

HP Inc.

Slower start to F24 (PC market rebound in 2H); FY guide unchanged; PO to \$32

Reiterate Rating: BUY | PO: 32.00 USD | Price: 28.72 USD

Weaker topline offset by strong margins/ 2H strength

HPQ F1Q24 rev came in below expectations at \$13.2bn versus \$13.7bn/ \$13.6bn (BofA / Street). Despite the weaker than expected revenue, HPQ delivered F1Q EPS of \$0.81, slightly below our est of \$0.82, but in line with Street est, as margins in both PS and Print remained strong (PS 6.1% vs. l-t 5-7%, Print 19.9% vs. l-t 16-19%). EPS guide for F2Q was in line with Street ests but below our est (\$0.81 mid-point vs. our/Street \$0.85/\$0.81). F24 EPS outlook is unchanged but 2H higher than 1H. We believe that FCF is the most important metric and guidance for F24 was maintained at \$3.1-3.6bn, despite near-term weakness in the commercial PC market. FY EPS guide was maintained at \$3.25-3.65. Reiterate Buy on an improving PC outlook, higher NPV print projects, cost controls, and improving FCF coming off trough levels in F23.

Commercial PC market remains weak; recovery in 2H

In F1Q, Personal Systems (PS) rev declined 4% y/y (-5% y/y in CC). HPQ gained PC share in C4Q despite weak market dynamics. Mgmt expects the PC market to grow low single digits in 2024 and the segment to be at least in line with market growth. Total PS units were up +5% y/y. Consumer PS units were up +10% y/y, while Commercial PS units were up +2% y/y. Segment OM was 6.1%, and F2Q24 OM was guided to solidly in the l-t range (cost management, pricing actions should help offset rising commodity costs).

Print margins increase q/q on lower hardware volume

In F1Q, Print margins grew 100bps q/q and came in at 19.9%. Print rev declined 5% y/y (-5% y/y in CC). Consumer print rev was down 22% y/y, while commercial print rev was down 12% y/y. Hardware units declined 17% y/y while supplies revs were flat y/y (+1% y/y in CC). Instant lnk delivered another qtr of rev & subscriber growth y/y.

Capital return back on track; Adjusting ests, PO to \$32

HPQ returned 37% of its FCF (\$1.1bn returned) to shareholders in F23 and returned \$775mn to shareholders in F1Q24. FCF guide for F24 remains \$3.1-3.6bn and HP intends to return approx. 100% of FCF to shareholders in F24. Our F24 rev/EPS moves to \$52.6bn/\$3.33 from \$54.3bn/\$3.43. PO moves to \$32 on 9x (unchanged) C24E EPS of \$3.37 (prior \$3.53).

Estimates (Oct) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	4.07	3.28	3.33	3.37	3.41
GAAP EPS	3.05	3.26	3.06	3.26	3.30
EPS Change (YoY)	7.4%	-19.4%	1.5%	1.2%	1.2%
Consensus EPS (Bloomberg)			3.45	3.67	3.81
DPS	1.00	1.05	1.10	1.10	1.10
Valuation (Oct)					
P/E	7.1x	8.8x	8.6x	8.5x	8.4x
GAAP P/E	9.4x	8.8x	9.4x	8.8x	8.7x
Dividend Yield	3.5%	3.7%	3.8%	3.8%	3.8%
EV / EBITDA*	6.2x	7.1x	7.2x	7.3x	7.4x
Free Cash Flow Yield*	13.1%	10.5%	11.9%	12.9%	12.8%
* For full definitions of <i>IQ</i> method ^{5M} measures, see page 5.					

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Refer to important disclosures on page 6 to 8. Analyst Certification on page 4. Price
Objective Basis/Risk on page 4.

28 February 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	33.00	32.00
2024E Rev (m)	54,335.5	52,661.0
2025E Rev (m)	55,412.2	52,997.6
2026E Rev (m)	56,694.6	53,424.3
2024E EPS	3.43	3.33
2025E EPS	3.50	3.37
2026E EPS	3.58	3.41

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Stock Data

Price	28.72 USD
Price Objective	32.00 USD
Date Established	28-Feb-2024
Investment Opinion	B-1-7
52-Week Range	25.22 USD - 33.90 USD
Mrkt Val (mn) / Shares Out	28,102 USD / 978.5
(mn)	
Free Float	97.5%
Average Daily Value (mn)	219.64 USD
BofA Ticker / Exchange	HPQ / NYS
Bloomberg / Reuters	HPQ US / HPQ.N
ROE (2024E)	NA
Net Dbt to Eqty (Oct-2023A)	NA
ESGMeter™	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".

