Alphabet

Solid search results, investing to support Al capabilities and cloud demand; Buy

Reiterate Rating: BUY | PO: 225.00 USD | Price: 206.38 USD

Search & YouTube beat offset by Cloud & Network miss

4Q net rev. at \$81.6bn was above Street at \$81.5bn driven by Search & YouTube upside. Search revs. grew 13% y/y (vs Street 11%), while YouTube grew 14% y/y (vs 11%), both accelerating q/q. Cloud growth decelerated 5pt q/q to 30% y/y (vs Street 32%), with Google & Azure both highlighting cloud capacity needs. 4Q EPS at \$2.15 beat at Street \$2.12 & benefited from lower S&M & SBC expense. Overall, as solid search quarter, but growing expectations post Meta's Q, Cloud miss and higher capex pressured stock AH.

Growing search vol growth; Cloud capacity constrained

Management emphasized growing Search volumes, aided by Overviews and Circle to search, though y/y disclosure is still lacking. The notable miss was Cloud revenues but management noted rapidly growing AI demand and that capacity constraints and a 4pt tougher y/y comp drove the deceleration in y/y growth. For FY25, Alphabet guided Capex at \$75bn (vs Street \$60bn) with focus on expanding infrastructure to meet growing AI demand (a positive). Some of this capacity is likely earmarked for Overviews.

'26 EPS unchanged; higher rev. growth offset by expenses

We recently updated estimates for FX, and are not changing our 2026 EPS estimate. We are raising revenue estimates for higher growth in Search, offset by lower growth in Cloud and higher depreciation expense. For 2025, we are raising net revenue by 1% to \$329bn, Opex by 1.1%, & GAAP EPS by 0.8% to \$8.85. For 2026, we raise net revenue by 0.7% to \$367bn, Opex by 1.1%, and our GAAP EPS remain unchanged at \$10.06. We raise 2025 capex to \$76bn & 2026 to \$83bn. We estimate \$21bn D&A in 2025 (up 37% y/y) & \$74bn in FCF (up 2% y/y).

Constructive on growing Al benefits for Search & Cloud

We are encouraged to see another quarter of strong Search growth and think Street could be underestimating Al Overview benefits for Search monetization in 2025. Street will likely have concerns on AI competitive noise (Meta AI and Open AI announcements), and slowing profit growth on higher infrastructure costs, but with core search business at 14x in our sum of parts, we see an attractively valued core search business that we expect to grow 12-13% ex-FX in 2025. Next potential catalysts for the stock are new AI driven search products & Cloud Next (4/9). Reiterate Buy & maintain \$225 PO.

Estimates (Dec) (US\$)	2023A	2024A	2025E	2026E	2027E
EPS	5.80	8.04	8.85	10.06	11.37
EPS Change (YoY)	27.2%	38.6%	10.1%	13.7%	13.0%
Consensus EPS (Bloomberg)			9.18	10.53	12.11
DPS	0	0.60	0.60	0.61	0.61
EPS (GOOG - US\$)	5.80	8.04	8.85	10.06	11.37
DPS (GOOG - US\$)	0	0.60	0.60	0.61	0.61
Valuation (Dec)					
P/E	35.6x	25.7x	23.3x	20.5x	18.2x
Dividend Yield	0%	0.3%	0.3%	0.3%	0.3%
EV / EBITDA*	21.0x	17.2x	15.0x	13.1x	11.4x
Free Cash Flow Yield*	2.7%	2.8%	2.9%	3.5%	4.4%
* For full definitions of <i>IQ</i> method SM measures, see page 11.					

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 12 to 15. Analyst Certification on page 10. Price Objective Basis/Risk on page 10.

Key Changes

Equity

Rey enanges		
(US\$)	Previous	Current
2025E Rev (m)	325,212.9	328,590.3
2026E Rev (m)	364,850.5	367,423.5
2027E Rev (m)	410,621.8	412,494.8
2025E EPS	8.78	8.85
2027E EPS	11.53	11.37

Justin Post

Research Analyst BofAS +1 415 676 3547 justin.post@bofa.com

05 February 2025

Nitin Bansal, CFA **Research Analyst** BofAS +1 415 676 3551 nbansal7@bofa.com

Stock Data

Price (NAS / NAS)	206.38 USD / 207.71 USD
Price Objective	225.00 USD / 225.00 USD
Date Established	14-Jan-2025 / 14-Jan-2025
Investment Opinion	B-1-7 / B-1-7
52-Week Range	130.67 USD - 207.05 USD
Market Value (mn)	2,562,208 USD
Free Float	99.7%
Average Daily Value	5273.40 USD
Shares Outstanding (mn)	12,415.0 / 12,415.0
BofA Ticker / Exchange	GOOGL / NAS
BofA Ticker / Exchange	GOOG / NAS
Bloomberg / Reuters	GOOGL US / GOOGL.OQ
ROE (2025E)	35.2%
Net Dbt to Eqty (Dec-	1.7%
2024A)	

GCP: Google Cloud Platform COR: Cost of Revenue AWS: Amazon Web Services YT: YouTube D&A: Depreciation & Amortization CC: Constant Currency LLM: Large Language Models Al: Artificial Intelligence Gen-Al: Generative Al AIO: AI Overviews SOTP: Sum of the parts

