

Baidu.com

Macro remains a risk; AI enters monetization stage

Reiterate Rating: BUY | PO: 156.00 USD | Price: 112.36 USD

4Q adjusted profit beats; lower 2024e due to soft macro

4Q Baidu Core revenue of RMB27.5bn (7% YoY) is in-line with consensus. Core ad grew 6% YoY and cloud revenue grew 11% YoY, both accelerated from 3Q23. Baidu Core adjusted OP of RMB6.2bn (13% YoY, 23% OPM) beats our RMB6bn (22% OPM), on cost control. Baidu Core's SG&A expense declined 1% YoY and R&D expense grew just 3% QoQ (12% YoY). Mgmt. mentions macro uncertainty and reiterates expectation for full year 2024: ad revenue to outgrow GDP, cloud back to strong growth, and continuous cost optimization. We lower 1Qe Baidu Core revenue to 6% YoY from 10% due to weak macro and longer & later Chinese New Year holiday, and lower 2024e revenue to 9% from 11% due to macro. We continue to expect a YoY stable trend for Core adjusted OPM and model 23%/24% margin for 1Qe/2024e. Due to lower growth outlook, our PO is lowered from USD168 to USD156 (HK\$153); we now assume FCF CAGR of 6% in 24-29E, vs 18% in 23-29E previously. We reiterate Buy on AI leadership. We see valuation as undemanding with net cash (excl. iQiyi) representing close to 50% of market cap. We expect market sentiment to improve if macro headwind eases, AI revenue contribution gets meaningful, shareholder return increases, AI tech advances, or chip issue resolves.

Revenues from AI to become meaningful

In 4Q23, incremental revenue from AI reached RMB several-hundred million for ad (in-line with our RMB400mn) and cRMB270mn for cloud (4.8% mix in cloud revenue from external customers, above our 3% est.). Search: users are engaging with Baidu more frequently and asking new questions; company began to facilitate search queries with multi-round conversations and introduced AI Chatbot as the new search landing page. Ad business: company's new AI marketing platform has attracted 10k advertisers and launched AI Chatbot For Brand. Cloud business: Baidu introduced AI APP Builder service, 26k+ enterprises actively used ERNIE through API in December, and ERNIE handles > 50mn queries a day. Autonomous driving business: Baidu has been using diffusion and transformer to train video generation model. For 2024, mgmt. expects RMB several-billion incremental revenue from Generative AI. We maintain AI revenue expectation at RMB5bn+, representing a meaningful 4-5% of Baidu Core revenue in 2024e.

Estimates (Dec) (CNY)	2021A	2022A	2023E	2024E	2025E
Net Income (Adjusted - mn)	18,830	20,680	25,923	30,384	33,238
EPS	29.66	21.77	56.88	68.90	79.95
EPS Change (YoY)	-54.5%	-26.6%	161.3%	21.1%	16.0%
Dividend / Share	0	0	0	0	0
Free Cash Flow / Share	(2.43)	47.87	71.71	88.12	107.66
Common EPS (CNY)	3.71	2.72	7.11	8.61	9.99
Common Dividend / Share (CNY)	0	0	0	0	0
Valuation (Dec)					
P/E	24.14x	35.89x	14.01x	11.74x	10.12x
EV / EBITDA*	20.10x	14.84x	11.57x	10.37x	9.31x
Free Cash Flow Yield*	-0.299%	5.94%	8.99%	11.07%	13.12%

* For full definitions of *iQmethod*SM measures, see page 5.

29 February 2024

Equity

Key Changes

(CNY)	Previous	Current
Price Obj.	US\$168.00	US\$156.00
2023E EPS	63.92	56.88
2024E EPS	70.68	68.90

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Stock Data

Price (ADR / Common)	112.36 USD / 106.60 HKD
Price Objective	156.00 USD / 153.00 HKD
Date Established	29-Feb-2024 / 29-Feb-2024
Investment Opinion	C-1-9 / C-1-9
52-Week Range	97.51 USD-160.53 USD
Market Value (mn)	38,863 USD
Shares Outstanding (mn)	345.9 / 2,767.0
Average Daily Value (mn)	365.78 USD
Free Float	100.0%
BofA Ticker / Exchange	BIDU / NAS
BofA Ticker / Exchange	BAIDF / HKG
Bloomberg / Reuters	BIDU US / BIDU.OQ
ROE (2023E)	10.4%
Net Dbt to Eqty (Dec-2022A)	12.9%

API: Application programing interface

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Refer to important disclosures on page 6 to 9. Analyst Certification on page 3. Price Objective Basis/Risk on page 3.

