

Alphabet

Search misses high expectations, but y/y growth accelerates across all key segments

Reiterate Rating: BUY | PO: 173.00 USD | Price: 151.46 USD

4Q Rev/EPS beat driven by cloud & lower tax

Net revenue at \$72.3bn beat Street at \$71.1bn driven by upside in Subscriptions & Cloud. Search grew 13%, accelerating 2pts q/q, but 1pt below our ests. YouTube grew 16% y/y, accelerating 4pts q/q (slightly above Street). Cloud beat and margins increased 6pts q/q to 9.4%. Opex growth accelerated 5pts to +11% y/y vs 6% in 3Q, but included \$1.2bn of office restructuring (would have been +6%), and likely some legal items in G&A. Overall, slight search miss and capex commentary (up significantly in 2024) will be negative takeaways, but growth accelerated & EPS beat \$1.63 vs \$1.61 on lower taxes and we think a there will be cleaner Opex Qs ahead given flattish q/q headcount trends.

Competitive position improved q/q vs Microsoft

Bing/ad ex-FX ad growth decelerated 2pts to 7%, and Azure cloud rev. growth was stable q/q at 28%. Relative Google metrics improved q/q, with y/y search growth accelerating 2pts to 13%, and Cloud accelerating 4pts q/q at 26%. On the call, Google emphasized: 1) Positive initial results from Gemini integration in SGE, Bard and Cloud (Google plans to launch more powerful Gemini version in coming months), 2) Robust adoption of GCP by Gen-AI startups, 3) A focus on containing costs (slower pace of hiring and driving efficiencies in computing infrastructure), 4) Higher capex to support AI enabled growth.

Slightly lowering revenues but raising EPS (lower tax rate)

We lower revenues primarily for lower network estimates and raise Opex for higher R&D costs. Our EPS estimates benefit from higher other income and a lower tax rate at 17% (vs 18%). Our 1Q'24 Rev/EPS estimates are virtually unchanged. For 2024, we are lowering net revenues by 0.6% (\$1.5bn) to \$288bn and slightly raise GAAP EPS to \$6.78 (from \$6.76). For 2025, we lower net revenue by 0.5% (\$1.5bn), raise Opex by 1% (\$0.9bn) & raise GAAP EPS 1% to \$7.70 (vs \$7.61). We raise '24 capex by 14% to \$45bn.

Still see strong AI positioning, better expense Qs ahead

While quarter didn't deliver on high expectations, with accelerating growth across all major business lines, & commentary suggesting positive impact from Gen-AI integrations, and a strong base of AI assets, we continue to believe Alphabet will be a net AI beneficiary. We think cleaner expense quarters (less restructuring and legal) are also likely in '24. We slightly lower our PO to \$173 (from \$175) based on relatively stable EPS and unchanged 21x 2025 P/E multiple, and lower estimated cash balance.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	5.78	7.48	8.51	9.67	10.84
GAAP EPS	4.56	5.80	6.78	7.70	8.65
EPS Change (YoY)	-11.9%	29.4%	13.8%	13.6%	12.1%
Consensus EPS (Bloomberg)			7.15	8.27	9.15
DPS	0	0	0	0	0
EPS (GOOG - US\$)	5.78	7.48	8.51	9.67	10.84
DPS (GOOG - US\$)	0	0	0	0	0
Valuation (Dec)					
P/E	26.2x	20.2x	17.8x	15.7x	14.0x
GAAP P/E	33.2x	26.1x	22.3x	19.7x	17.5x
EV / EBITDA*	17.3x	15.4x	13.4x	11.9x	10.7x
Free Cash Flow Yield*	3.2%	3.7%	4.3%	5.2%	6.0%

* For full definitions of *IQmethod*SM measures, see page 10.

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31 January 2024

Equity

Key Changes

(US\$)	Previous	Current
Price Obj.	175.00	173.00
2024E Rev (m)	290,742.0	289,092.3
2025E Rev (m)	323,111.0	321,615.1
2026E Rev (m)	NA	354,475.3
2024E EPS	8.49	8.51
2025E EPS	9.63	9.67
2026E EPS	NA	10.84

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Stock Data

Price (NAS / NAS)	151.46 USD / 153.05 USD
Price Objective	173.00 USD / 173.00 USD
Date Established	31-Jan-2024 / 31-Jan-2024
Investment Opinion	B-1-9 / B-1-9
52-Week Range	88.58 USD - 153.78 USD
Market Value (mn)	1,891,410 USD
Free Float	99.6%
Average Daily Value	4002.88 USD
Shares Outstanding (mn)	12,487.9 / 12,487.9
BofA Ticker / Exchange	GOOGL / NAS
BofA Ticker / Exchange	GOOG / NAS
Bloomberg / Reuters	GOOGL US / GOOGL OQ
ROE (2024E)	35.2%
Net Dbt to Eqty (Dec-2023A)	1.2%

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".

