

Alphabet Inc.

Recommendation BUY ★ ★ ★ ★ ★

Price USD 143.54 (as of market close Feb 02, 2024) 12-Mo. Target Price USD 166.00 Report Currency USD Investment Style Large-Cap Growth

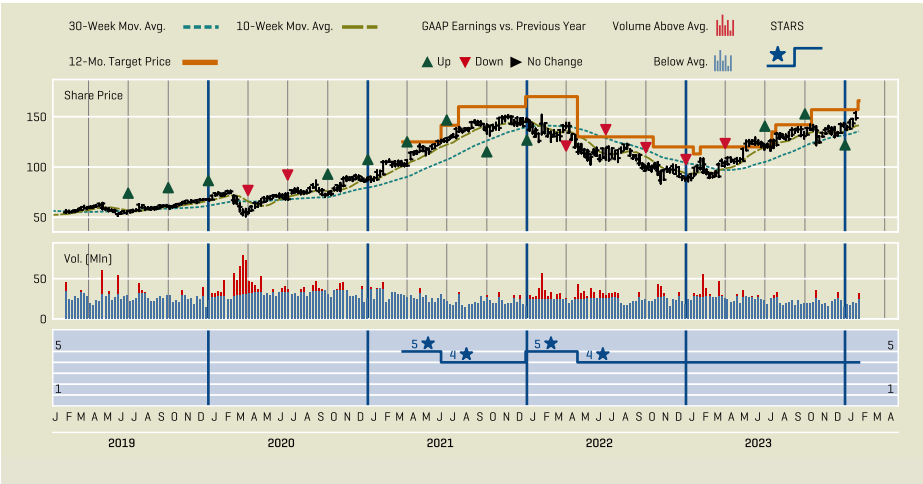
Equity Analyst Angelo Zino, CFA

GICS Sector Communication Services Sub-Industry Interactive Media and Services

Summary Alphabet is the world’s leading internet search provider and the world’s largest generator of advertising revenue.

Key Stock Statistics (Source: CFRA, S&P Global Market Intelligence (SPGMI), Company Reports)					
52-Wk Range	USD 155.2 - 88.86	Oper.EPS2024E	USD 6.77	Market Capitalization[B]	USD 1763.83
Trailing 12-Month EPS	USD 5.8	Oper.EPS2025E	USD 7.54	Yield [%]	N/A
Trailing 12-Month P/E	24.75	P/E on Oper.EPS2024E	21.20	Dividend Rate/Share	N/A
USD 10K Invested 5 Yrs Ago	25,846.0	Common Shares Outstg.[M]	12,460.00	Trailing 12-Month Dividend	N/A
				Beta	1.06
				3-yr Proj. EPS CAGR[%]	12
				SPGMI's Quality Ranking	B+
				Institutional Ownership [%]	65.0

Price Performance



Source: CFRA, S&P Global Market Intelligence

Past performance is not an indication of future performance and should not be relied upon as such. Analysis prepared by Angelo Zino, CFA on Jan 31, 2024 11:17 AM ET, when the stock traded at USD 143.67.

Highlights

- We forecast sales to grow 11% in 2024 and 9% in 2025 after an 8.7% increase in 2023, led by the ongoing shift of global ad spend to digital/online. Sales rose 13% in Q4 on Cloud growth [+26%; accelerating from 22% in Q3], Search [+13%], and YouTube [+16%]. We like prospects from YouTube experiences (e.g., Shorts, live shopping, and upside from subscriptions for the NFL Sunday ticket package) as well as emerging AI growth prospects tied to the cloud/search. We note leadership/traction in areas with massive long-term potential, including machine learning (e.g., TensorFlow), natural language processing, and efforts in self-driving vehicles.
- We forecast an operating margin of 29%-30% in 2024 and 2025, better than the 27.4% figure for 2023. We like the prior cost cuts (employee headcount was down Y/Y at the end of Q4), as we expect cost increases to remain below revenue through 2024. Cloud generated a \$864M profit, or 9% operating margin, in Q4 as it has scale benefits ahead.
- While regulatory issues are a long tail risk, GOOG's financial position provides cushion. We like AI prospects, given initiatives related to Bard, Gemini, and Search Generative Experience (experimental version of Search).