PS: Personal Systems, OM: Operating Margin, FCF: Free Cash Flow, NPV: Net Present Value, SAM: Security Analyst Meeting, I-t: long-term; TAM: Total Available Market, CC: Constant Currency

iQprofile[™]HP Inc.

2022A	2023A	2024E	2025E	2026E
40.0%	30.9%	30.3%	28.4%	26.7%
NM	NM	NM	NM	NM
8.5%	8.5%	8.6%	8.4%	8.2%
3,673	2,962	3,336	3,635	3,610
2022A	2023A	2024E	2025E	2026E
1.0x	1.1x	1.2x	1.4x	1.4x
1.0x	0.7x	0.8x	0.8x	0.8x
15.4%	14.6%	14.5%	14.9%	14.9%
				NM
14.8x	6.8x	6.9x	6.5x	6.5x
2022A	2023A	2024E	2025E	2026E
62,910	53,718	52,661	52,998	53,424
-0.9%	-14.6%	-2.0%	0.6%	0.8%
12,263	11,508	11,524	11,598	11,691
				0.8%
				5,212
				-0.9%
, ,	, ,	, ,	, ,	(674) 3,110
·	·			-1.4%
2022A	2023A	2024E	2025E	2026E
4,562	3,646	3,684	3,433	3,390
				837
, , ,	, ,	, ,		24
				0
	, ,	, ,		53 (695)
	. ,	. ,	. ,	3,610
•	•	12.6%	•	-0.7%
	(100)	(76)	0	0
(1,037)	(1,036)	(1,083)	(1,033)	(1,005)
3,082	(1,455)	143	0	0
2022A	2023A	2024E	2025E	2026E
3,145	3,232	3,482	,	4,689
				4,042
				11,274
				2,942
			,	16,181 39,128
				35,126
				24,869
				9,301
4,534	4,331	4,328	4,328	4,328
41,519	38,073	38,666	38,740	38,857
(3,025)	(1,069)	(1,020)	(367)	271
38,494	37,004	37,646	38,373	39,128
	40.0% NM 8.5% 3.673 2022A 1.0x 1.0x 15.4% NM 14.8x 2022A 62,910 -0.9% 12,263 -8.4% 6,258 -4.5% (371) 4,276 -7.4% 2022A 4,562 780 (1,111) 0 232 (790) 3,673 -37.0% (95) (1,037) 3,082 2022A 3,145 4,546 12,045 2,774 15,984 38,494 218 25,971 10,796 4,534 41,519 (3,025)	40.0% 30.9% NM NM NM NM NM 8.5% 8.5% 3,673 2,962 2022A 2023A 1.0x 1.1x 1.0x 0.7x 15.4% 14.6% NM NM 14.8x 6.8x 2022A 2023A 62,910 53,718 -0.9% -14.6% 12,263 11,508 -8.4% -6.2% 6,258 5,423 -4.5% -13.3% (371) (671) 4,276 3,278 -7.4% -23.3% 2022A 2023A 4,276 3,646 780 850 (1,111) (590) 0 0 0 232 (335) (790) (609) 3,673 2,962 -37.0% -19.4% (95) (100) (1,037) (1,036) 3,082 (1,455) 2022A 2023A 3,145 3,232 4,546 4,237 12,045 10,508 2,774 2,827 15,984 16,200 38,494 37,004 218 230 25,971 24,258 10,796 9,254 4,534 4,331 41,519 38,073 (3,025) (1,069)	40.0% 30.9% 30.3% NM NM NM 8.5% 8.6% 3,673 2,962 3,336 2022A 2023A 2024E 1.0x 1.1x 1.2x 1.0x 0.7x 0.8x 15.4% 14.6% 14.5% NM NM NM NM 14.8x 6.8x 6.9x 2022A 2023A 2024E 62,910 53,718 52,661 -0.9% -14.6% -2.0% 12,263 11,508 11,524 -8.4% -6.2% 0.1% 6,258 5,423 5,370 -4.5% -13.3% -1.0% (371) (671) (660) 4,276 3,278 3,270 -7.4% -23.3% -0.2% 2022A 2023A 2024E 4,562 3,646 3,684 780 850 816 (1,111) (59	Mode

Company Sector

IT Hardware

Company Description

HP Inc. (HPQ) includes the PC and Printing segments of the former Hewlett-Packard Company. The Personal Systems segment provides consumer and commercial desktops and notebooks, workstations, thin clients, tablets, point-of-sale systems, calculators and related accessories, software, and support. The Printing segment provides printer hardware (InkJet, Laser, Multi-function, Graphics), supplies, media, software and managed print services.