GCP: Google Cloud Platform

BoD: Board of Directors

Mgmt.: Management

AWS: Amazon Web Services

Cont'd: continued

YT: YouTube

W

iQprofileSM Alphabet

iQmethodSM – Bus Performance*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	26.8%	31.0%	31.4%	31.8%	32.1%
Return on Equity	29.1%	35.1%	35.2%	35.4%	35.4%
Operating Margin	40.3%	42.8%	43.0%	42.7%	42.6%
Free Cash Flow	60,010	69,495	80,385	98,704	113,346

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	1.2x	1.1x	1.2x	1.2x	1.3x
Asset Replacement Ratio	2.0x	2.4x	2.5x	2.0x	1.8x
Tax Rate	15.9%	13.9%	17.0%	17.0%	17.0%
Net Debt-to-Equity Ratio	3.0%	1.2%	1.6%	-0.8%	-4.3%
Interest Cover	26.8x	NA	NA	NA	NA

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	233,881	256,508	289,092	321,615	354,475
% Change	10.3%	9.7%	12.7%	11.2%	10.2%
Gross Profit	156,633	174,062	194,128	212,692	232,119
% Change	6.8%	11.1%	11.5%	9.6%	9.1%
EBITDA	109,931	123,594	141,908	160,092	178,875
% Change	3.4%	12.4%	14.8%	12.8%	11.7%
Net Interest & Other Income	(22,876)	(24,178)	(22,997)	(25,187)	(27,227)
Net Income (Adjusted)	76,051	95,112	105,635	116,828	128,776
% Change	-14.5%	25.1%	11.1%	10.6%	10.2%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	59,972	73,795	84,101	92,977	102,774
Depreciation & Amortization	15,727	13,699	17,584	22,884	27,824
Change in Working Capital	(2,235)	(3,845)	(2,769)	237	(37)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	18,031	18,097	26,072	29,092	31,912
Capital Expenditure	(31,485)	(32,251)	(44,603)	(46,486)	(49,128)
Free Cash Flow	60,010	69,495	80,385	98,704	113,346
% Change	-10.6%	15.8%	15.7%	22.8%	14.8%
Share / Issue Repurchase	43,572	953	(5,852)	(7,452)	(9,052)
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	(54,068)	(11,550)	(8,916)	(10,116)	(11,316)

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	21,879	24,048	22,161	29,793	43,267
Trade Receivables	40,258	47,964	55,346	59,487	65,324
Other Current Assets	102,658	99,518	101,575	103,297	104,899
Property, Plant & Equipment	112,668	134,345	161,391	185,052	206,447
Other Non-Current Assets	87,801	98,350	99,150	99,950	100,750
Total Assets	365,264	404,225	439,623	477,580	520,686
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	69,300	81,814	88,483	94,584	101,986
Long-Term Debt	29,449	27,329	27,129	26,929	26,729
Other Non-Current Liabilities	10,371	9,870	9,870	9,870	9,870
Total Liabilities	109,120	119,013	125,482	131,383	138,585
Total Equity	256,144	285,212	314,140	346,197	382,102
Total Equity & Liabilities	365,264	404,225	439,623	477,580	520,686

* For full definitions of iQmethodSM measures, see page 10.

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 AI 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	26,428,606
Shares / Common - Dual Listed	1.00

Quarterly Earnings Estimates

	2023	2024
Q1	1.71A	1.90E
Q2	1.82A	2.11E
Q3	1.92A	2.13E
Q4	2.03A	2.38E

Key Changes

(US\$)	Previous	Current
Price Obj.	175.00	173.00
2024E EPS	8.49	8.51
2025E EPS	9.63	9.67
2026E EPS	NA	10.84

4Q Summary and thoughts on the stock

Google reported 4Q net revenues at \$72.3bn (up 15% y/y), above Street estimates at \$71.1bn (up 13% y/y) and GAAP EPS of \$1.64 vs Street at \$1.61.

While search likely missed expectations for revenues and capex outlook suggested higher growth than street estimates, four key drivers for the stock (revenue trends, y/y core margin trends, use of capital and new disclosures) were mostly positive in 4Q.

- Google Properties revenue at \$57.2bn was in line with Street estimates at \$57.2bn and estimated ex-FX growth accelerated 3pts to 14% vs 11% in 3Q.
- Google services core margins were 522bps y/y in 4Q, improving from +444pbs in 3Q. Total headcount was down 4% y/y (flat q/q), suggesting ongoing expense control and potential for margin beats in 2024.
- Google repurchased \$16.2bn in stock in 4Q, up from \$15.8bn in 3Q and \$15.0bn in 2Q.
- New business disclosures included 1) Subscription business (which includes YouTube TV, YouTube Music and Premium, and NFL Sunday Ticket, Google One) reaching \$15bn annual revenue run rate (up 5x since 2019), 2) Some new commentary on Gen-AI integration into search (Gemini improving search results and 40% increase in speed).