12790820

*iQ*profile[™]Alphabet

iQmethod SM – Bus Performance*					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Return on Capital Employed	31.0%	37.2%	37.5%	36.4%	34.9%
Return on Equity	27.4%	35.3%	35.2%	33.8%	32.0%
Operating Margin	42.8%	45.8%	46.0%	45.8%	45.5%
Free Cash Flow	69,495	72,764	74,415	90,362	112,744
iQmethod [™] – Quality of Earnings* (US\$ Millions)	2023A	2024A	2025E	2026E	2027E
	2023A 1.4x	2024A 1.3x	2025E 1.4x	2026E 1.4x	2027E 1.5x
(US\$ Millions)					
(US\$ Millions) Cash Realization Ratio	1.4x	1.3x	1.4x	1.4x	1.5x
(US\$ Millions) Cash Realization Ratio Asset Replacement Ratio	1.4x 2.4x	1.3x 3.4x	1.4x 3.6x	1.4x 2.9x	1.5x 2.3x

Income Statement Data (Dec)

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Sales	256,508	295,118	328,590	367,423	412,495
% Change	9.7%	15.1%	11.3%	11.8%	12.3%
Gross Profit	174,062	203,712	225,848	250,743	279,302
% Change	11.1%	17.0%	10.9%	11.0%	11.4%
EBITDA	123,410	150,486	172,152	197,639	227,353
% Change	12.3%	21.9%	14.4%	14.8%	15.0%
Net Interest & Other Income	(23,994)	(15,360)	(21,775)	(23,665)	(25,585)
Net Income (Adjusted)	73,783	100,076	107,598	120,486	134,875
% Change	23.0%	35.6%	7.5%	12.0%	11.9%

Free Cash Flow Data (Dec)

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Net Income from Cont Operations (GAAP)	73,795	100,118	107,542	120,468	134,866
Depreciation & Amortization	13,699	15,311	21,000	29,180	39,670
Change in Working Capital	(3,845)	(9,343)	(3,634)	(3,589)	(619)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	18,097	19,213	25,140	27,730	30,430
Capital Expenditure	(32,251)	(52,535)	(75,633)	(83,427)	(91,603)
Free Cash Flow	69,495	72,764	74,415	90,362	112,744
% Change	15.8%	4.7%	2.3%	21.4%	24.8%
Share / Issue Repurchase	953	(8,879)	(13,296)	(14,896)	(16,496)
Cost of Dividends Paid	0	(7,363)	(7,271)	(7,190)	(7,107)
Change in Debt	(11,550)	(2,423)	(1,200)	(2,400)	(3,600)

Balance Sheet Data (Dec)

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Cash & Equivalents	24,048	24,048	11,436	12,299	32,435
Trade Receivables	47,964	47,964	58,674	65,653	73,599
Other Current Assets	99,518	99,518	100,956	102,642	104,582
Property, Plant & Equipment	134,345	134,345	189,005	243,311	295,335
Other Non-Current Assets	96,517	96,517	97,317	98,117	98,917
Total Assets	402,392	402,392	457,389	522,021	604,868
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	81,814	81,814	92,328	99,403	110,671
Long-Term Debt	27,329	28,725	28,525	28,325	28,125
Other Non-Current Liabilities	9,870	8,474	8,474	8,474	8,474
Total Liabilities	119,013	119,013	129,327	136,202	147,270
Total Equity	283,379	283,379	328,061	385,819	457,598
Total Equity & Liabilities	402,392	402,392	457,389	522,021	604,868

* For full definitions of *IQ* methodSM measures, see page 11.

Company Sector

Internet/e-Commerce

Company Description

Alphabet is a global technology company focused around key areas, such as search, advertising, operating systems and platforms, enterprise and hardware products. The company generates revenue primarily by delivering online advertising and by selling apps and contents on Google Play as well as hardware products. The company provides its products and services in more than 100 languages and in 190 countries, regions, and territories.

Investment Rationale

We see Alphabet as well positioned long term with leading Al technology to apply to search, YouTube and Cloud businesses. Alphabet should also benefit from increasing mobile usage, video usage, Google Play activity, and connected device activity (including autos). We believe that Alphabet should trade at a premium to a media peer group given technology leadership, high margins, and strong cash flow generation for buybacks.

Stock Data

Average Daily Volume	25,551,892
Shares / Common - Dual Listed	1.00

Quarterly Earnings Estimates

	2024	2025
Q1	1.89A	1.99E
Q2	1.89A	2.18E
Q3	2.12A	2.24E
Q4	2.15A	2.44E

Previous	Current
8.78	8.85
11.53	11.37
	8.78



4Q Summary and thoughts on the stock

Four key drivers for the stock (revenue trends, y/y core margin trends, use of capital and new disclosures) were mixed in 4Q.