Investment Rationale

Our Buy rating is based on improving PC outlook and lower restructuring costs that drive higher free cash flow, growth in operating profit dollars from a combination of higher NPV projects and tight cost control, and resumption of capital returns.

Stock Data

Average Daily Volume 7,647,685

Quarterly Earnings Estimates

	2023	2024
Q1	0.73A	0.81A
Q2	0.79A	0.81E
Q3	0.86A	0.82E
04	0.90A	0.89E

* For full definitions of *IQ*method^{≤M} measures, see page 5.

Model

Figure 1: HPQ Income Statement We model F25 revenue/EPS at \$53bn/\$3.37

Hewlett-Packard Inc (HPQ)		F20	23E			F20	24E						
(\$ Millions Except Per Share Data)	1/23A	4/23A	7/23A	10/23A	1/24A	4/24E	7/24E	10/24E	F2022A	F2023A	F2024E	F2025E	F2026E
Income Statement													
Revenue	\$13,798	\$12,907	\$13,196	\$13,817	\$13,185	\$12,481	\$13,167	\$13,828	\$62,910	\$53,718	\$52,661	\$52,998	\$53,424
PPSG	\$13,827	\$12,912	\$13,195	\$13,816	\$13,184	\$12,480	\$13,166	\$13,827	\$62,986	\$53,750	\$52,657	\$52,994	\$53,420
Corporate investment	\$1	\$3	\$1	\$2	\$2	\$1	\$1	\$1	\$2	\$7	\$5	\$4	\$4
Eliminations	\$0	(\$1)	\$0	(\$1)	(\$1)	\$0	\$0	\$0	(\$5)	(\$2)	(\$1)	\$0	\$0
Cost of Goods Sold	11,011.0	9,993.0	10,374.0	10,832.0	10,297.0	9,676.0	10,338.1	10,826.4	50,647.0	42,210.0	41,137.5	41,399.8	41,733.1
Gross Profit	2,787.0	2,914.0	2,822.0	2,985.0	2,888.0	2,805.4	2,829.0	3,001.1	12,289.0	11,508.0	11,523.5	11,597.8	11,691.2
Total Operating Expense	1,734.0	1,808.0	1,656.0	1,738.0	1,782.0	1,675.7	1,703.6	1,809.1	6,917.0	6,936.0	6,970.3	7,162.6	7,315.9
R&D	403.0	410.0	354.0	411.0	399.0	359.0	326.9	383.7	1,653.0	1,578.0	1,468.6	1,372.3	1,276.6
SG&A	1,331.0	1,398.0	1,302.0	1,327.0	1,383.0	1,316.7	1,376.7	1,425.4	5,264.0	5,358.0	5,501.8	5,790.3	6,039.3
Operating Income (Post Options, Pre-Amort.)	1,053.0	1,107.0	1,166.0	1,247.0	1,106.0	1,129.7	1,125.4	1,192.0	5,478.0	4,573.0	4,553.2	4,435.1	4,375.3
Total Interest & Other Income/(Expense)	(183.0)	(172.0)	(143.0)	(173.0)	(144.0)	(172.6)	(172.5)	(171.2)	(371.0)	(671.0)	(660.3)	(679.5)	(673.6)
Pretax Income	870.0	935.0	1,023.0	1,074.0	962.0	957.1	952.9	1,020.9	5,107.0	3,902.0	3,892.9	3,755.6	3,701.7
Provision for Income Taxes (Credit)	139.0	149.0	0.0 164.0	0.0 172.0	154.0	152.5	0.0 152.8	0.0 163.5	0.0 831.0	0.0 624.0	0.0 622.8	0.0 600.8	0.0 592.2
From some more raxes (credit)	133.0	149.0	104.0	172.0	154.0	132.3	132.0	0.501	0.1.0	024.0	022.0	0.00.8	J3Z.Z
Net Income (pro-forma-adj for Options)	731.0	786.0	859.0	902.0	808.0	804.6	800.2	857.4	4,276.0	3,278.0	3,270.1	3,154.8	3,109.5