4Q Highlights include:

- Search growth accelerated 2pts q/q to 13%, slightly below our estimate at 14% and in line with Street estimates, driven by continued strong growth in retail vertical (specially in APAC). This compares to Microsoft's ex-FX search and news ad revenue (ex-TAC) growth deceleration of 2pt to 7% in C4Q (vs 9% in C3Q and 8% in C2Q)
- YouTube revenue growth accelerated 4pts to 16% y/y on a 6pt easier y/y comp. Growth was driven by both direct response and brand advertisers.
- Network revenue was down 2% y/y to \$8.3bn and was below Street at \$8.6bn. This could reflect an advertiser flight to larger platforms and continued stress on smaller platforms.
- Cloud revenue at \$9.2bn was above Street at \$9.0bn and y/y growth accelerated 4pts to 26% (vs 22% in 3Q). This compares to Microsoft's Azure C4Q revenue growth that was stable vs C3Q at 28%.
- Other revenue at \$10.8bn (up 23% y/y) was above Street at \$10.3bn, reflecting ongoing strong subscriber growth in YouTube TV and YouTube Music Premium, and a likely DTV NFL deal revenue benefit.
- Total Opex growth accelerated 5bps to 11% in 4Q (vs 6% y/y in 3Q) and was impacted by \$1.2bn real estate optimization expenses (growth was 6% excluding the charge).
- GAAP Operating Income at \$23.7bn was slightly below Street estimates at \$24.0bn due to higher-than-expected Opex, but GAAP EPS at \$1.63bn was above Street estimates at \$1.61 benefiting from lower tax (15.3% vs 18% estimated).

For 4Q commentary and business outlook, management noted that: 1) 4Q acceleration in Search and YouTube growth was aided by improved user experience (Gen-AI integrations) and higher advertisers ROI (PMax), 2) Focus on maintaining a sustainable healthy y/y revenue growth on a now much larger revenue base (revenues up more than \$100bn since 2019), 3) Revenues from subscription products reached \$15bn in FY23 driven by strong growth in YouTube subscription subscribers, 4) Google Play saw



solid growth in 4Q driven by an increase in the number of buyers, 5) In devices, Google plans to increase emphasis on pixel family, particularly with AI powered innovation, 6) Google Cloud is seeing strong demand for AI services and is focused on integrating Gemini to differentiate its offerings, 7) On profitability, management emphasized focus to reengineer cost base, focus to slow expense growth (see below) and continued investments in high priority areas, 8) 4Q capex at \$11bn was up \$3bn q/q and management noted it did not include any 1x items, 9) For 2024, Alphabet expects capex to increase driven by investment in technical infrastructure and data centers to support AI opportunities in advertising and cloud business, 10) For Other Bets, the company remains focused on capturing the upside but will limit investments by spinning out more projects as independent companies through external capital.

To control expense growth in 2024, Alphabet's key initiatives include: 1) Slower pace of hiring (with more focus on technical and AI talent), 2) Simplifying organizational structure and removing layers to drive more efficient execution, 3) Winding down non-priority projects, 4) Improving machine utilization by driving cost efficiencies in computing infrastructure and operations, 5) Supplier efficiency efforts and optimizing real estate portfolio.

We are lowering our PO to \$173 (from \$175) based on an unchanged 21x 2025 core services P/E multiple, plus a lower cash balance. Using a GOOGL market after-hour price of ~\$143, the stock is trading at 19x our 2025 Google GAAP EPS. Backing out estimated values for YouTube, YouTube Subscription, Cloud, Waymo, and cash, as well as the potential earnings contribution from YouTube, and losses from Cloud and Other Bets investments, we estimate the implied valuation on core Google core services businesses is 14x 2025E earnings, which we see as attractive vs the S&P at 18x. See our [Google 2024 PM Outlook](#) for additional commentary on opportunities & risks for the stock.

Read-across for Meta and Amazon AWS

Meta – YouTube, a slightly positive read

We think YouTube is a better read for Meta's ad revenues than Google search, and the 4pts acceleration in YouTube ad growth in 4Q (in line with Street estimates) is a slightly positive read for Meta. Management highlighted that strong YouTube growth in 4Q was driven by strength in both brand and DR advertising. For 4Q'23, we estimate Meta advertising revenue growth decelerate 2pts q/q (1pts ex-FX) to \$38bn (up 22% y/y), in line with Street, and total revenue growth decelerate 1pts at \$39.3bn (vs Street at \$39.0bn). Given YouTube acceleration we continue to think Meta will likely report total revenue at the upper end of its 4Q revenue guidance range (\$36.5-\$40.0bn) and beat Street. For 1Q'24, we continue to believe Meta's y/y growth will decelerate, with high end of 1Q revenue guidance above Street estimates.