- **Revenue Trajectory:** Total net revenue growth decelerated 3pt to 13% from 16% in 3Q. Search revenues, however, grew 13% y/y (vs Street 11%), accelerating 1pts q/q, YouTube grew 14% y/y (vs Street 11%), accelerating 2pts q/q, and Cloud revenues grew 30% (vs Street 32%), decelerating 5pts q/q. ex-FX Google Properties (which includes Search and YouTube) grew 13% (same as 3Q'24). Overall revenue growth was partially impacted by Pixel launch in 3Q.
- **Margin Trajectory:** Google services core margins improved 402bps y/y in 4Q, vs improvement of +512ps y/y in 3Q. Total headcount at 183.3K was slightly above Street at 182.8K and was flat y/y (up 1% q/q).
- **Capital Allocation:** Little change. Alphabet maintained cash dividend of \$0.20 per share. The company repurchased \$15.5bn of shares in 4Q (total \$62.2bn in 2024).
- **Disclosures:** Some new commentary on Al Overviews and capex. Management noted 1) healthy growth in Google Search volume and noted Al Overviews are driving higher usage, 2) Alphabet plans to invest ~\$75bn in Capex in FY25, with \$16-\$18bn in 1Q'25, prioritizing servers, data centers, and networking to support Al expansion, 3) Due to higher Capex investments, depreciation expenses growth is expected to accelerate in 2025, and 4) In FY25, the company expects selective hiring in Al and Cloud.

For 4Q commentary and business outlook, management noted that:

- 1) **Search:** 4Q'24 growth was driven by strength in financial services (insurance) and retail vertical.
- 2) **YouTube:** 4Q'24 growth was primarily led by brand advertising, followed by performance advertising.
- 3) **2025 ad growth outlook:** Management noted 2025 ad revenue growth will be impacted by lapping strong financial vertical performance from 2024.
- Subscription & Devices: 4Q'24 Growth was driven by subscription revenue increases, partially offset by the shift in Made by Google device launches to 3Q'24.
- 5) **Subscription:** Continued strong growth across YouTube TV, YouTube Music, YouTube Premium, and Google One, driven by an increase in paid subscribers.
- 6) **Google Play**: The growth rate slightly increased in 4Q'24, mainly due to a strong rise in the number of buyers.
- 7) **Cloud:** 4Q'24 Growth was fueled by AI adoption, with GCP growing at a significantly higher rate than the overall cloud segment.
- 8) **Google Workspace**: Growth was driven by higher average revenue per seat.
- 9) **Cloud Revenue Outlook**: Management expects Cloud revenue growth to fluctuate in 2025, depending on the timing of new capacity deployments.
- 10) **Capex:** 4Q capex of \$14bn was driven by investments in technical infrastructure, with the largest component being investment in servers, followed by data centers to support the growth of business across Google services, Google Cloud and Google DeepMind.



- 11) **FY25 Capex outlook:** Alphabet plans to invest ~\$75bn in Capex in FY25, with \$16-\$18bn in 1Q'25, prioritizing servers, data centers, and networking to support Al expansion.
- 12) **Depreciation**: Due to higher Capex investments, depreciation expense growth is expected to accelerate in 2025 (D&A was up 28% y/y in 2024).
- 13) **Efficiency & Hiring**: Alphabet remains focused on efficiency improvements while accelerating AI product launches. In FY25, the company expects selective hiring in AI and Cloud to support innovation.

Amazon AWS read across neutral to negative

AWS – **Google Cloud miss, it may come down to AWS capacity capabilities in 4Q** In 4Q, total Google Cloud growth decelerated 5pts to 30% y/y (vs Street 32%) on a 4pt more difficult y/y comp. For AWS, we estimate stable q/q growth in 4Q (on 1pts tougher y/y comp) at 19% (marginally below Street) and Google commentary suggested that AI driven demand is increasing, but capacity constraints are limiting sector growth.

4Q Positives:

- Search revenue beat: 4Q'24 Search revenue at \$54.0bn was above Street at \$53.4bn and y/y growth accelerated 1pts vs 3Q to 13% on a 1pt tougher comps. 4Q Search growth was driven by strength in the financial services (insurance) and retail verticals.
- YouTube beat: 4Q'24 YouTube revenue at \$10.4bn was above Street at \$10.2bn and y/y growth accelerated 2pts to14% y/y on 4pt tougher y/y comp. Growth was driven by brand followed by performance advertising. Political advertising aided the quarter which won't repeat in 1Q.
- Margins above Street: GAAP Operating Income at \$31.0bn (37.9% margin) was above Street at \$30.5bn (37.4% margin) due to lower- than-expected S&M and SBC expense, and GAAP EPS at \$2.15 was above Street estimates at \$2.12. Total reported Opex was down 0.6% y/y in 4Q.
- Al overviews aiding Search usage: Management emphasized healthy growth in Google Search volume and noted Al Overviews are driving higher usage.
- **Growing Gemini traction:** Management more than 4.4mn developers are using Google Gemini models, double the number from just six months ago.
- Growing Al cloud demand: Management highlighted Cloud customers are consuming >8x compute capacity (vs 18 months ago) and cloud business is capacity constrained (rather than demand).