Options Expense (net of tax)	140.3	79.9	76.4	71.4	148.7	83.9	88.4	92.9	286.0	368.0	414.0	278.3	280.5
Net Income (pro-forma pre options)	871.3	865.9	935.4	973.4	956.7	888.5	888.6	950.3	4,562.0	3,646.0	3,684.1	3,433.1	3,390.1
Diluted Operating EPS (Pre-Options)	\$0.87	\$0.87	\$0.93	\$0.97	\$0.95	\$0.90	\$0.91	\$0.99	\$4.34	\$3.65	\$3.75	\$3.66	\$3.72
Diluted Operating EPS (Post-Options)	\$0.73	\$0.79	\$0.86	\$0.90	\$0.81	\$0.81	\$0.82	\$0.89	\$4.07	\$3.28	\$3.33	\$3.37	\$3.41
Diluted Weighted Average Shares	996	998	1,002	1,004	1,002	992	977	962	1,050	1,000	983	937	912
Income Statement Continued													
% of revenue	200/	220/	210/	220/	220/	220/	210/	220/	200/	210/	220/	220/	220/
Gross Profit	20%	23%	21%	22%	22%	22%	21%	22%	20%	21%	22%	22%	22%
Opex R&D	13% 3%	14% 3%	13% 3%	13% 3%	14% 3%	13% 3%	13% 2%	13% 3%	11% 3%	13% 3%	13% 3%	14% 3%	14% 2%
SG&A	10%	3% 11%	3% 10%	10%	10%	3% 11%	10%	3% 10%	3% 8%	10%	10%	3% 11%	11%
EBIT (Post-options, Pre-Amortization)	8%	9%	9%	9%	8%	9%	9%	9%	9%	9%	9%	8%	8%
Options Expense	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
EBIT (Pre-options, Pre-Amortization)	9%	9%	10%	10%	10%	10%	9%	9%	9%	9%	10%	9%	9%
Pretax Income	6%	7%	8%	8%	7%	8%	7%	7%	8%	7%	7%	7%	7%
Tax Rate	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%
Net Income (Operating, pre-options)	6%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	6%	6%
Net Income (Operating, post-options)	5%	6%	7%	7%	6%	6%	6%	6%	7%	6%	6%	6%	6%
Revenues (Y/Y)	-19%	-22%	-10%	-7%	-4%	-3%	0%	0%	-1%	-15%	-2%	1%	1%
Organic Growth (Y/Y)	-19%	-22%	-10%	-7%	-4%	-3%	0%	0%	-1%	-15%	-2%	1%	1%
Opex (Y/Y)	-11%	-4%	10%	11%	3%	-7%	3%	4%	-10%	0%	0%	3%	2%
R&D (Y/Y)	-16%	-4%	-4%	8%	-1%	-12%	-8%	-7%	-11%	-5%	-7%	-7%	-7%
SG&A (Y/Y)	-9%	-5%	14%	12%	4%	-6%	6%	7%	-8%	2%	3%	5%	4%
EBIT Incl. SFAS 123 (Y/Y)	-30%	-23%	-16%	9%	5%	2%	-3%	-4%	-5%	-17%	0%	-3%	-1%
Pretax Income (Y/Y)	-39%	-32%	-20%	6%	11%	2%	-7%	-5%	-7%	-24%	0%	-4%	-1%
Net Income (Y/Y)	-32%	-29%	-19%	7%	10%	3%	-5%	-2%	-7%	-20%	1%	-7%	-1%
Op. EPS (Y/Y) Op. EPS Option adj (Y/Y)	-25% -31%	-24% -28%	-17% -19%	7% 6%	9% 10%	3% 3%	-3% -4%	2% -1%	8% 8%	-16% -20%	3% 1%	-2% 1%	1% 1%
Revenues (Q/Q)	-7%	-6%	2%	5%	-5%	-5%	5%	5%					
Organic Growth (Q/Q)	-7% -7%	-6% -6%	2% 2%	5% 5%	-5% -5%	-5% -5%	5% 5%	5% 5%					
Opex (Q/Q)	10%	-6% 4%	-8%	5% 5%	-5% 3%	-5% -6%	2%	5% 6%					
R&D (Q/Q)	5%	2%	-14%	16%	-3%	-10%	-9%	17%					
SG&A (Q/Q)	12%	5%	-7%	2%	4%	-5%	-5 % 5%	4%					
5500 ((Q/ Q)	1∠ /0	J /U	7 /0	2 /0	7/0	טו כ	<i>J</i> (0	-t /U					