Pinterest and Snap – YouTube positive, network revenues miss a negative

YouTube growth accelerated 4 points q/q, a positive (see above) given estimates for less q/q acceleration. However, Google Network revenue at \$8.3bn (down 2% y/y) was below Street at \$8.6bn and only accelerated 1pt q/q on 7pts easier comp, which could reflect continued stress on smaller ad platforms and advertiser preference for large platforms. For 4Q'23, we estimate Snap revenue at \$1,364mn (below Street at \$1,383) with stable growth q/q at 5% on 6pt easier comp. We believe Street is expecting 2-3 points of acceleration in 4Q growth for Snap. For Pinterest, we expect y/y revenue growth to accelerate 2pts q/q to 13% on a 5pt easier comp, with revenues of \$988mn (in line with Street) and Street expectations could be in line to 1pt above our estimate. To summarize, we believe Snap and Pinterest expectations are for more q/q acceleration in y/y revenue growth than Google Network revenues, but less than YouTube.

AWS – Google Cloud & Azure a positive read, but may set a higher bar

We think Google Cloud acceleration is a positive read for AWS in 4Q. In 4Q, Google Cloud growth accelerated 4pts to 26% y/y (above Street at 22%) with increasing contribution from AI and call commentary suggesting less client expense optimization

headwinds. For Amazon, we assume 1pt q/q acceleration in AWS revenue in 4Q to 13% (from 12% in 3Q), and Google's commentary on client optimization headwinds suggests potential for AWS to accelerate. Also, in C4Q, Microsoft Azure revenue was stable q/q at 28% but was above Street estimates at 27%, with AI contributing a strong 6% to y/y growth. For C1Q, Microsoft expects Azure growth to remain stable vs C4Q, also above Street estimates at 27%. Microsoft noted C1Q Azure growth to be driven by consumption business with continued strong contribution from AI.

4Q Positives:

- **YouTube growth accelerated:** YouTube revenue to \$9.2bn accelerated 4pts on 6pts easier y/y comp. YouTube saw solid momentum driven by growth in both direct response and brand advertising.
- **Cloud growth and margins ramp:** Cloud revenues were \$9.2bn for the quarter, up 26% (vs 22% in 3Q) and was above Street at \$9.0bn. Google Cloud had operating income of \$864 million and an operating margin of 9%, well above 3Q at 3% and our estimates.
- **Other revenue above Street:** Other revenue at \$10.8bn (up 23% y/y) was above Street at \$10.3bn, reflecting ongoing strong subscriber growth in YouTube TV and YouTube Music Premium, and a likely DTV NFL deal revenue benefit.
- **Core margin growth & continued focus on cost management:** Core Google margins were up 522bps y/y with profit growth of 32%. Total headcount was down 4% y/y (flattish q/q), declining y/y for the second consecutive quarter. Google is also focusing on optimizing its real estate footprint, which sets the company for possible margin improvement in 2024 (revenues growing faster than expenses).
- **Share buybacks continue:** Alphabet repurchased \$15.8bn in stock in 4Q, similar to 3Q. In 2023, Alphabet repurchased \$62bn stock in 2023, and around \$36.5bn remains available for Class A and Class C share repurchases.

4Q Negatives:

- **Risk that Search slows on retail seasonality:** Google had easy 4Q retail spending comps and highlighted that retail was a strong vertical in 4Q (this has been true for several quarters). The retail vertical will likely be less of a positive driver in 1Q on retail seasonality. Also, management indicated the large base of search revenues in prepared remarks, possibly suggesting that future growth could be more challenging.
- **Opex higher, partially on one-offs:** Operating expenses were \$25bn up 11% (vs up 6% in 3Q), reflecting an increase in R&D expenses, which were driven by the real estate charges (an additional \$1.2bn charge in connection with optimizing global office space), followed by compensation.
- **Capex commentary suggests growing spend:** Capex growth accelerated in 4Q (up \$3bn q/q to \$11bn) driven by investment in technical infrastructure, with the largest component for servers, followed by data centers. For 2024, Alphas expects capex to increase meaningfully driven by investment in AI opportunities for advertising and cloud business, and we raise our capex estimate from \$39bn to \$45bn (roughly \$0.50 less in FCF per share in 2024).
- **Network revenues well below Street:** 4Q network revenue at \$8.3bn (down 2% y/y) was below Street at \$8.6bn.



Actual vs Expected Results

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

4Q'23 results were above for Revenue and EPS, but below for Operating Income and Adjusted EBITDA.

