

## CyberArk

## Solid execution drives growth acceleration; reiterate Buy

Reiterate Rating: BUY | PO: 198.00 USD | Price: 175.10 USD

## 3Q reflects strong performance across the board

CyberArk reported solid 3Q23 results and 4Q guidance, demonstrating continued strong demand for Privileged Access Management (PAM). 3Q ARR of \$705mn was up 38% YoY, above Street's \$694mn and revenue of \$191.2mn grew 25% YoY above Street's 21% growth. Strength is attributed to improved close rates, strong pipeline conversion, and solid transition to subscriptions. On the profitability front, operating margin of 8.8% was 570bps above Street's expectations, driving a 19c EPS beat. We reiterate our Buy and \$198 PO, favoring CyberArk's solid execution and underlying demand trends for privileged access.

## Revenue/ARR trends positive with margin improvement

3Q outperformance is supported by multiple positive trends. ARR grew 38% YoY, with Subscription ARR up 68%, accounting for of 72% of total ARR vs. 59% last year. Net new ARR of \$53mn was driven by a mix of existing customer expansion and new logos, with the company adding 230 new logos in the quarter. Management noted an improvement in deal close rates and deal size of new customers and expects these trends to continue into 4Q23/FY24. Revenue was supported by bookings outperformance, with Subscription bookings mix of 97%, above guidance of 95%. Margin improvement was another bright spot, with operating margin of 8.8% expanding by 620bps YoY, with a major part of the improvement related to the different timing of CyberArk's Impact conference that carries a \$6mn cost. As a result of better revenue and better operating margin, EPS of 42c was above Street's 23c. We increase our FY24 EPS estimate by 7c accordingly.

## Favorable FY24 setup with multiple growth drivers

We believe a few secular trends will continue to support the stock price. Growth is supported by the migration of identity to the Cloud and growth in recurring revenue, which now accounts for 91% of total revenue, vs. 84% last year. Also, SaaS revenue grew 78% YoY. At a higher level, recent breaches, including MGM and Caesars, highlight the criticality of Identity and PAM. The company carries a record pipeline and expects to see good conversion in FY24, supporting its long-term targets. We believe the stock remains underappreciated, trading at roughly 7x CY24 EV/Sales, a discount to cybersecurity peers like Palo Alto, Zscaler, and CrowdStrike, which trade between 9x-11x.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	0.33	(0.44)	0.83	1.53	3.05
GAAP EPS	(2.12)	(3.21)	(1.92)	(1.38)	(0.12)
EPS Change (YoY)	-83.9%	NM	NM	84.3%	99.3%
Consensus EPS (Bloomberg)			0.55	1.47	2.98
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	490.1x	NM	194.9x	105.7x	53.0x
EV / EBITDA*	112.1x	NM	125.0x	68.5x	30.3x
Free Cash Flow Yield*	1.3%	0.7%	1.3%	3.8%	4.7%
* For full definitions of <i>IQ</i> method <sup>SM</sup> measures, see page 6.					

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Objective Basis/Risk on page 5. 12621408

#### 02 November 2023

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#### Stock Data

Price Objective 198.00 USD Date Established 20-Sep-2023 Investment Opinion C-1-9 113.19 USD - 174.94 USD 52-Week Range Mrkt Val (mn) / Shares Out 5,623 USD / 32.1 Average Daily Value (mn) 86.28 USD RofA Ticker / Exchange CYBR / NAS Bloomberg / Reuters CYBR US / CYBR.OO ROE (2023E) 5 1% Net Dbt to Eqty (Dec-2022A) -95.6% ESGMeter™