4Q Negatives:

- FY25 Capex guide above Street: Alphabet plans to invest ~\$75bn in Capex in FY25 (vs Street estimates for \$60bn), with \$16-\$18bn expected spend in 1Q'25. The company with invest in servers, data centers, and networking to support Al expansion.
- Higher depreciation expense: Due to higher Capex investments, depreciation expense growth is expected to accelerate in 2025 (D&A was up 28% y/y in 4Q'24) and weigh on EPS growth. We estimate \$21bn D&A expense in 2025 (up 37% y/y) & \$74bn FCF (up 2% y/y).
- Network revenues below Street: 4Q'24 Network revenue miss at \$8.0bn was below Street at \$8.2bn and y/y growth decelerated 2pts to down 4% y/y on



11

a 1pt tougher comp. This could reflect continued advertiser preference for larger platforms with advanced 1P targeting capabilities.

- Cloud revenues below Street: 4Q'24 Cloud revenue at \$12.0bn was below Street at \$12.1bn and y/y growth decelerated 5pts q/q to 30% on a 4pt tougher y/y comp.
- Other revenues below Street: 4Q'24 Other revenue at \$11.6bn (up 8% y/y) was below Street estimates at \$12.0bn. 4Q'24. Growth was driven by subscription revenue increases, partially offset by the shift in hardware (Made by Google) device launches to 3Q'24.
- Tough advertising comps ahead: Management noted 2025 ad revenue growth will be impacted by lapping strong financial services performance from 2024. For 1Q, management noted growth will be impacted by Leap year benefit in 1Q'24 and FX headwinds.
- Some negative possible catalysts ahead: While not discussed on the call, we see potential for some negative catalysts (such as OpenAl launching ads, new product rollouts from Meta & other emerging competitors, and Search remedy hearing in April) could impact sentiment.

Actual vs Expected Results

4Q net revenue at \$81.6bn beat Street at \$81.5bn driven by Search & YouTube strength offset by Cloud and Network misses. Search revs. grew 13% y/y (vs Street 11%), while YouTube grew 14% y/y (vs 11%), both accelerating q/q. Cloud growth decelerated 5pt q/q to 30% y/y (vs Street 32%), with margins up 36bps q/q to 17.4%. 4Q GAAP EPS at \$2.15 (vs Street \$2.12) & benefited from lower S&M & SBC expense. Operating margins improved 518bps y/y to 37.9% and core service margins increased 402bps y/y to 39.0%. Other income was \$1.3bn (vs Street \$0.9bn).

Exhibit 1: Alphabet actual vs estimates (\$ in millions)

4Q'24 Net Revenue/EPS was above Street.

	4Q'24	Actual vs Str	eet vs BofA		
Alphabet Actual vs Street Results	BofA	Street	Actual	Act vs Street	Act vs BofA
Google segment Revs					
Google Search & other	\$52,908	\$53,405	\$54,034	\$629	\$1,126
v/v %	10%	11%	13%		
YouTube ads	\$10,120	\$10,241	\$10,473	\$232	\$353
V/V %	10%	11%	14%		
Network Revenue	\$8,110	\$8,187	\$7,954	(\$233)	(\$156)
y/y %	(2%)	(1%)	(4%)		
Google Cloud Revenue	\$12,253	\$12,137	\$11,955	(\$182)	(\$298)
y/y %	33%	32%	30%		
Other Revenue	\$11,905	\$11,949	\$11,633	(\$316)	(\$272)
y/y %	10%	11%	8%		
Other Bets Segment Revs	\$447	\$604	\$400	(\$204)	(\$47)
y/y %	(32%)	(8%)	(39%)		
Consolidated Gross Revenue	\$96,143	\$96,581	\$96,469	(\$112)	\$326
TAC	\$15,051	\$15,026	\$14,848	(\$178)	(\$203)
Google Net Revenue	\$81,092	\$81,472	\$81,621	\$149	\$529
y/y %	12%	12.6%	13%	0.2%	0.7%
Other cost of revenue	\$26,055	\$25,714	\$25,765	\$51	(\$290)
Research and Development	\$12,999	\$13,089	\$13,116	\$27	\$117
Sales and Marketing	\$7,971	\$7,894	\$7,363	(\$531)	(\$608)
General & Administrative	\$4,071	\$4,478	\$4,405	(\$73)	\$334
	1 /	1 /	1,		
GAAP Operating Income	\$29,996	\$30,480	\$30,972	\$492	\$976
Margin	37.0%	37.4%	37.9%	0.5%	1.0%
D&A	\$4,335	\$4,331	\$4,205	(\$126)	(\$130)
SBC	\$5,896	\$6,239	\$5,810	(\$429)	(\$86)
Adj EBITDA	\$40,227	\$40,997	\$40,987	(\$10)	\$760
Margin	49.6%	50.3%	50.2%	-0.1%	0.6%
Non-GAAP EPS	\$2.47	\$2.52	\$2.54	\$0.02	\$0.07
GAAP EPS	\$2.07	\$2.12	\$2.15	\$0.03	\$0.08
Headcount	181,769	182,834	183,323	489	1,554
	t /= co=	+ 10 0FF	+ 13 0 3 F	+===	(1010)
US Gross Revenue	\$47,687	\$46,855	\$47,375	\$520	(\$312)
EMEA Gross Revenue	\$27,717	\$27,599	\$28,184	\$585	\$467
APAC Gross Revenue	\$15,167	\$15,575	\$15,156	(\$419)	(\$11)
Other Americas Gross Revenue	\$5,572	\$5,856	\$5,734	(\$122)	\$162