	4Q'23 Actual vs Street vs BofA				
	BofA Est.	Street	Actual	Act vs Street	Act vs BofA
Google segment Revs					
Google Properties Revenue (Incl. YouTube Ads)	\$57,619	\$57,231	\$57,220	(\$11)	(\$399)
Y/Y Growth	14%	13%	13%		
Network Revenue	\$8,814	\$8,551	\$8,297	(\$254)	(\$517)
Y/Y Growth	4%	1%	(2%)		
Other Revenue	\$11,161	\$10,253	\$10,794	\$541	(\$367)
Y/Y Growth	27%	17%	23%		
Google Cloud Revenue	\$8,981	\$8,950	\$9,192	\$242	\$211
Y/Y Growth	23%	22%	26%		
Other Bets Segment Revs	\$294	\$298	\$657	\$359	\$363
Y/Y Growth	30%	32%	191%		
Consolidated Gross Revenue	\$86,879	\$85,282	\$86,310	\$1,028	(\$569)
TAC	(\$14,258)	(\$14,162)	(\$13,986)	\$176	\$272
Google Net Revenue	\$72,621	\$71,141	\$72,324	\$1,183	(\$297)
Y/Y Growth	15.0%	12.7%	14.6%	1.9%	-0.5%
US Gross Revenue	\$41,789	\$41,401	\$41,995	\$594	\$206
EMEA Gross Revenue	\$25,701	\$25,197	\$25,010	(\$187)	(\$691)
APAC Gross Revenue	\$13,978	\$14,269	\$13,979	(\$290)	\$1
Other Americas Gross Revenue	\$5,411	\$5,250	\$5,176	(\$74)	(\$235)
Consolidated GAAP Operating Income	\$24,623	\$23,972	\$23,697	(\$275)	(\$926)
Margin on Net Rev.	39.7%	33.7%	38.2%	4.5%	-1.5%
Consolidated Non-GAAP Op. Income	\$30,416	\$29,724	\$29,356	(\$368)	(\$1,060)
Margin on Net Rev.	49.0%	41.8%	47.3%	5.5%	-1.7%
D&A	\$4,050	\$4,163	\$3,316	(\$847)	(\$734)
Adj EBITDA	\$34,466	\$33,893	\$32,672	(\$1,221)	(\$1,794)
Margin on Net Revenue	55.5%	47.6%	52.6%	5.0%	-2.9%
GAAP EPS	\$1.63	\$1.61	\$1.64	\$0.03	\$0.01

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

BofA GLOBAL RESEARCH

Estimate changes

We are lowering our revenue estimates to adjust for lower growth in network segment and raising Opex to account for higher R&D costs. We raise EPS on lower tax assumptions of 17% (vs 18% previously) and higher other revenues. Our 1Q'24 Rev/EPS estimates are virtually unchanged. For 2024, we are lowering net revenues by 0.6% (\$1.5bn) to \$288bn and estimate GAAP EPS of \$6.78, up slightly from \$6.76. For 2025, we are lowering net revenue by 0.5% (\$1.5bn), raise Opex by 1% (\$0.9bn) & raise GAAP EPS by 1% to \$7.70 (vs \$7.61 previously).

Exhibit 2: Alphabet estimate changes

We are slightly raising 2025 GAAP EPS, key for valuation, by 1% to \$7.70.

