>	<b>16%</b>	<b>16%</b>	<b>17%</b>	<b>17%</b>	<b>20%</b>	<b>18%</b>	<b>17%</b>	<b>18%</b>	<b>10%</b>	<b>14%</b>	<b>16%</b>	<b>18%</b>
Tax rate	11%	10%	4%	8%	10%	10%	12%	8%	10%	10%	10%	10%	10%	10%	10%	10%	8%	9%	10%	10%
Net Income	9%	8%	9%	11%	12%	15%	15%	17%	17%	17%	17%	17%	20%	18%	17%	18%	9%	15%	17%	18%
<b>YoY Growth</b>																				
Total revenue	62%	63%	63%	61%	54%	52%	39%	32%	29%	24%	28%	30%	29%	27%	26%	30%	62%	43%	28%	28%
Total Operating expenses	69%	62%	70%	60%	53%	44%	29%	23%	20%	17%	23%	28%	20%	23%	24%	27%	65%	36%	22%	24%
<b>QoQ Growth</b>																				
Total revenue	17%	11%	12%	11%	12%	9%	3%	6%	9%	5%	6%	8%	8%	4%	5%	11%				
Total Operating expenses	17%	13%	11%	8%	12%	6%	0%	3%	9%	4%	5%	7%	3%	7%	6%	10%				

Source: BofA Global Research estimates, company report

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## Price objective basis & risk

### Zscaler (ZS)

Our PO of \$145 is based on roughly 9.5x CY23E EV/Sales. The multiple is a premium versus high-growth software peers (7-10x), which we justify by the higher growth profile. We believe a premium is warranted due to Zscaler's higher growth profile and potential to take meaningful share in new markets that would increase the TAM and potentially accelerate growth. The positives of Zscaler's high growth and longer-term opportunities balance the risk related to the current valuation premium, in our view.

Upside risks to our PO are: 1) faster-than-expected adoption of Zscaler's new products, such as Zscaler Private Access, 2) higher ASP uplift due to adoption of high-end offerings like the Cloud Next-generation firewall and Cloud Sandbox, and 3) a more significant shift to cloud-based security across enterprises of all sizes.

Downside risks to our PO are: 1) a lower take-rate of new offerings, 2) material slowdown in new customer adoption and expansion deals, 3) risk of network outages or security breaches, and 4) an increase in competition from incumbent vendors and newer start-ups.

## Analyst Certification

I, Tal Liani, 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 - Telecom and Data Networking Equipment Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	Amdocs	DOX	DOX US	Tal Liani
	Arista Networks	ANET	ANET US	Tal Liani
	Check Point Software Technologies	CHKP	CHKP US	Tal Liani
	Ciena	CIEN	CIEN US	Tal Liani
	Cisco Systems	CSCO	CSCO US	Tal Liani
	CommScope	COMM	COMM US	Tal Liani
	CrowdStrike Holdings Inc.	CRWD	CRWD US	Tal Liani
	CyberArk	CYBR	CYBR US	Tal Liani
	Fastly	FSLY	FSLY US	Tal Liani
	Palo Alto Networks	PANW	PANW US	Tal Liani
	Qualcomm	QCOM	QCOM US	Tal Liani
	Zscaler	ZS	ZS US	Tal Liani
<b>NEUTRAL</b>				
	AudioCodes	AUDC	AUDC US	Tal Liani
	Cellebrite	CLBT	CLBT US	Tal Liani
	F5 Inc	FFIV	FFIV US	Tal Liani
	Fortinet	FTNT	FTNT US	Tal Liani
	SentinelOne, Inc.	S	S US	Tal Liani
<b>UNDERPERFORM</b>				
	InterDigital, Inc.	IDCC	IDCC US	Tal Liani
	Juniper Networks	JNPR	JNPR US	Tal Liani
	Okta Inc	OKTA	OKTA US	Madeline Brooks
	SecureWorks	SCWX	SCWX US	Tal Liani



## **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 & 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 valuations. 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.

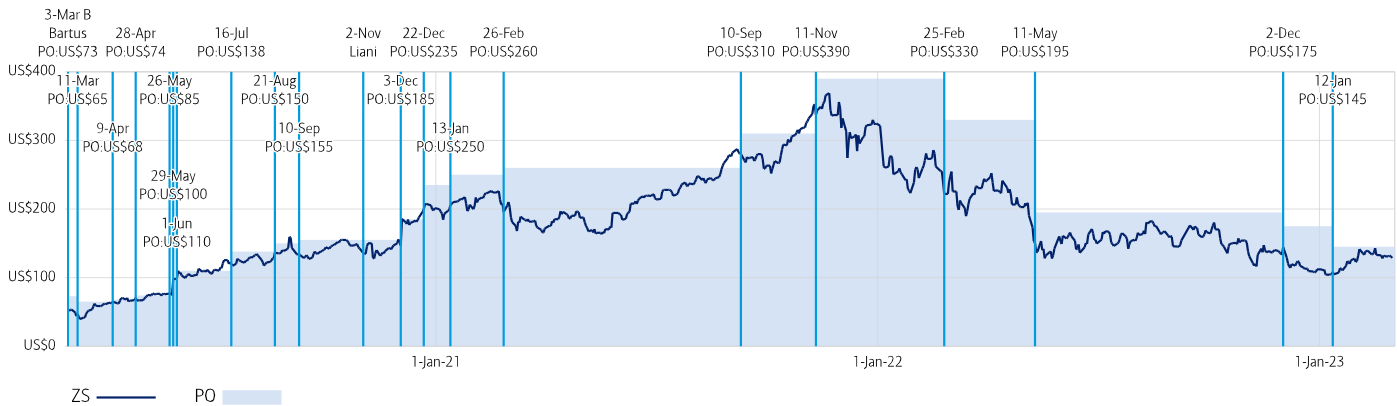
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# Disclosures

## Important Disclosures

### Zscaler (ZS) Price Chart



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

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

### Equity Investment Rating Distribution: Telecommunications Group (as of 31 Dec 2022)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	59	55.14%	Buy	39	66.10%
Hold	24	22.43%	Hold	17	70.83%
Sell	24	22.43%	Sell	14	58.33%

### Equity Investment Rating Distribution: Global Group (as of 31 Dec 2022)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	1853	52.58%	Buy	1040	56.13%
Hold	840	23.84%	Hold	493	58.69%
Sell	831	23.58%	Sell	404	48.62%

<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.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
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.

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