Source: BofA Global Research estimates, Company Filings, Visible Alpha

BofA GLOBAL RESEARCH

11

Estimate changes

We are raising our revenue estimates for higher growth in Search offset by lower growth in Cloud, Network and Other revenue. Our EPS estimates are virtually unchanged as higher expenses (depreciation, R&D and headcount) offset impact from higher revenues. For 1Q, we estimate net revenue of \$75.0bn and GAAP EPS of \$1.99. For 2025, we are increasing net revenue by 1% to \$329bn, Opex by 1.1%, & GAAP EPS by 0.8% to \$8.85. For 2026, we are increasing net revenue by 0.7% to \$367bn, Opex by 1.1%, & our GAAP EPS estimate remain unchanged at \$10.06. We raise 2025 capex to \$76bn & 2026 to \$83bn. We estimate \$21bn D&A expense in 2025 (up 37% y/y) & \$74bn FCF (up 2% y/y).

Exhibit 2: Alphabet Estimate Changes

We maintain our 2026 GAAP EPS at \$10.06.

	10'2	25 Estimat	es	2Q'2	25 Estimat	es	202	5 Estimates	5	202	6 Estimates	S
	Old	New	Change	Old	New	Change	Old	New	Change	Old	New	Change
Google Properties	\$58,202	\$58,882	\$680	\$61,603	\$62,693	\$1,090	\$250,503	\$254,657	\$4,154	\$277,354	\$280,957	\$3,603
Google Network Websites	\$7,220	\$6,872	(\$348)	\$7,394	\$7,295	(\$99)	\$30,245	\$29,363	(\$882)	\$31,018	\$29,563	(\$1,454)
Google Cloud	\$12,558	\$12,280	(\$278)	\$13,368	\$13,160	(\$208)	\$55,788	\$54,856	(\$932)	\$69,429	\$68,647	(\$782)
Google Other Revenues	\$9,422	\$9,418	(\$3)	\$10,089	\$10,126	\$37	\$44,003	\$43,774	(\$228)	\$49,026	\$48,771	(\$256)
Google Gross Revenue	\$87,402	\$87,452	\$50	\$92,455	\$93,274	\$819	\$380,539	\$382,651	\$2,112	\$426,827	\$427,938	\$1,111
Traffic Acquisition Costs (TAC)	\$13,782	\$13,414	(\$369)	\$14,486	\$14,291	(\$195)	\$59,436	\$58,090	(\$1,347)	\$64,333	\$62,770	(\$1,563)
Google Net Revenue (ex-TAC)	\$74,615	\$75,009	\$394	\$78,932	\$79,946	\$1,014	\$325,213	\$328,590	\$3,377	\$364,850	\$367,423	\$2,573
Y/Y	10%	11%	0.6%	11%	12%	1.4%	10%	11%	0.9%	12%	12%	-0.4%
Other Bets Revenues	\$446	\$421	(\$25)	\$438	\$438	\$0	\$1,885	\$1,804	(\$81)	\$2,357	\$2,255	(\$101)
Y/Y	-10%	-15%	-5.0%	20%	20%	0.0%	11%	9%	-1.8%	25%	25%	0.0%
Consolidated Gross Revenue	\$88,397	\$88,423	\$26	\$93,418	\$94,237	\$819	\$384,649	\$386,680	\$2,031	\$429,184	\$430,193	\$1,009
Consolidated Net Revenue (ex-TAC)	\$74,615	\$75,009	\$394	\$78,932	\$79,946	\$1,014	\$325,213	\$328,590	\$3,377	\$364,850	\$367,423	\$2,573
Y/Y	10%	11%	1%	11%	12%	1%	10%	11%	1%	12%	12%	0%
Other Costs of Revenue	\$23,057	\$23,064	\$7	\$24,665	\$25,070	\$405	\$102,016	\$102,742	\$726	\$115,542	\$116,681	\$1,139
Gross Profit	\$51,557	\$51,945	\$388	\$54,267	\$54,876	\$609	\$223,197	\$225,848	\$2,651	\$249,309	\$250,743	\$1,434
Gross Profit Margin	30.9%	30.7%	-0.2%	31.2%	31.4%	0.1%	31.4%	31.3%	-0.1%	31.7%	31.8%	0.1%
Research and Dev.	\$12,722	\$12,902	\$180	\$12,945	\$13,111	\$166	\$53,201	\$54,116	\$915	\$58,956	\$60,146	\$1,190
Sales and Mktg	\$6,872	\$6,908	\$36	\$7,341	\$7,355	\$14	\$30,480	\$30,262	(\$218)	\$33,100	\$32,736	(\$364)
<u>G & A</u>	\$3,432	\$3,450	\$18	\$3,552	\$3,598	\$46	\$15,067	\$15,408	\$341	\$16,538	\$16,862	\$324
Total Operating Expenses	\$23,026	\$23,260	\$234	\$23,837	\$24,064	\$226	\$98,748	\$99,786	\$1,038	\$108,594	\$109,744	\$1,150
% of net rev	31%	31%	0%	30%	30%	0%	30%	30%	0%	30%	30%	0%
Operating Income - GAAP	\$28,531	\$28,685	\$153	\$30,429	\$30,812	\$383	\$124,449	\$126,062	\$1,613	\$140,714	\$140,999	\$284
Margin	38.2%	38.2%	0.0%	38.6%	38.5%	0.0%	38.3%	38.4%	0.1%	38.6%	38.4%	-0.2%
SBC	\$6,296	\$6,210	(\$86)	\$6,396	\$6,310	(\$86)	\$25,434	\$25,090	(\$344)	\$27,804	\$27,460	(\$344)
Operating Income - non-GAAP	\$34,827	\$34,895	\$67	\$36,825	\$37,122	\$297	\$149,883	\$151,152	\$1,269	\$168,518	\$168,459	(\$60)
% of net rev	46.7%	46.5%	-0.2%	46.7%	46.4%	-0.2%	46.1%	46.0%	-0.1%	46.2%	45.8%	-0.3%
D&A	\$4,725	\$4,595	(\$130)	\$5,075	\$5,045	(\$30)	\$20,920	\$21,000	\$80	\$26,900	\$29,180	\$2,280
Adj. EBITDA	\$39,552	\$39,490	(\$63)	\$41,900	\$42,167	\$267	\$170,803	\$172,152	\$1,349	\$195,418	\$197,639	\$2,220
Margin	53.0%	52.6%	-0.4%	53.1%	52.7%	-0.3%	52.5%	52.4%	-0.1%	53.6%	53.8%	0.2%
Interest income and other, net	\$880	\$790	(\$90)	\$895	\$805	(\$90)	\$3,675	\$3,315	(\$360)	\$4,235	\$3,795	(\$440)
Income pre-tax and acct. change (Reported)	\$29,411	\$29,475	\$63	\$31,324	\$31,617	\$293	\$128,124	\$129,377	\$1,253	\$144,949	\$144,794	(\$156)
Provision for tax	\$5,014	\$5,011	(\$3)	\$5,012	\$5,059	\$47	\$21,514	\$21,835	\$322	\$24,710	\$24,325	(\$385)
Effective tax rate (Reported)	17.0%	17.0%	0.0%	16.0%	16.0%	0.0%	16.8%	16.9%	0.1%	17.0%	16.8%	-0.2%
Net income - GAAP	\$24,398	\$24,464	\$67	\$26,312	\$26,559	\$246	\$106,611	\$107,542	\$931	\$120,239	\$120,468	\$229
Net income - non-GAAP	\$29,620	\$29,618	(\$2)	\$31,685	\$31,859	\$174	\$127,779	\$128,404	\$625	\$143,307	\$143,301	(\$6)
Diluted GAAP EPS	\$1.99	\$1.99	\$0.00	\$2.16	\$2.18	\$0.02	\$8.78	\$8.85	\$0.07	\$10.06	\$10.06	\$0.00
Diluted EPS (ex-SBC)	\$2.42	\$2.41	(\$0.00)	\$2.60	\$2.61	\$0.01	\$10.52	\$10.56	\$0.04	\$11.99	\$11.96	(\$0.02)
Diluted shares	12,264	12,278	14	12,184	12,198	14	12,144	12,158	14	11,957	11,977	20
Consolidated Capital expenditures	\$14,177	\$17,252	\$3,075	\$14,918	\$18,388	\$3,469	\$60,138	\$75,633	\$15,495	\$67,758	\$83,427	\$15,670
Headcount	182,769	184,823	2,054	183,269	186,023	2,754	185,669	190,523	4,854	192,469	198,323	5,854