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Timestamp: 28 February 2024 03:32PM EST

iQprofileSM Baidu.com

Key Income Statement Data (Dec)	2021A	2022A	2023E	2024E	2025E
(CNY Millions)					
Sales	124,493	123,675	134,598	145,905	158,461
Gross Profit	60,179	59,740	69,567	75,580	82,131
Sell General & Admin Expense	(24,723)	(20,514)	(23,657)	(24,185)	(25,131)
Operating Profit	10,518	15,911	21,709	25,648	29,540
Net Interest & Other Income	468	(5,791)	3,342	5,166	5,172
Associates	NA	NA	NA	NA	NA
Pretax Income	10,986	10,120	25,051	30,814	34,712
Tax (expense) / Benefit	(3,187)	(2,578)	(3,649)	(4,994)	(5,625)
Net Income (Adjusted)	18,830	20,680	25,923	30,384	33,238
Average Fully Diluted Shares Outstanding	352	348	355	354	343

Key Cash Flow Statement Data					
Net Income	10,434	7,567	20,168	24,372	27,432
Depreciation & Amortization	6,355	6,944	7,594	7,065	6,880
Change in Working Capital	(18,691)	(16,758)	549	(1,337)	3,512
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	11,961	27,158	8,041	13,140	13,140
Cash Flow from Operations	10,059	24,911	36,352	43,240	50,965
Capital Expenditure	(10,896)	(8,286)	(11,190)	(12,266)	(14,266)
(Acquisition) / Disposal of Investments	(20,028)	4,954	(44,479)	13,352	2,083
Other Cash Inflow / (Outflow)	(520)	(612)	5,272	(500)	10,719
Cash Flow from Investing	(31,444)	(3,944)	(50,397)	586	(1,464)
Shares Issue / (Repurchase)	16,987	(498)	0	0	0
Cost of Dividends Paid	0	0	0	0	0
Cash Flow from Financing	23,396	(6,390)	(14,162)	0	0
Free Cash Flow	(837)	16,625	25,162	30,973	36,698
Net Debt	46,226	30,579	51,214	(11,693)	(80,270)
Change in Net Debt	5,450	(26,568)	26,461	(43,819)	(49,489)

Key Balance Sheet Data					
Property, Plant & Equipment	23,027	23,973	27,960	37,400	48,915
Other Non-Current Assets	143,692	154,150	148,544	145,692	138,761
Trade Receivables	9,981	11,733	10,848	12,392	14,761
Cash & Equivalents	36,850	53,156	25,231	69,050	118,539
Other Current Assets	166,484	147,961	194,176	188,176	178,176
Total Assets	380,034	390,973	406,759	452,711	499,152
Long-Term Debt	68,401	63,183	57,357	38,269	19,181
Other Non-Current Liabilities	13,193	10,355	10,343	10,343	10,343
Short-Term Debt	14,675	20,552	19,088	19,088	19,088
Other Current Liabilities	59,813	59,078	57,363	62,070	64,372
Total Liabilities	156,082	153,168	144,151	129,770	112,984
Total Equity	223,952	237,805	262,608	322,941	386,167
Total Equity & Liabilities	380,034	390,973	406,759	452,711	499,152

iQmethod SM - Bus Performance*					
Return On Capital Employed	3.8%	5.1%	7.5%	7.7%	7.7%
Return On Equity	9.1%	9.0%	10.4%	10.4%	9.4%
Operating Margin	8.4%	12.9%	16.1%	17.6%	18.6%
EBITDA Margin	13.6%	18.5%	21.8%	22.4%	23.0%

iQmethod SM - Quality of Earnings*					
Cash Realization Ratio	0.5x	1.2x	1.4x	1.4x	1.5x
Asset Replacement Ratio	1.7x	1.2x	1.5x	1.7x	2.1x
Tax Rate (Reported)	29.0%	25.5%	14.6%	16.2%	16.2%
Net Debt-to-Equity Ratio	20.6%	12.9%	19.5%	-3.6%	-20.8%
Interest Cover	3.1x	5.5x	6.7x	8.3x	9.5x

Key Metrics

* For full definitions of iQmethodSM measures, see page 5.

Company Sector

Internet/e-Commerce

Company Description

Baidu is a leading AI company in China. It mainly provides search engine service, cloud service, autonomous driving service. It mainly monetizes through advertising and cloud revenue.