Investment Rationale/Risk

- Our Buy rating reflects our view of valuation, FCF potential, and our belief GOOG can sustain 6%-11% revenue growth through 2025. We are excited about the AI opportunities for GOOG, which include revenue potential in the cloud, new enterprise AI tools, and efforts on the Search/YouTube side. We also like greater focus on efficiencies, with improving profitability across the cloud and smaller losses from Other Bets. We see growth from YouTube sustaining a 10%+ growth pace in 2024, partly aided by increasing prices and momentum from the Sunday NFL ticket, while search ad revenue should benefit from AI initiatives. We see FCF of \$75B+ in 2024 and \$90B+ in 2025.
- We have concerns surrounding search given AI disruptive trends and increasing competitive pressures. We also note regulatory risks as Europe/U.S. look to curtail the capabilities of Big Tech online businesses that kill competition while a DoJ lawsuit is also targeting the search distribution business.
- Our 12-month target is \$166 on a P/E of 22x our 2025 EPS of \$7.54, which compares to its five- and 10-year historical forward averages of 24.3x and 23.4x, respectively. We see valuation aided by net cash of \$129B (includes long-term securities).

Analyst's Risk Assessment

LOW	MEDIUM	HIGH
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Our risk assessment reflects GOOG's dominant position in internet search and in internet video advertising through YouTube, not to mention its exceptionally strong balance sheet, partially offset by significant regulatory risk both in the U.S. and Europe.

Revenue/Earnings Data

Revenue (Million USD)					
	1Q	2Q	3Q	4Q	Year
2025	E 85,585	E 90,407	E 91,491	E 103,897	E 371,379
2024	E 78,007	E 82,915	E 84,539	E 95,336	E 340,796
2023	69,787	74,604	76,693	86,310	307,394
2022	68,011	69,685	69,092	76,048	282,836
2021	55,314	61,880	65,118	75,325	257,637
2020	41,159	38,297	46,173	56,898	182,527

Earnings Per Share (USD)

	1Q	2Q	3Q	4Q	Year
2025	E 1.71	E 1.87	E 1.90	E 2.06	E 7.54
2024	E 1.50	E 1.66	E 1.71	E 1.89	E 6.77
2023	1.17	1.44	1.55	1.64	5.80
2022	1.23	1.21	1.06	1.05	4.56
2021	1.31	1.36	1.40	1.53	5.61
2020	0.49	0.51	0.82	1.12	2.93

Fiscal Year ended Dec 31. EPS Estimates based on CFRA's Operating Earnings; historical earnings are adjusted. In periods where a different currency has been reported, this has been adjusted to match the current quoted currency.

Dividend Data

No cash dividends have been paid in the last year.

Alphabet Inc.

Business Summary Jan 31, 2024

CORPORATE OVERVIEW. Alphabet [GOOG] is the world’s dominant internet search engine, with between 80% and 90% of the internet’s search engine queries and close to 90% of all search engine revenue. Smartphones enable searches anytime, anywhere, and their proliferation has boosted usage considerably, with 70% of queries now mobile. The search engine’s everyday presence became so common, so quickly that “google” was recognized as a verb by the Merriam-Webster and Oxford English dictionaries in 2006. In addition to search [55% to 60% of total revenue], Google generates ad revenue from its display ad network [10%-12% of total] and YouTube [10% to 13% of total]. Google is nurturing many other businesses, including “moonshots,” with little revenue but tremendous long-term potential, e.g., autonomous vehicles, quantum computing, and drone delivery. Google Cloud is its largest source of non-ad revenue [10% to 12% of total], competing with Amazon AWS and Microsoft Azure. Revenue from Other businesses [e.g., hardware, app store] represents about 10%-12% of sales.

CORPORATE HISTORY. In 1998, Larry Page and Sergey Brin founded “Google,” based on a research project they began at Stanford University. Their PageRank algorithm added relevance to frequency, putting the most relevant links at the top of the results page. This was a big improvement over early search engines where page links were sorted only by frequency — the sheer number of instances of a search term on each page — often forcing users to flip through multiple pages to find relevant links. It also encouraged websites to hide the text of thousands of instances of certain keywords [e.g., “car insurance”) to drive search traffic, regardless of relevance. PageRank determined relevance by determining the number and relevance of pages containing the search term that linked “back” to the first page, with the relevance of those pages also determined by the number and relevance of their back-linked pages, etc. PageRank is recursive, cleverly analyzing the web’s own hyperlinked structure to determine relevance, but they had to build “web crawler” software to index the entire web — all of it, continuously. Today, Google processes over 70,000 queries/sec., 7.8B/day, but most of its computing capacity — millions of servers — are still dedicated to this massive indexing task.