Source: BofA Global Research estimates

111

BofA GLOBAL RESEARCH

Valuation

PO: Our unchanged \$225 PO is based on 2026 GAAP EPS of \$10.06 and 22x P/E multiple.

Exhibit 3: Alphabet valuation

Our unchanged \$225 PO is based on 2026 GAAP EPS of \$10.06 and 22x P/E multiple.

	2026 GAAP
Other Bets losses (mn)	(\$4,956)
Estimated Tax Savings	\$843
Other Bets Losses ex-Tax	(\$4,113)
2025 Diluted Shares	12,158
GAAP EPS Impact	(\$0.34)
2026E Total GAAP EPS	\$10.06
Adjusted EPS*	\$10.36
Applying a target PE multiple	21x
Implied Target Price / Share	\$218
Plus YE26 cash/share	\$7.2
Implied Target Price / Share	\$225
Source: BofA Global Research estimates	

BofA GLOBAL RESEARCH

Sum of the parts valuation

Using the AH price of \$192.60, Alphabet stock is currently valued at 19x our GAAP 2026 EPS, vs a 14-year historical range of 13-30x and 10- year average of 22x. Backing out our estimated values for YouTube, YouTube Subscription, Cloud, Waymo, and cash, as well as the potential earnings contribution from YouTube, and \$3.9bn in after-tax losses from Other Bets investments, we estimate the implied valuation on core Google advertising and Play businesses at 14x 2025E earnings, which we think is attractive vs the S&P 500 at 20x.