Investment Rationale

Baidu is a leading AI company in China. We expect Baidu to grow core ad revenue faster than macro growth and accelerate cloud growth in 2024, and the benefit from Generative AI will start to realize from 2024 with a long runway further ahead.

Stock Data

Shares / Common	0.13
Price to Book Value	1.1x

Key Changes

(CNY)	Previous	Current
Price Obj.	HK\$165.00	HK\$153.00
2023E EPS	7.99	7.11
2024E EPS	8.83	8.61

Price objective basis & risk

Baidu.com (BIDU / BAIDF)

Our PO is US\$156 (HK\$153): 1) US\$145 from a DCF valuation of the existing operation which also absorbs the costs of loss-making businesses, based on a discount rate of 12%, FCF CAGR of 6% in 24-29E, and a terminal growth rate of 5%, current net cash per share of USD52, 2) US\$11 from its investments, primarily comprised of Trip.com and iQIYI.

Downside risks are: 1) Major operating or regulation events, 2) Government intervention in business or ownership, 3) Macroeconomic, 4) ad competition, 5) Margin and capex risk on spending for AI, 6) geopolitical risks impacting access to tech chips and investment by foreign investors, 7) AI technology usage risk, may impact stock listing or investors ability to own, 8) more stringent regulation on AI, 9) more intensified competition on AI.

Upside risks are: 1) better than expected macro recovery, 2) better development progress in AI, 3) application of AI in company's businesses to lift competitiveness and monetization, 4) monetization of AI in its cloud business.

Analyst Certification

I, Miranda Zhuang, CFA, 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.

APR - Internet, Media and Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Agora	API	API US	Daley Li, CFA
	AiHuiShou	RERE	RERE US	Joyce Ju
	Alibaba Group	BABA	BABA US	Joyce Ju
	Alibaba Group	BABAF	9988 HK	Joyce Ju
	Alibaba Health	ALBHF	241 HK	Miranda Zhuang, CFA
	Baidu.com	BIDU	BIDU US	Miranda Zhuang, CFA
	Baidu.com	BAIDF	9888 HK	Miranda Zhuang, CFA
	Bilibili	BILI	BILI US	Lei Zhang
	Bilibili	BLBLF	9626 HK	Lei Zhang
	CAR Group	CRSLF	CAR AU	Sriharsh Singh
	Chinasoft International	CFTLF	354 HK	Daley Li, CFA
	Cloud Music	XWJF	9899 HK	Lei Zhang
	Com2uS Corp	XOYAF	078340 KS	Jeehoon Jeong, CFA
	DBAPPSecurity	XDBAF	688023 CH	Daley Li, CFA
	Delhivery	XDVLF	DELHIVER IN	Sachin Salgaonkar
	Dingdong	DDL	DDL US	Joyce Ju
	East Money	XEQTF	300059 CH	Michael Li
	Grab Holdings	GRAB	GRAB US	Sachin Salgaonkar
	Hello Group	MOMO	MOMO US	Lei Zhang
	Hundsun Technologies	XYTGF	600570 CH	Daley Li, CFA
	iQIYI	IQ	IQ US	Lei Zhang
	JD Health	JDHIF	6618 HK	Miranda Zhuang, CFA
	JD.com	JD	JD US	Joyce Ju
	JD.com	JDCMF	9618 HK	Joyce Ju
	Kingdee International Software	KGDEF	268 HK	Daley Li, CFA
	Kingsoft Corporation	KSFTF	3888 HK	Daley Li, CFA
	Kuaishou	KUASF	1024 HK	Lei Zhang
	Makemytrip Limited	MMYT	MMYT US	Sachin Salgaonkar
	Meituan	MPNGF	3690 HK	Lei Zhang
	NetEase	NETTF	9999 HK	Lei Zhang
	NetEase, Inc	NTES	NTES US	Lei Zhang