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

ARR: Annual Recurring Revenue

SaaS: Software-as-a-Service

175.10 USD

# **iQ**profile<sup>™</sup> CyberArk

iQmethod <sup>™</sup> – Bus Performance*					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	1.9%	-0.3%	4.4%	5.1%	8.9%
Return on Equity	1.9%	-2.5%	5.1%	9.0%	15.7%
Operating Margin	4.8%	-3.8%	2.7%	5.5%	12.9%
Free Cash Flow	66	37	68	199	245
<i>iQ</i> method <sup>™</sup> – <b>Quality of Earnings*</b>					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash Realization Ratio	5.6x	NM	2.1x	2.8x	1.7x
Asset Replacement Ratio	0.4x	0.6x	0.4x	0.4x	0.4x
Tax Rate	8.1%	4.9%	5.1%	22.0%	22.0%
Net Debt-to-Equity Ratio Interest Cover	-76.6% NA	-95.6% NA	-90.0% NA	-101.8% NA	-107.4% NA
Income Statement Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Sales	503	592	740	917	1,125
% Change	8.3%	17.7%	25.1%	23.9%	22.6%
Gross Profit	426	487	608	757	932
% Change	6.6%	14.4%	24.8%	24.5%	23.1%
EBITDA	46	(2)	41	75	169
% Change	-58.5%	NM	NM	82.5%	126.0%
Net Interest & Other Income	5	18	49	47	44
Net Income (Adjusted)	13	(18)	37	73	150
% Change	-83.5%	NM	NM	100.0%	104.9%
Free Cash Flow Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Income from Cont Operations (GAAP)	(86)	(130)	(85)	(66)	(6)
Depreciation & Amortization	(60)	(130)	(63)	24	(6)
Change in Working Capital	(57)	(41)	(46)	(36)	(73)
Deferred Taxation Charge	(12)	(16)	(11)	(50)	(75)
Other Adjustments, Net	208	215	197	287	310
Capital Expenditure	(9)	(13)	(8)	(9)	(10)
Free Cash Flow	66	37	68	199	245
% Change	-33.9%	-43.5%	83.6%	192.0%	22.9%
Balance Sheet Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	557	648	679	879	1,124
Trade Receivables	NA	NA	NA	NA	NA
Other Current Assets	505	449	460	499	572
Property, Plant & Equipment	20	23	19	16	14
Other Non-Current Assets	611	698	793	781	769
Total Assets	1,693	1,819	1,950	2,174	2,478
Short-Term Debt	0	0	0	0	0
		/L /	515	616	717
Other Current Liabilities	340	452		^	^
Long-Term Debt	0	0	0	0	
Long-Term Debt Other Non-Current Liabilities	0 627	0 689	0 686	700	720
Long-Term Debt Other Non-Current Liabilities <b>Total Liabilities</b>	0 627 <b>967</b>	0 689 <b>1,141</b>	0 686 <b>1,201</b>	700 <b>1,316</b>	720 <b>1,437</b>
Long-Term Debt Other Non-Current Liabilities	0 627	0 689	0 686	700	720

### **Company Sector**

Cyber Security

#### **Company Description**

CyberArk's a pioneer of a new layer of IT security solutions that protect orgs. from cyber-attackers that have evaded the network perimeter. CyberArk's solutions secure organizations critical assets dubbed privileged accounts, which are the keys to databases, industrial control systems, servers and applications, all which house sensitive data. CyberArk's software is focused on protecting these accounts, which are highly targeted in cyber-attacks to disrupt networks and/or steal sensitive info.

#### **Investment Rationale**

We have a positive view for CyberArk as we see revenue growth reacceleration and resilient market tailwinds. Strong margins and relatively high growth also make the valuation attractive, even when considering the execution risks and perpetual licensing model.

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Average Daily Volume 492,749

### **Quarterly Earnings Estimates**

	2022	2023
Q1	-0.30A	-0.17A
Q2	-0.27A	0.03A
Q3	-0.06A	0.42A
Q4	0.17A	0.48E



\* For full definitions of *IQ* method <sup>SM</sup> measures, see page 6.

## **Financial Highlights**

## Exhibit 1: Actual versus Estimated Results

3Q23 revenue and EPS of \$191.2mn and 42c, respectively, were above BofA expectations for \$189.5mn and 18c