Exhibit 4: Alphabet 2yr Forward GAAP PE

Core Services Sum-of-the-Parts Valuation Analysis based on AH GOOG price of ~\$192.60

Alphabet Sum of the Parts Valuation (2026 Estimates)					
	Net				
Mkt Cap	Revenue	P/S	Net income	P/E Comment	
\$2,342	\$367	6.4x	\$120	19x	
(\$179)	(\$45)		(\$4.5)	40x 4.0x revenues (peers at 3-5x), assumes 12% profit margin and a 17% tax rate	
(\$44)	(\$29)		(\$1.2)	Assumes 1.5x P/S multiple and 5% margin & 17% tax rate	
(\$549)	(\$69)		(\$11.6)	Assumes 8x P/S and 20% margins in 2026 and a 17% tax rate	
(\$50)	\$0		\$0.0	Reflects time horizon & potential technology value	
	(\$2)		\$4.1	Waymo loss included, and incorporates a 17% tax rate	
(\$86)			(\$2.2)	Excludes net cash, est. 3% interest income and 17% tax rate	
\$1,433	\$222	6.4x	\$105	14x	
	\$2,342 (\$179) (\$44) (\$549) (\$50) (\$86)	Mkt Cap Revenue \$2,342 \$367 (\$179) (\$45) (\$44) (\$29) (\$549) (\$69) (\$50) \$0 (\$86)	Mkt Cap Revenue P/S \$2,342 \$367 6.4x (\$179) (\$45) (\$44) (\$44) (\$29) (\$69) (\$50) \$0 (\$2,50) (\$86) (\$2,20) (\$2,20)	Net Perenue P/S Net income \$2,342 \$367 6.4x \$120 (\$179) (\$45) (\$4.5) (\$44) (\$29) (\$1.2) (\$549) (\$69) (\$11.6) (\$50) \$0 \$0.0 (\$22) \$4.1 (\$86) (\$2.2)	

Source: BofA Global Research Estimates

BofA GLOBAL RESEARCH

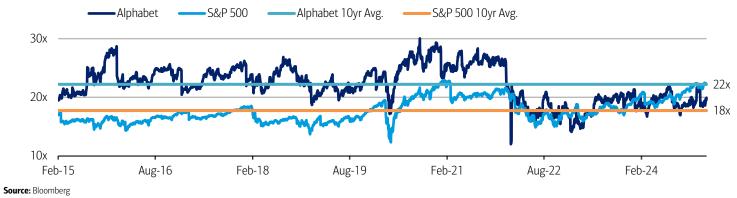
At the AH price of ~\$192.60, Alphabet is currently trading at 19x our 2026 GAAP EPS vs a 2yr forward GAAP PE historical average of 22x and 16-year historical range of 12-30x. In the last 10yrs, Alphabet has traded at an average 4pts premium to S&P 500 (trading at 20x, assuming 2026 GAAP EPS of \$295).



11

Exhibit 5: Alphabet & S&P 500 2yr Forward GAAP PE Multiple

At the AH price of \$X, Alphabet is currently trading at Xx our revised 2026 GAAP EPS.



BofA GLOBAL RESEARCH



Price objective basis & risk

Alphabet (GOOGL / GOOG)

Our price objective of \$225/\$225 is based on 21x 2026E core Google GAAP EPS plus cash per share. Alphabet has traded at an average multiple of 22x GAAP P/E over the last ten years and we think our multiple is reasonable vs history given expectations for double-digit revenue growth, Cloud margin expansion, and opportunity to capitalize on strong AI assets.

Downside risks are: 1) loss of search traffic to AI tools from competitors, 2) LLM integration in search may take longer than expected or negatively impact search revenues, 3) revenue pressure from compliance with the EU Digital Markets Act (DMA), 4) adverse judge ruling on the ongoing Department of Justice (DOJ) search distribution trial, and 5) potential for increasing Capex and lower FCF-given AI investments.