	1Q'24 Estimates			2Q'24 Estimates			2024 Estimates			2025 Estimates		
	Old	New	Change	Old	New	Change	Old	New	Change	Old	New	Change
Google Websites	\$52,797	\$52,864	\$67	\$56,122	\$56,122	\$0	\$230,217	\$229,861	(\$356)	\$252,706	\$252,547	(\$159)
Google Network Websites	\$7,934	\$7,526	(\$409)	\$8,400	\$8,007	(\$393)	\$34,169	\$31,954	(\$2,215)	\$37,024	\$33,662	(\$3,362)
Google Other Revenues (Incl. Cloud, YT Subs, HW)	\$18,056	\$18,170	\$114	\$19,329	\$19,466	\$137	\$81,196	\$81,169	(\$28)	\$94,409	\$94,196	(\$213)
Google Gross Revenue	\$78,788	\$78,560	(\$228)	\$83,851	\$83,595	(\$255)	\$345,582	\$342,983	(\$2,599)	\$384,140	\$380,405	(\$3,735)
Traffic Acquisition Costs (TAC)	\$12,985	\$12,789	(\$196)	\$13,721	\$13,637	(\$84)	\$56,480	\$55,394	(\$1,087)	\$62,604	\$60,401	(\$2,203)
Google Net Revenue (ex-TAC)	\$65,803	\$65,770	(\$32)	\$70,129	\$69,958	(\$172)	\$289,102	\$287,590	(\$1,512)	\$321,535	\$320,004	(\$1,531)
Y/Y	14%	14%	-0.1%	14%	13%	-0.3%	13%	13%	-0.2%	11%	11%	0.1%
Other Bets Revenues	\$346	\$340	(\$6)	\$336	\$336	\$0	\$1,370	\$1,408	\$37	\$1,576	\$1,611	\$35
Y/Y	20%	18%	-2.0%	18%	18%	0.0%	18%	-8%	-25.6%	15%	14%	-0.5%
Consolidated Gross Revenue	\$79,198	\$78,944	(\$254)	\$84,277	\$83,956	(\$320)	\$347,222	\$344,486	(\$2,736)	\$385,715	\$382,016	(\$3,699)
Consolidated Net Revenue (ex-TAC)	\$66,213	\$66,155	(\$58)	\$70,556	\$70,319	(\$237)	\$290,742	\$289,092	(\$1,650)	\$323,111	\$321,615	(\$1,496)
Y/Y	14%	14%	0%	14%	13%	0%	13%	12.7%	-1%	11%	11.2%	0%
Other Costs of Revenue	\$21,859	\$21,473	(\$386)	\$22,566	\$22,668	\$102	\$97,316	\$94,965	(\$2,351)	\$111,956	\$108,923	(\$3,033)
Gross Profit	\$44,355	\$44,682	\$328	\$47,990	\$47,651	(\$339)	\$193,426	\$194,128	\$701	\$211,155	\$212,692	\$1,537
Gross Profit Margin	67.0%	67.5%	0.6%	68.0%	67.8%	-0.3%	66.5%	67.2%	0.6%	65.4%	66.1%	0.8%
Research and Dev.	\$11,720	\$12,173	\$453	\$11,853	\$11,954	\$101	\$48,247	\$48,955	\$709	\$52,641	\$53,301	\$659
Sales and Mktg	\$6,688	\$6,946	\$259	\$7,267	\$7,243	(\$24)	\$29,814	\$29,909	\$95	\$32,810	\$32,631	(\$179)
G & A	\$3,973	\$3,969	(\$3)	\$4,092	\$4,149	\$57	\$16,751	\$16,962	\$210	\$17,971	\$18,375	\$404
Total Operating Expenses	\$22,380	\$23,088	\$708	\$23,213	\$23,346	\$133	\$94,812	\$95,826	\$1,014	\$103,422	\$104,306	\$884
% of net rev	34%	35%	1%	33%	33%	0%	33%	33%	1%	32%	32%	0%
Operating Income - GAAP	\$21,974	\$21,594	(\$380)	\$24,777	\$24,305	(\$472)	\$98,614	\$98,302	(\$312)	\$107,734	\$108,386	\$652
Operating Margin	33.2%	32.6%	-0.5%	35.1%	34.6%	-0.6%	33.9%	34.0%	0.1%	33.3%	33.7%	0.4%
SBC	\$5,993	\$6,343	\$350	\$6,693	\$6,543	(\$150)	\$26,122	\$26,022	(\$100)	\$29,622	\$28,822	(\$800)
Operating Income - non-GAAP	\$27,967	\$27,937	(\$30)	\$31,470	\$30,848	(\$622)	\$124,736	\$124,324	(\$412)	\$137,356	\$137,208	(\$148)
Operating Margin	42.2%	42.2%	0.0%	44.6%	43.9%	-0.7%	42.9%	43.0%	0.1%	42.5%	42.7%	0.2%
D&A	\$4,300	\$3,966	(\$334)	\$4,550	\$4,246	(\$304)	\$18,630	\$17,584	(\$1,046)	\$22,370	\$22,884	\$514
Stock-based Compensation	\$5,993	\$6,343	\$350	\$6,693	\$6,543	(\$150)	\$26,122	\$26,022	(\$100)	\$29,622	\$28,822	(\$800)
EBITDA	\$32,267	\$31,903	(\$364)	\$36,020	\$35,094	(\$926)	\$143,366	\$141,908	(\$1,458)	\$159,726	\$160,092	\$366
Adjusted EBITDA margin	48.7%	48.2%	-0.5%	51.1%	49.9%	-1.1%	49.3%	49.1%	-0.2%	49.4%	49.8%	0.3%
Interest income and other, net	\$650	\$700	\$50	\$685	\$735	\$50	\$2,825	\$3,025	\$200	\$3,355	\$3,635	\$280
Income pre-tax and acct. change (Reported)	\$22,624	\$22,294	(\$330)	\$25,462	\$25,040	(\$422)	\$101,439	\$101,327	(\$112)	\$111,089	\$112,021	\$932
Provision for tax	\$3,891	\$3,790	(\$101)	\$4,329	\$4,257	(\$72)	\$17,566	\$17,226	(\$340)	\$19,236	\$19,044	(\$193)
Effective tax rate (Reported)	17.2%	17.0%	-0.2%	17.0%	17.0%	0.0%	17.3%	17.0%	-0.3%	17.3%	17.0%	-0.3%
Net income - GAAP	\$18,733	\$18,504	(\$229)	\$21,133	\$20,783	(\$350)	\$83,874	\$84,101	\$228	\$91,852	\$92,977	\$1,125
Net income - non-GAAP	\$23,695	\$23,769	\$74	\$26,689	\$26,214	(\$475)	\$105,409	\$105,635	\$226	\$116,275	\$116,828	\$552
Diluted GAAP EPS	\$1.49	\$1.48	(\$0.02)	\$1.70	\$1.67	(\$0.03)	\$6.76	\$6.78	\$0.02	\$7.61	\$7.70	\$0.09
Diluted EPS (ex-SBC)	\$1.89	\$1.90	\$0.01	\$2.14	\$2.11	(\$0.04)	\$8.49	\$8.51	\$0.02	\$9.63	\$9.67	\$0.04
Diluted shares	12,546	12,532	(14)	12,446	12,452	6	12,411	12,411	(0)	12,074	12,080	6
Consolidated Capital expenditures	\$9,733	\$11,114	\$1,381	\$9,737	\$11,110	\$1,374	\$39,208	\$44,603	\$5,395	\$42,768	\$46,486	\$3,718
Headcount	186,081	182,902	(3,179)	190,081	185,402	(4,679)	198,581	191,402	(7,179)	216,481	203,902	(12,579)

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Valuation

We are lowering our PO to \$173 (from \$175) with a slightly lower Y/E 2024 cash benefit.