APR - Internet, Media and Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Nine Entertainment Company	NNMTF	NEC AU	Alice Lei, CFA
	Pinduoduo Inc.	PDD	PDD US	Joyce Ju
	Plan B Media PCL	XMKTF	PLANB TB	Thititthep Nophaket
	PT Bukalapak.com	BKLPF	BUKA IJ	Sachin Salgaonkar
	PVR-Inox Ltd	PVRLF	PVRINOX IN	Sachin Salgaonkar
	REA Group	RGRF	REA AU	Sriharsh Singh
	Tencent Holdings	TCTZF	700 HK	Miranda Zhuang, CFA
	Tencent Music	TME	TME US	Lei Zhang
	Tencent Music	XWFWF	1698 HK	Lei Zhang
	Tongcheng Travel	TNGCF	780 HK	Janet Yang
	Trip.com Group	TCOM	TCOM US	Joyce Ju
	Trip.com Group	TRPCF	9961 HK	Joyce Ju
	TUHU Car	XTCRF	9690 HK	Miranda Zhuang, CFA
	Venustech	XVCGF	002439 CH	Daley Li, CFA
	Vipshop Holdings	VIPS	VIPS US	Joyce Ju
	Xero Limited	XROLF	XRO AU	Sriharsh Singh
	YY	YY	YY US	Lei Zhang
	Zomato Limited	XMWRF	ZOMATO IN	Sachin Salgaonkar

NEUTRAL

	Autohome	ATHM	ATHM US	Miranda Zhuang, CFA
	Autohome	XXYZF	2518 HK	Miranda Zhuang, CFA
	Baozun	BZUN	BZUN US	Joyce Ju
	Glodon Company	XGCOF	002410 CH	Daley Li, CFA
	GoTo Group	GTOFF	GOTO IJ	Sachin Salgaonkar
	Huya	HUYA	HUYA US	Lei Zhang
	KE Holdings	BEKE	BEKE US	Miranda Zhuang, CFA
	KE Holdings	XSQRF	2423 HK	Miranda Zhuang, CFA
	Kingsoft Cloud	KC	KC US	Daley Li, CFA
	Kingsoft Cloud	KCLHF	3896 HK	Daley Li, CFA
	Nykaa	XQQGF	NYKAA IN	Sachin Salgaonkar
	PB Fintech	XPFXF	POLICYBZ IN	Sachin Salgaonkar
	Sea Limited	SE	SE US	Sachin Salgaonkar
	Seek Limited	SKLTF	SEK AU	Sriharsh Singh
	Seven West Media	WANHF	SWM AU	Alice Lei, CFA
	The ONE Enterprise	XUFCF	ONEE TB	Thititthep Nophaket
	VGI Public Company Limited	XZQHF	VGI TB	Thititthep Nophaket
	Weimob	WEMXF	2013 HK	Daley Li, CFA
	WiseTech Global Limited	WTCF	WTC AU	Ware Kuo
	XD Inc.	XDNCF	2400 HK	Lei Zhang
	Yonyou Network	XYNIF	600588 CH	Daley Li, CFA

UNDERPERFORM

	Appen Ltd	APPEF	APX AU	Ware Kuo
	BEC World	XBJHF	BEC TB	Thititthep Nophaket
	Douyu	DOYU	DOYU US	Lei Zhang
	Indiamart InterMesh Limited	XEITF	INMART IN	Sachin Salgaonkar
	Info Edge	IFOEF	INFOE IN	Sachin Salgaonkar
	Kingsoft Office	XBKOF	688111 CH	Daley Li, CFA
	Ming Yuan Cloud	XWTAF	909 HK	Daley Li, CFA
	NavInfo	XWLHF	002405 CH	Daley Li, CFA
	Ping An Healthcare and Technology	PANHF	1833 HK	Miranda Zhuang, CFA
	Qi An Xin	XQTDF	688561 CH	Daley Li, CFA
	Technology One Limited	THNOF	TNE AU	Ware Kuo
	ThunderSoft	XSTS F	300496 CH	Daley Li, CFA
	Weibo Corporation	WB	WB US	Miranda Zhuang, CFA
	Weibo Corporation	WEIBF	9898 HK	Miranda Zhuang, CFA
	Zee Entertainment Enterprises	XZETF	Z IN	Sachin Salgaonkar
	Zip Co Limited	ZIZTF	ZIP AU	Ware Kuo

RVW

	AfreecaTV	WNTHF	067160 KS	Susie Lee
	CJ ENM	CJHOF	035760 KS	Susie Lee
	Coupang	CPNG	CPNG US	Susie Lee
	Dada Nexus	DADA	DADA US	Lei Zhang
	HYBE	XBGOF	352820 KS	Susie Lee
	JYP Entertainment	ALNNF	035900 KS	Susie Lee

APR - Internet, Media and Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Kakao Corp.	DAUCF	035720 KS	Susie Lee
	Kakao Games	XKKGf	293490 KS	Susie Lee
	Krafton	XKINF	259960 KS	Susie Lee
	Naver Corporation	NHNCf	035420 KS	Susie Lee
	NCSoft	NCSCf	036570 KS	Susie Lee
	Netmarble	XLGHF	251270 KS	Susie Lee
	Paytm	XUXBF	PAYTM IN	Sachin Salgaonkar
	PearlAbyss Corp	XEPAF	263750 KS	Susie Lee
	YG Entertainment	XYEIF	122870 KS	Susie Lee

iQmethodSM 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

iQmethodSM 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.