Analyst Certification

I, Justin Post, 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 - Internet Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Alphabet	GOOGL	GOOGL US	Justin Post
	Alphabet	GOOG	GOOG US	Justin Post
	Amazon.com	AMZN	AMZN US	Justin Post
	AppLovin	APP	APP US	Omar Dessouky, CFA
	Carvana	CVNA	CVNA US	Michael McGovern
	Chewy Inc	CHWY	CHWY US	Curtis Nagle, CFA
	DoorDash	DASH	DASH US	Michael McGovern
	Expedia	EXPE	EXPE US	Justin Post
	lbotta	IBTA	IBTA US	Curtis Nagle, CFA
	Integral Ad Science Holding Corp.	IAS	IAS US	Omar Dessouky, CFA
	Lyft, Inc.	LYFT	LYFT US	Michael McGovern
	Magnite, Inc.	MGNI	MGNI US	Omar Dessouky, CFA
	Meta Platforms Inc	META	META US	Justin Post
	Peloton	PTON	PTON US	Curtis Nagle, CFA
	Pinterest	PINS	PINS US	Justin Post
	RH	RH	RHUS	Curtis Nagle, CFA
	Roblox Corp. Class A	RBLX	RBLX US	Omar Dessouky, CFA
	Take-Two Interactive	TTWO	TTWO US	Omar Dessouky, CFA
	Uber	UBER	UBER US	Justin Post
	Vivid Seats	SEAT	SEAT US	Curtis Nagle, CFA
	Wix.com	WIX	WIX US	Michael McGovern
NEUTRAL				
IEUTRAL	ACV Auctions	ACVA	ACVA US	Curtis Nagle, CFA
	Airbnb	ABNB	ABNB US	Justin Post
	Booking Holdings Inc	BKNG	BKNG US	Justin Post
	Duolingo	DUOL	DUOLUS	Curtis Nagle, CFA
	eBay	EBAY	EBAY US	Justin Post
	Electronic Arts	EA	EAUS	Omar Dessouky, CFA
	Electronic Arts Etsy, Inc.	ETSY	ETSY US	Curtis Nagle, CFA
	Instacart	CART	CART US	Justin Post
		MTCH	MTCH US	•
	Match Group			Curtis Nagle, CFA
	Reddit	RDDT	RDDT US	Justin Post
	Snap	SNAP	SNAP US	Justin Post
	Udemy Inc	UDMY	UDMY US	Curtis Nagle, CFA
	Wayfair	W	W US	Curtis Nagle, CFA
	Zillow	ZG	ZG US	Curtis Nagle, CFA



111

US - Internet Coverage Cluster

Investment rating	Company Zillow	BofA Ticker Z	Bloomberg symbol Z US	Analyst Curtis Nagle, CFA
UNDERPERFORM				
	Bumble	BMBL	BMBL US	Curtis Nagle, CFA
	Cardlytics, Inc	CDLX	CDLX US	Omar Dessouky, CFA
	Digital Turbine, Inc	APPS	APPS US	Omar Dessouky, CFA
	DoubleVerify Holdings, Inc.	DV	DV US	Omar Dessouky, CFA
	LegalZoom	LZ	LZ US	Michael McGovern
	Opendoor Technologies	OPEN	OPEN US	Curtis Nagle, CFA
	Playtika	PLTK	PLTK US	Omar Dessouky, CFA
	Redfin Corp	RDFN	RDFN US	Curtis Nagle, CFA
	Yelp	YELP	YELP US	Nitin Bansal, CFA
RVW				
	Coursera Inc.	COUR	COURUS	Nafeesa Gupta

*iQ*method[™] Measures Definitions

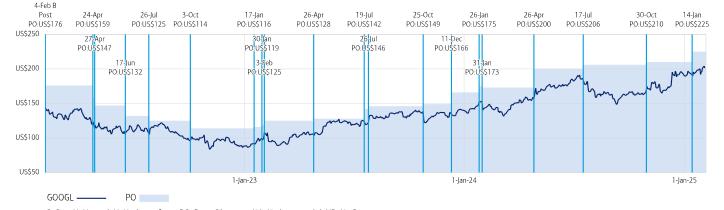
Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (1 - Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating 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

*Rethod*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. *Redatabase*[®] 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^{5M}, IQmethod^{5M} are service marks of Bank of America Corporation. IQdatabase[®] is a registered service mark of Bank of America Corporation.

Disclosures Important Disclosures

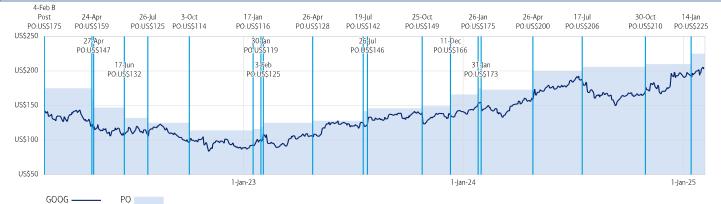
Alphabet A (GOOGL) Price Chart



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.

Alphabet C (GOOG) 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 2024)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	209	53.45%	Buy	107	51.20%
Hold	93	23.79%	Hold	47	50.54%
Sell	89	22.76%	Sell	28	31.46%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2024)

Buy 1869 54.39% Buy	1108	59.28%
Duy 1005 54.55% Duy	1108	59.20%
Hold 766 22.29% Hold	463	60.44%
Sell 801 23.31% Sell	370	46.19%

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.

11

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.

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.

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: Alphabet A, Alphabet C.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Alphabet.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Alphabet.

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: Alphabet.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Alphabet.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Alphabet. 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: Alphabet.

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: Alphabet A, Alphabet C.

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: Alphabet.

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 <u>BofA Global Research policies relating to conflicts of interest</u>.

"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.bofaml.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 (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 (HKSFC); 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; 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 HKSFC; 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 <u>Electronic Communications Disclaimers</u> 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, NA). 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.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS 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 BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS 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.

Copyright and General Information:

Copyright 2025 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. This document and its content is provided solely for informational purposes and cannot be used for training or developing artificial intelligence (AI) models or as an input in any AI application (collectively, an AI tool). Any attempt to utilize this document or any of its content in connection with an Al tool without explicit written permission from BofA Global Research is strictly prohibited. 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 BofAS 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 sustainability in this material is limited as discussed herein and is not intended to provide a comprehensive view on any sustainability claim with respect to any issuer or security.

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 BofAS 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.