Exhibit 3: Alphabet valuation

Our revised PO is \$173

	2025 GAAP
Other Bets losses (mn)	(\$3,534)
Estimated Tax Savings	\$707
Other Bets Losses ex-Tax	(\$2,827)
2023 Diluted Shares	12,721
GAAP EPS Impact	(\$0.22)
Current Est. Total GAAP EPS	\$7.70
Adjusted EPS*	\$7.88
Applying a target PE multiple	21x
Implied Target Price / Share	\$166
Plus YE24 cash/share	\$7.5
Implied Target Price / Share	\$173

Source: BofA Global Research

BofA GLOBAL RESEARCH

Using a GOOGL market after-hour price of \$143, the stock is trading at 19x our 2025 Google GAAP EPS. Backing out estimated values for YouTube, YouTube Subscription, Cloud, Waymo, and cash, as well as the potential earnings contribution from YouTube, and losses from Cloud and Other Bets investments, we estimate the implied valuation on core Google core services businesses is 14x 2025E earnings, which we see as attractive vs the S&P at 18x.

Exhibit 4: Sum-of-the-Parts Analysis on 2024 estimates

Core Services Sum-of-the-Parts Valuation based on GOOGL AH price of \$143.

	Net					
	Mkt Cap	Revenue	P/S	Net income	Mkt Cap / NI	Comment
Alphabet Total	\$1,802	\$320	5.6x	\$93.0	19x	
YouTube	(\$146)	(\$42)		(\$3.5)	42.2x	3.5x revenues (peers at 3-5x), assumes 10% profit margin & 17% tax rate
YouTube Subscription	(\$40)	(\$26)		\$0.4		Assumes 1.5x P/S multiple and \$400mn operating loss in 2024
Google Cloud Profit/Losses	(\$294)	(\$49)		(\$5.4)		Assumes 6x P/S and margins at 7% in 2024
Waymo	(\$30)	\$0		\$0.0		Reflects time horizon & potential technology value
Other Bets losses		\$2		\$3.5		Waymo loss included, and incorporates a 17% tax rate
Cash & Equivalents	(\$111)			(\$2.8)		Excludes net cash and est. 3% interest income
Google core services	\$1,181	\$205	5.8x	\$85	14x	

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Price objective basis & risk

Alphabet (GOOGL / GOOG)

Our price objective of \$173/\$173 is based on 21x 2025E core Google GAAP EPS plus cash. 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.

Risks for the stock include: 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 DOJ search distribution trial, 5) potential for increasing Capex and lower FCF given AI focus.

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
	DoorDash	DASH	DASH US	Michael McGovern
	DoubleVerify Holdings, Inc.	DV	DV US	Omar Dessouky, CFA
	Electronic Arts	EA	EA US	Omar Dessouky, CFA
	Expedia	EXPE	EXPE US	Justin Post
	Integral Ad Science Holding Corp.	IAS	IAS US	Omar Dessouky, CFA
	LegalZoom	LZ	LZ US	Michael McGovern
	Match Group	MTCH	MTCH US	Curtis Nagle, CFA
	Meta Platforms Inc	META	META US	Justin Post
	Pinterest	PINS	PINS US	Justin Post
	RH	RH	RH US	Curtis Nagle, CFA
	Roblox Corp. Class A	RBLX	RBLX US	Omar Dessouky, CFA
	Squarespace, Inc.	SQSP	SQSP US	Michael McGovern
	Uber	UBER	UBER US	Justin Post
	Udemy Inc	UDMY	UDMY US	Curtis Nagle, CFA
	Vivid Seats	SEAT	SEAT US	Curtis Nagle, CFA
	Wayfair	W	W US	Curtis Nagle, CFA
	Wix.com	WIX	WIX US	Michael McGovern
NEUTRAL				
	ACV Auctions	ACVA	ACVA US	Curtis Nagle, CFA
	Airbnb	ABNB	ABNB US	Justin Post
	Beyond Inc	BYON	BYON US	Curtis Nagle, CFA
	Booking Holdings Inc	BKNG	BKNG US	Justin Post
	Bumble	BMBL	BMBL US	Curtis Nagle, CFA
	Digital Turbine, Inc	APPS	APPS US	Omar Dessouky, CFA
	Duolingo	DUOL	DUOL US	Curtis Nagle, CFA
	eBay	EBAY	EBAY US	Justin Post
	Etsy, Inc.	ETSY	ETSY US	Curtis Nagle, CFA
	Instacart	CART	CART US	Justin Post
	Magnite, Inc.	MGNI	MGNI US	Omar Dessouky, CFA
	Snap	SNAP	SNAP US	Justin Post
	Take-Two Interactive	TTWO	TTWO US	Omar Dessouky, CFA
	Zillow	ZG	ZG US	Curtis Nagle, CFA