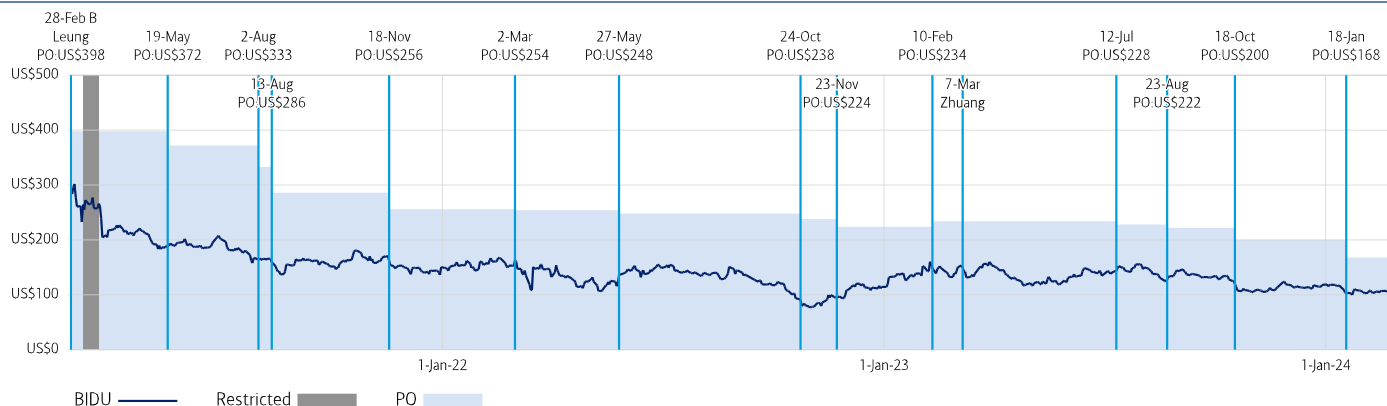
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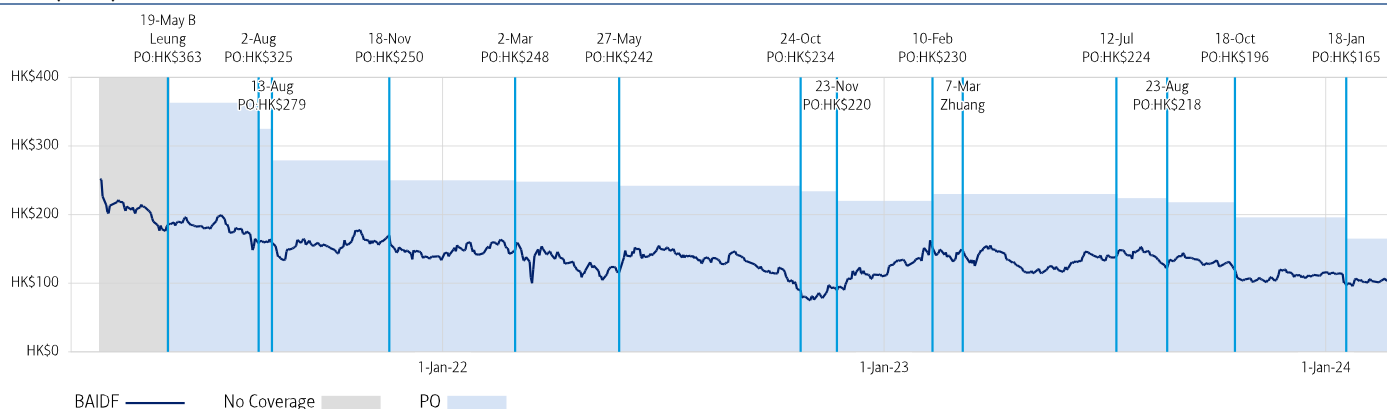
Baidu.com-ADR (BIDU) Price Chart



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.

Baidu.com (BAIDF) Price Chart



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

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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%
Underperform	N/A	≥ 20%

^{R2}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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