Larry and Sergey had their second big breakthrough in 2001 after agreeing to two VC investor demands: 1] hiring Eric Schmidt as CEO; and 2] allowing advertising to generate revenue. However, initial efforts cluttered the results page with ads that were no more relevant than ordinary banner ads. The breakthrough was Google AdWords, an online auction where ad buyers bid on keywords [e.g., once again, “car insurance”), with the winners getting to put ads on the results pages of searches for that keyword, paying Google the bid amount for each ad click. However, rather than “highest bid wins,” which can be rigged by high bids with irrelevant ads, winning bids on AdWords are those that maximize revenue, i.e., the per-click bid amount times the number of clicks, extrapolated from history. Over the years, Google has added over 200 other criteria to PageRank to maximize relevance and revenue. AdWords was an instant hit, especially among smaller businesses that cannot afford big ad buys on traditional media [TV, radio, print]. Further, AdWords was totally automated and self-serve, hence generating considerable operating leverage. Three years later in 2004, Google IPO’d with \$3.2B in revenue and minimal sales and marketing costs.

M&A. In its first few years post-IPO, Google was quite active in M&A, its first major buys being YouTube in 2006 for \$1.7B and DoubleClick in 2008 for \$3.1B, forming the basis of its ad network. In 2012, Google bought Motorola Mobility for \$13B to support Android, its open-source mobile operating system, which was created to prevent Apple, Microsoft, Nokia, or Samsung from using their positions to enter the search or extract higher “rent” as search moved to mobile. Google sold Motorola to Lenovo in 2014 for only \$3B, but it kept 17k Motorola patents to protect itself in potential IP fights and to continue distributing Android for free without paying royalties to third-party IP holders like Apple and Microsoft. In 2013, Google spent \$1B for Waze, adding crowdsourced traffic reports to Google Maps. 2014 saw deals for Nest [smart home tech] for \$3.2B and AI pioneer DeepMind for \$600M. Since 2014, growing anti-trust scrutiny has deterred larger deals, though Google made numerous small acquisitions to pick up promising technologies or teams. The 2019 purchase of Looker for \$2.6B, software for connecting disparate databases, was an exception because it operates under Google Cloud, which trails AWS and Azure in revenue by significant margins.

COMPETITIVE LANDSCAPE. Direct competitors in “general purpose” search have each held a 1%-4% global share over the last decade: Microsoft’s Bing, 6%-8% share in the U.S.; Verizon, purchased Yahoo in 2017; Baidu, limited to China. Indirect competition from Facebook and Amazon is more significant, keeping Google’s share in total online/digital advertising at 25%-30%. Though YouTube is primarily ad-driven, it is expanding into paid subscriptions and a la carte prices for premium content and is approaching Netflix in sales. In cloud services, Google ranks #3 behind Amazon AWS and Microsoft Azure but has carved out a solid position in machine learning with TensorFlow.

FINANCIAL TRENDS. We expect Google to maintain a 10%+ organic EPS growth pace over the next decade with YouTube and Google Cloud now emerging as increasingly important drivers as core search advertising has gradually decelerated. Sales grew 8.7% in 2023, with its biggest segment [Search at 57% of sales] growing at a 9% clip. YouTube grew 8% for the year and represented 10% of revenue, while the Cloud segment increased at an impressive 26% rate and comprised 11% of sales. We expect at least one “moon shot” to contribute materially by 2027 [e.g., Waymo autonomous driving].

GOOG used \$62B toward share repurchases in 2023, up from \$59B in 2022 and \$50B in 2021.

GOOG completed a 20-for-1 stock split in July 2022.

Corporate information

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J. K. Walker  
President, Chief Investment Officer, Senior VP & CFO  
R. M. Porat

Chief Accounting Officer & VP  
A. T. O’Toole  
Chairman & Lead Independent Director  
J. L. Hennessy

CEO & Director  
S. Pichai

Board Members  
F. H. Arnold  
J. L. Hennessy  
K. R. Shriram  
L. E. Page  
L. J. Doerr  
R. L. Washington  
R. M. Chavez  
R. W. Ferguson  
S. Brin  
S. Pichai

Domicile  
Delaware  
Auditor  
Ernst & Young LLP

Founded  
1998

Employees  
182,502

Stockholders  
N/A



Alphabet Inc.