	Q3	Q4	Q1	Q2	Q3	Q3E			
	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Sep-23	delta	QoQ	YoY
License revenue	88,039	103,030	96,602	111,257	126,935	124,052	2,883	14.1%	44.2%
y/y	50.9%	19.5%	54.5%	44.4%	44.2%	40.9%			
Maintenance & services	64,631	66,121	65,103	64,586	64,301	65,486	-1,185	-0.4%	-0.5%
y/y	-1.0%	2.3%	-1.5%	-0.8%	-0.4%	1.4%			
Total Revenues	152,670	169,151	161,705	175,843	191,236	189,538	1,698	9%	25%
y/y	25.5%	11.8%	26.8%	23.5%	25.3%	24.1%			
License Gross Profit (Non-Gaap)	75,122	88,355	80,445	93,305	105,012	105,940	-928	13%	40%
Service Gross Profit (Non-Gaap)	50,840	51,853	51,048	49,958	53,139	51,407	1,732	6%	5%
Total Gross Profit (Non-GAAP)	125,962	140,208	131,493	143,263	158,151	157,347	804	10%	26%
R&D	41,454	44,162	45,518	46,472	43,866	47,401	-3,535	-6%	6%
S&M	76,490	76,900	84,696	87,360	82,920	88,670	-5,750	-5%	8%
G&A	12,010	15,047	13,865	15,311	14,488	15,158	-670	-5%	21%
Total opex (Non-Gaap)	129,954	136,109	144,079	149,143	141,274	151,230	-9,956	-5%	9%
Operating income (Non-GAAP)	-3,992	4,099	-12,586	-5,880	16,877	6,117	10,760	-387%	-523%
y/y	-3170.8%	-74.9%	6.6%	-44.9%	-522.8%	-253.2%			
Financial income (expense), net	4,053	9,909	10,354	12,630	12,922	2,500	10,422	2%	219%
Income (loss) before taxes on income	61	14,008	-2,232	6,750	29,799	8,617	21,182	341%	48751%
Non-Gaap Net income (loss)	-2,344	7,150	-6,946	1,280	19,609	7,755	11,854	1432%	-937%
Diluted sharecount	40,835	40,924	41,168	41,599	46,642	42,847	3,794	12%	14%
Diluted EPS (Non-Gaap)	-\$0.06	\$0.17	-\$0.17	\$0.03	\$0.42	\$0.18	\$0.24	1266%	-832%
y/y	-5.9%	-38.2%	-44.5%	-111.6%	-832.4%	-415.3%			
Margin Analysis								bps	bps
License Gross Profit (Non-Gaap)	85.3%	85.8%	83.3%	83.6%	83.6%	85.4%	-180 bps	0 bps	-173 bps
Service Gross Profit (Non-Gaap)	78.7%	78.4%	78.4%	78.6%	78.6%	78.5%	10 bps	0 bps	-6 bps
Gross Margin (Non-Gaap)	82.5%	82.9%	81.3%	81.5%	82.7%	83.0%	-32 bps	123 bps	19 bps
Operating Margin (Non-Gaap)	-2.6%	2.4%	-7.8%	-3.3%	8.8%	3.2%	560 bps	1217 bps	1144 bps
Tax rate (Non-Gaap)	-33.0%	40.0%	40.0%	5.0%	5.0%	10.0%	-500 bps	0 bps	3800 bps
Net Margin (Non-Gaap)	-1.5%	4.2%	-4.3%	0.7%	10.3%	4.1%	616 bps	953 bps	1179 bps
Billings (Implied)	176,661	201,504	169,088	178,672	195,601	208,377	-12,776	16929 bps	11%

Source: BofA Global Research estimates, company report

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## **Exhibit 2: Summary of Model Changes**

We fine-tune our estimates to be more streamlined with guidance

		Sales			EPS		
	Old	New	Delta	Old	New	Delta	
FY23							
Q1	161,705	161,705	0.0	-\$0.17	-\$0.17	0.00	
Q2	175,843	175,843	0.0	\$0.03	\$0.03	0.00	
Q3	186,338	191,236	4,897.6	\$0.19	\$0.42	0.23	
Q4E	210,237	211,520	1,283.1	\$0.38	\$0.48	0.10	
Total	734,124	740,304	6,180.6	\$0.44	\$0.83	0.38	
FY24							
Q1E	207,742	206,759	(983.3)	\$0.26	\$0.20	(0.06)	
Q2E	217,349	220,236	2,887.8	\$0.29	\$0.29	0.00	
Q3E	227,324	231,367	4,043.3	\$0.30	\$0.41	0.11	
Q4E	260,141	258,915	(1,226.1)	\$0.61	\$0.62	0.01	
Total	912,555	917,277	4,721.7	\$1.46	\$1.53	0.07	
FY25							
Q1E	256,323	256,566	243.5	\$0.57	\$0.53	(0.04)	
Q2E	266,533	270,673	4,140.4	\$0.58	\$0.63	0.04	
Q3E	292,262	282,906	(9,355.6)	\$0.82	\$0.80	(0.02)	
Q4E	337,452	314,787	(22,665.6)	\$1.34	\$1.09	(0.26)	
Total	1,152,570	1,124,932	(27,637.3)	\$3.33	\$3.05	(0.28)	