US - Internet Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Zillow	Z	Z US	Curtis Nagle, CFA
UNDERPERFORM				
	Chewy Inc	CHWY	CHWY US	Curtis Nagle, CFA
	Lyft, Inc.	LYFT	LYFT US	Michael McGovern
	Opendoor Technologies	OPEN	OPEN US	Curtis Nagle, CFA
	Peloton	PTON	PTON US	Curtis Nagle, CFA
	Playtika	PLTK	PLTK US	Omar Dessouky, CFA
	Redfin Corp	RDFN	RDFN US	Curtis Nagle, CFA
	Shutterstock	SSTK	SSTK US	Curtis Nagle, CFA

iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

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

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization

Shareholders' Equity

Sales

N/A

N/A

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

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

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

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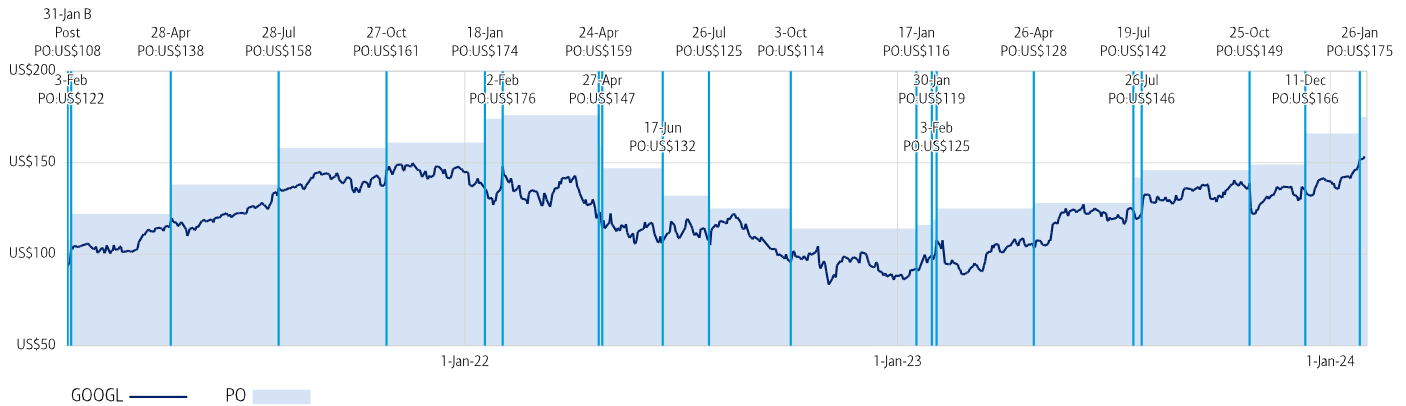
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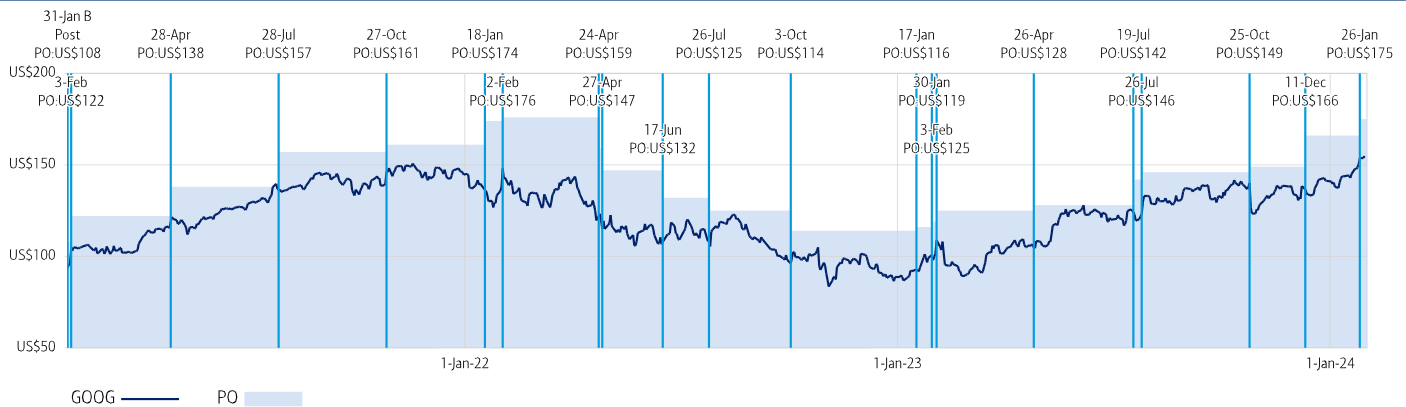
Alphabet A (GOOGL) Price Chart



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 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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