Source: Company reports, BofA Global Research estimates

BofA GLOBAL RESEARCH



Price objective basis & risk

HP Inc. (HPQ)

Our PO of \$32 is based on 9x our C24E EPS of \$3.37. This multiple is the median of long-term range 5-13x. In our opinion, this multiple is justified given it balances near-term pressures the company is facing vs. long term opportunities. The weaker macro is leading to softer enterprise demand, weak demand in China, and price competition in the Printer business from Japanese competitors creates headwinds. Positives drivers include an improving PC market backdrop, improved profitability from cost actions and and stable to higher free cash flow over the next several years.

Downside risks to our price objective are increased price pressure in PCs and Print, weaker than expected macro, additional channel inventory correction required in light of lower demand in the near-term, uncertainty surrounding the company's pricing models in print, higher than expected restructuring costs which can pressure free cash flow, and FX headwinds favoring Japanese Print competitors.

Upside risks to our price objective are faster than expected recovery in PC demand and print supplies, strong capital return, large cost actions to support earnings, an unexpected recovery in the global economy, more than expected improvement in cash conversion cycle, unexpected share gain versus competitors, and large transformative accretive M&A that drives earnings growth.

Analyst Certification

I, Wamsi Mohan, 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 - IT Hardware and Technology Supply Chain Coverage Cluster

	63 113			
Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Amphenol	APH	APH US	Wamsi Mohan
	Apple Inc.	AAPL	AAPL US	Wamsi Mohan
	Corning Inc.	GLW	GLW US	Wamsi Mohan
	Dell Technologies Inc.	DELL	DELL US	Wamsi Mohan
	Flex Ltd.	FLEX	FLEX US	Ruplu Bhattacharya
	HP Inc.	HPQ	HPQ US	Wamsi Mohan
	International Business Machines Corp.	IBM	IBM US	Wamsi Mohan
	Jabil Inc.	JBL	JBL US	Ruplu Bhattacharya
	Nutanix Inc	NTNX	NTNX US	Wamsi Mohan
	Roku, Inc.	ROKU	ROKU US	Ruplu Bhattacharya
	Seagate Technology	STX	STX US	Wamsi Mohan
	Super Micro Computer Inc.	SMCI	SMCI US	Ruplu Bhattacharya
	TD Synnex Corp	SNX	SNX US	Ruplu Bhattacharya
	TE Connectivity Ltd.	TEL	TEL US	Wamsi Mohan
	Western Digital Corporation	WDC	WDC US	Wamsi Mohan
NEUTRAL				
	Arrow Electronics Inc.	ARW	ARW US	Ruplu Bhattacharya
	Avnet Inc.	AVT	AVT US	Ruplu Bhattacharya
	CDW Corp	CDW	CDW US	Ruplu Bhattacharya
	Concentrix Corporation	CNXC	CNXC US	Ruplu Bhattacharya
	Hewlett-Packard Enterprise	HPE	HPE US	Wamsi Mohan
	Pure Storage	PSTG	PSTG US	Wamsi Mohan
	Sensata Technologies Holdings Plc	ST	ST US	Wamsi Mohan
	Teradata Corporation	TDC	TDC US	Wamsi Mohan

US - IT Hardware and Technology Supply Chain Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
UNDERPERFORM				
	DigitalOcean	DOCN	DOCN US	Wamsi Mohan
	NetApp Inc.	NTAP	NTAP US	Wamsi Mohan
	Sanmina Corporation	SANM	SANM US	Ruplu Bhattacharya
	Vishay Intertechnology, Inc.	VSH	VSH US	Ruplu Bhattacharya

Pmethod[™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (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
	Other LT Liabilities	
EV / EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

Manethod 3^M 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.

Raiatabase* 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.

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Disclosures

Important Disclosures

HP Inc. (HPQ) 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: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	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 R1	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%

R1 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^{R2}

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Inderperform	N/A	≥ 20%

R2Ratings 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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