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

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**Exhibit 3: Income Statement**Updated summary of financials; we increase our FY23 revenue and EPS estimates to \$740.3mn and 83c, respectively

	Q1	Q2	Q3	Q4E	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E			
(in \$K's except EPS)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25	FY2023E	FY2024E	FY2025E
License revenue	96,602	111,257	126,935	146,356	143,429	157,772	168,816	195,826	195,826	211,493	224,182	255,568	481,150	665,843	887,068
Maintenance and professional services	65,103	64,586	64,301	65,164	63,330	62,465	62,551	63,088	60,740	59,181	58,724	59,219	259,154	251,434	237,864
Total Revenues	161,705	175,843	191,236	211,520	206,759	220,236	231,367	258,915	256,566	270,673	282,906	314,787	740,304	917,277	1,124,932
YoY Growth	26.8%	23.5%	25.3%	25.0%	27.9%	25.2%	21.0%	22.4%	24.1%	22.9%	22.3%	21.6%	25.1%	23.9%	22.6%
Cost of sales (Non-GAAP)	30,212	32,580	33,085	36,589	36,501	38,611	40,397	44,833	44,331	46,503	48,436	53,564	132,466	160,342	192,834
Gross Profits (Non-GAAP)	131,493	143,263	158,151	174,931	170,257	181,626	190,971	214,082	212,236	224,170	234,470	261,223	607,838	756,935	932,099
Gross Margins (Non-GAAP)	81.3%	81.5%	82.7%	82.7%	82.3%	82.5%	82.5%	82.7%	82.7%	82.8%	82.9%	83.0%	82.1%	82.5%	82.9%
R&D	45,518	46,472	43,866	48,253	53,078	55,732	56,846	59,689	59,689	61,479	61,479	63,324	184,109	225,345	245,971
S&M	84,696	87,360	82,920	89,554	98,509	101,464	103,494	109,703	111,897	115,254	115,254	122,169	344,530	413,170	464,575
G&A	13,865	15,311	14,488	15,647	16,116	16,761	16,761	17,934	18,114	19,019	19,400	19,982	59,311	67,573	76,515
Total opex (Non-Gaap)	144,079	149,143	141,274	153,453	167,703	173,957	177,101	187,326	189,700	195,753	196,133	205,475	587,949	706,088	787,061
Operating income (Non-GAAP)	-12,586	-5,880	16,877	21,478	2,554	7,668	13,870	26,755	22,536	28,417	38,337	55,748	19,889	50,848	145,038
Operating margin (Non-GAAP)	-7.8%	-3.3%	8.8%	10.2%	1.2%	3.5%	6.0%	10.3%	8.8%	10.5%	13.6%	17.7%	2.7%	5.5%	12.9%
Financial income (expense), net	10,354	12,630	12,922	12,922	11,922	11,922	11,922	10,922	10,922	10,922	10,922	10,922	48,828	46,688	43,688
Taxes (Non-GAAP)	4,714	5,470	10,190	11,763	5,009	5,681	6,061	7,611	7,695	8,458	10,000	12,667	32,137	24,362	38,820
Net Income (Non-GAAP)	-6,946	1,280	19,609	22,637	9,467	13,909	19,731	30,067	25,763	30,881	39,259	54,003	36,580	73,174	149,906
EPS (Non-GAAP)	-\$0.17	\$0.03	\$0.42	\$0.48	\$0.20	\$0.29	\$0.41	\$0.62	\$0.53	\$0.63	\$0.80	\$1.09	\$0.83	\$1.53	\$3.05
EPS (GAAP)	-\$0.85	-\$0.62	-\$0.35	-\$0.15	-\$0.49	-\$0.42	-\$0.33	-\$0.15	-\$0.23	-\$0.15	-\$0.01	\$0.25	-\$1.92	-\$1.38	-\$0.12
Diluted sharecount	41,168	41,599	46,642	47,108	47,815	47,336	47,762	48,240	48,674	49,161	49,308	49,752	44,129	47,788	49,224