Quantitative Evaluations					
Fair Value Rank	1	2	3	4	5
	LOWEST		HIGHEST		
	Based on CFRA's proprietary quantitative model, stocks are ranked from most overvalued (1) to most undervalued (5).				
Fair Value Calculation	USD 144.77	Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that GOOG is undervalued by USD 1.23 or 0.86%			
Volatility	LOW		AVERAGE		HIGH
Technical Evaluation	BULLISH	Since November, 2023, the technical indicators for GOOG have been BULLISH"			
Insider Activity	UNFAVORABLE	NEUTRAL		FAVORABLE	

Expanded Ratio Analysis				
	2023	2022	2021	2020
Price/Sales	5.83	4.13	7.61	6.59
Price/EBITDA	17.90	13.22	22.04	21.92
Price/Pretax Income	20.92	16.37	21.61	25.03
P/E Ratio	24.30	19.46	25.79	29.89
Avg. Diluted Shares Outstg. [M]	12,722	13,159	13,553	13,741
Figures based on fiscal year-end price				

Key Growth Rates and Averages				
Past Growth Rate [%]		1 Year	3 Years	5 Years
Net Income		23.05	22.37	19.14
Sales		8.68	18.98	17.57
Ratio Analysis [Annual Avg.]				
Net Margin [%]		24.01	24.91	23.60
% LT Debt to Capitalization		3.79	4.29	3.96
Return on Equity [%]		27.36	27.68	24.03

Company Financials Fiscal year ending Dec 31										
Per Share Data [USD]	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Tangible Book Value	20.40	17.68	17.16	14.80	12.99	11.32	9.58	8.63	7.32	6.14
Free Cash Flow	5.50	4.59	5.02	3.15	2.24	1.64	1.73	1.88	1.21	0.89
Earnings	5.80	4.56	5.61	2.93	2.46	2.19	0.90	1.39	1.18	0.99
Earnings [Normalized]	5.80	4.56	5.61	2.93	2.62	2.18	1.60	1.72	1.48	1.28
Dividends	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Payout Ratio [%]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Prices: High	143.94	152.10	151.85	92.36	68.25	63.69	53.92	40.83	39.00	30.16
Prices: Low	85.57	83.45	84.95	50.68	50.70	48.51	38.79	33.15	24.31	24.38
P/E Ratio: High	24.80	33.40	27.10	31.50	26.10	29.20	33.70	23.80	26.40	23.60
P/E Ratio: Low	14.80	18.30	15.10	17.30	19.40	22.20	24.20	19.30	16.40	19.10
Income Statement Analysis [Million USD]										
Revenue	307,394	282,836	257,637	182,527	161,857	136,819	110,855	90,272	74,989	66,001
Operating Income	88,226	74,842	78,714	41,224	35,928	32,595	28,914	23,716	19,360	16,874
Depreciation + Amortization	11,946	13,475	10,273	13,679	11,651	9,029	6,899	6,100	5,024	4,601
Interest Expense	308.00	357.00	346.00	135.00	100.00	114.00	109.00	124.00	104.00	101.00
Pretax Income	85,717	71,328	90,734	48,082	39,625	34,913	27,193	24,150	19,651	17,259
Effective Tax Rate	13.90	15.90	16.20	16.20	13.30	12.00	53.40	19.30	16.80	21.10
Net Income	73,795	59,972	76,033	40,269	34,343	30,736	12,662	19,478	16,348	14,136
Net Income [Normalized]	56,546	48,029	49,040	26,103	23,834	20,909	18,826	15,266	12,491	10,779
Balance Sheet and Other Financial Data [Million USD]										
Cash	110,916	113,762	139,649	136,694	119,675	109,140	101,871	86,333	71,926	62,633
Current Assets	171,530	164,795	188,143	174,296	152,578	135,676	124,308	105,408	90,114	78,656
Total Assets	402,392	365,264	359,268	319,616	275,909	232,792	197,295	167,497	147,461	129,187
Current Liabilities	81,814	69,300	64,254	56,834	45,221	34,620	24,183	16,756	19,310	16,779
Long Term Debt	11,870	12,857	12,844	12,832	3,958	3,950	3,943	3,935	1,995	2,992
Total Capital	313,246	286,121	280,143	250,416	217,524	181,640	156,471	142,971	127,979	111,875
Capital Expenditures	32,251	31,485	24,640	22,281	23,548	25,139	13,184	10,212	9,950	11,014
Cash from Operations	101,746	91,495	91,652	65,124	54,520	47,971	37,091	36,036	26,572	23,024
Current Ratio	2.10	2.38	2.93	3.07	3.37	3.92	5.14	6.29	4.67	4.69
% Long Term Debt of Capitalization	3.80	4.50	4.60	5.10	1.80	2.20	2.50	2.80	1.60	2.70
% Net Income of Revenue	24.00	21.20	29.50	22.10	21.20	22.50	11.40	21.60	21.80	21.40
% Return on Assets	14.37	12.91	14.49	8.65	8.83	9.47	9.91	9.41	8.75	8.78
% Return on Equity	27.40	23.60	32.10	19.00	18.10	18.60	8.70	15.00	14.60	14.20

Source: S&P Global Market Intelligence. Data may be preliminary or restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends; EPS diluted. E-Estimated. NA-Not Available. NM-Not Meaningful. NR-Not Ranked. UR-Under Review.