Operating Cash Flow	5,821	-10,868	14,353	67,286	64,512	25,577	34,021	84,261	92,178	41,476	53,777	67,306	76,592	208,371	254,738
OCF Margin	3.6%	-6.2%	7.5%	31.8%	31.2%	11.6%	14.7%	32.5%	35.9%	15.3%	19.0%	21.4%	10.3%	22.7%	22.6%
Free Cash Flow	4,046	-12,615	13,622	63,248	62,595	23,690	33,231	79,900	90,107	39,439	52,925	62,596	68,301	199,416	245,067
FCF margin	2.5%	-7.2%	7.1%	29.9%	30.3%	10.8%	14.4%	30.9%	35.1%	14.6%	18.7%	19.9%	9.2%	21.7%	21.8%
r ci margin	2.570	7.270	7.170	25.5 70	30.370	10.070	11.170	30.370	33.170	11.070	10.7 70	13.370	5.2 70	21.770	21.070
Cash and cash equivalent	913,752	905,134	906,196	963,796	1,026,391	1,050,081	1,083,312	1,163,212	1,253,319	1,292,758	1,345,683	1,408,279	963,796	1,163,212	1,408,279
Margin Analysis:															
Gross Margin (Non-Gaap)	81.3%	81.5%	82.7%	82.7%	82.3%	82.5%	82.5%	82.7%	82.7%	82.8%	82.9%	83.0%	82.1%	82.5%	82.9%
R&D	28.1%	26.4%	22.9%	22.8%	25.7%	25.3%	24.6%	23.1%	23.3%	22.7%	21.7%	20.1%	24.9%	24.6%	21.9%
S&M	52.4%	49.7%	43.4%	42.3%	47.6%	46.1%	44.7%	42.4%	43.6%	42.6%	40.7%	38.8%	46.5%	45.0%	41.3%
G&A	8.6%	8.7%	7.6%	7.4%	7.8%	7.6%	7.2%	6.9%	7.1%	7.0%	6.9%	6.3%	8.0%	7.4%	6.8%
OPEX (Non-Gaap)	89.1%	84.8%	73.9%	72.5%	81.1%	79.0%	76.5%	72.4%	73.9%	72.3%	69.3%	65.3%	79.4%	77.0%	70.0%
Operating Margin (Non-Gaap)	-7.8%	-3.3%	8.8%	10.2%	1.2%	3.5%	6.0%	10.3%	8.8%	10.5%	13.6%	17.7%	2.7%	5.5%	12.9%
Tax rate (Non-GAAP)	-211.2%	81.0%	34.2%	34.2%	34.6%	29.0%	23.5%	20.2%	23.0%	21.5%	20.3%	19.0%	46.8%	25.0%	20.6%
Net Margin (Non-Gaap)	-4.3%	0.7%	10.3%	10.7%	4.6%	6.3%	8.5%	11.6%	10.0%	11.4%	13.9%	17.2%	4.9%	8.0%	13.3%
YoY%Chg															
License revenue	54.5%	44.4%	44.2%	42.1%	48.5%	41.8%	33.0%	33.8%	36.5%	34.0%	32.8%	30.5%	45.5%	38.4%	33.2%
Maintenance and professional services	0.1%	-1.1%	-0.5%	-1.4%	-2.7%	-3.3%	-2.7%	-3.2%	-4.1%	-5.3%	-6.1%	-6.1%	-0.7%	-3.0%	-5.4%
Total revenues	26.8%	23.5%	25.3%	25.0%	27.9%	25.2%	21.0%	22.4%	24.1%	22.9%	22.3%	21.6%	25.1%	23.9%	22.6%
OPEX	24.3%	16.9%	8.7%	12.7%	16.4%	16.6%	25.4%	22.1%	13.1%	12.5%	10.7%	9.7%	15.4%	20.1%	11.5%
Operating Income	6.6%	-44.9%	-522.8%	424.0%	-120.3%	-230.4%	-17.8%	24.6%	782.3%	270.6%	176.4%	108.4%	-188.9%	155.7%	185.2%
EPS (Non-GAAP)	-44.5%	-111.6%	-832.4%	175.0%	-217.4%	855.0%	-1.7%	29.7%	167.3%	113.8%	92.7%	74.2%	-287.5%	84.7%	98.9%
QoQ%Chg															
License revenue	-6.2%	15.2%	14.1%	15.3%	-2.0%	10.0%	7.0%	16.0%	0.0%	8.0%	6.0%	14.0%			
Maintenance and professional services	-1.5%	-0.8%	-0.4%	1.3%	-2.8%	-1.4%	0.1%	0.9%	-3.7%	-2.6%	-0.8%	0.8%			]
Total revenues	-4.4%	8.7%	8.8%	10.6%	-2.3%	6.5%	5.1%	11.9%	-0.9%	5.5%	4.5%	11.3%			
OPEX (Non-Gaap)	5.9%	3.5%	-5.3%	8.6%	9.3%	3.7%	1.8%	5.8%	1.3%	3.2%	0.2%	4.8%			
Operating Income (Non-Gaap)	-407.1%	-53.3%	-387.0%	27.3%	-88.1%	200.2%	80.9%	92.9%	-15.8%	26.1%	34.9%	45.4%			
EPS (Non-GAAP)	-196.6%	-118.2%	1266.3%	14.3%	-58.8%	48.4%	40.6%	50.9%	-15.1%	18.7%	26.8%	36.3%			



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

## Price objective basis & risk

#### CyberArk (CYBR)

Our PO of \$198 is based on roughly  $8x\,2024E$  EV/Sales. This is near the middle of SaaS security peers at 5-15x. CyberArk's transition to SaaS is gaining additional momentum, which should support the multiple.

Upside risks to our price objective are difficulties in sizing the market given its newness and low market awareness, stronger conversion of qualified customers that are currently in the pipeline, and higher average deal sizes from rising license attach rates.

Downside risks are FX risk exposure (40% international exposure), difficulties sizing the market, and competition from large, well-established operators.

## **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
BUY				
	Akamai	AKAM	AKAM US	Madeline Brooks
	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
	CommScope	COMM	COMM US	Tal Liani
	CrowdStrike Holdings Inc.	CRWD	CRWD US	Tal Liani
	CyberArk	CYBR	CYBR US	Tal Liani
	Fastly	FSLY	FSLY US	Madeline Brooks
	Fortinet	FTNT	FTNT US	Tal Liani
	InterDigital, Inc.	IDCC	IDCC US	Tal Liani
	Motorola Solutions	MSI	MSI US	Tomer Zilberman
	Palo Alto Networks	PANW	PANW US	Tal Liani
	Qualcomm	QCOM	QCOM US	Tal Liani
	Zscaler	ZS	ZS US	Tal Liani
NEUTRAL				
	Cellebrite	CLBT	CLBT US	Tal Liani
	Cisco Systems	CSCO	CSCO US	Tal Liani
	SentinelOne, Inc.	S	SUS	Tal Liani
UNDERPERFORM				
	Cloudflare	NET	NET US	Madeline Brooks
	F5 Inc	FFIV	FFIV US	Tal Liani
	Juniper Networks	JNPR	JNPR US	Tal Liani
	Okta Inc	OKTA	OKTA US	Madeline Brooks
	SecureWorks	SCWX	SCWX US	Tal Liani



## **Q**method <sup>34</sup> Measures Definitions

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

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

\*\*Menthod SM\* 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.

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#### CyberArk Software (CYBR) 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 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	53	49.07%	Buy	38	71.70%
Hold	30	27.78%	Hold	20	66.67%
Sell	25	23.15%	Sell	13	52.00%

#### Equity Investment Rating Distribution: Global Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1869	53.48%	Buy	1046	55.97%
Hold	828	23.69%	Hold	461	55.68%
Sell	798	22.83%	Sell	370	46.37%

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%UnderperformN/A≥ 20%

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