Alphabet Inc.

Sub-Industry Outlook

Industry Performance

We have a positive fundamental outlook for the Interactive Media Services sub-industry over the next 12 months, reflecting the improving digital advertising landscape and margin expansion potential/earnings leverage from prior headcount cuts. Heading into 2024, we project digital ad spending to continue to grow, with easier comparisons in the first half of the year, while the Olympics and the presidential election will support additional gains in the second half. Greater momentum from China advertisers is stimulating near-term demand while increasing investments in Generative AI (GenAI) will improve content/recommendations and translate to higher return on investment (ROI) for advertisers.

According to Magna Global, total global digital ad spending is forecasted to reach over \$600 billion in 2024 (68% of total media ad spend), growing 9% after increasing by a projected similar figure in 2023 (about 10%). Long term, we note the ongoing shift of total global advertising spend from traditional broadcast TV/radio and print media to Internet/digital media. This shift is driven by the increasing time consumers spend on Internet/digital vs. traditional media and by the superior return on investment for the advertisers due to more precise targeting, richer feedback, and a more efficient ad buying process that is mostly auction-based and increasingly programmatic.

We expect revenue growth to accelerate for social media participants GOOGL, META, Snapchat (SNAP), and Pinterest (PINS) after showing growth rates temper down since the end of the pandemic. While customer budgets remain relatively resilient and advertisers have increasingly focused on larger platform providers amid a tougher macro backdrop, we see greater competitive pressures from new ad-based driven platforms [e.g., Netflix]. This comes at a time when the digital ad pie is growing much slower, which will have negative implications for the long-term outlook of existing players. Despite this, new AI capabilities should improve targeting capabilities and engagement levels amid a still-growing digital ad market.

GOOGL and META capture a majority of digital ad revenue, while Amazon (AMZN) is poised to take considerable share, creating a triopoly. Together, GOOGL and META dominate digital/online advertising, holding more than 60% of the global online/digital advertising market with what might be called monopolistic power in their respective search and social media businesses, at least outside of China. Within the \$250 billion-plus U.S. ad market, this triopoly controls nearly two-thirds of the market, with AMZN being the clear share-taker.

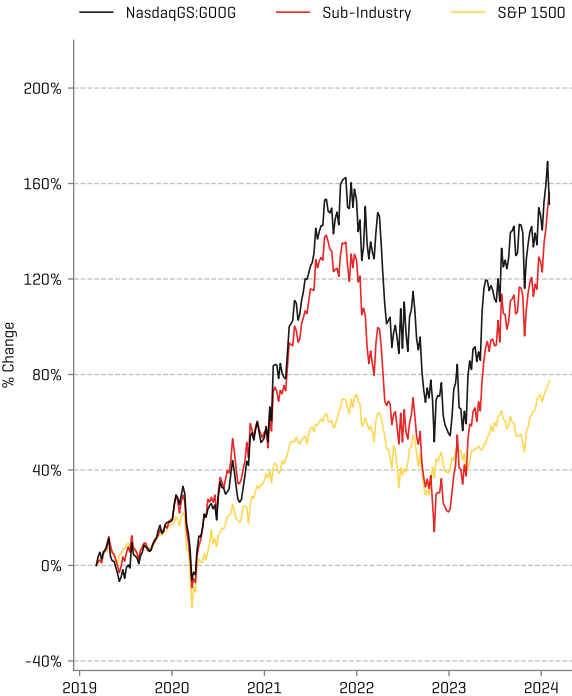
We also underscore the tremendous profitability and substantial operating leverage inherent to the businesses in this sub-industry. We note the large adjacent markets into which GOOGL/META are expanding (e.g., GOOGL's enterprise cloud services and META's VR/AR apps) or planning to expand (e.g., autonomous vehicles, drone delivery, payments). The opportunity we see in this sub-industry is partially offset by the persistent threat of greater regulation regarding alleged antitrust violations and data privacy, with the greatest threat coming from Europe (Digital Markets Act and Digital Services Act).

For the full-year of 2023, the S&P 1500 Interactive Media Services sub-industry index rose 85.8% vs. a 23.4% rise for the S&P 1500. For the year 2022, the S&P 1500 Interactive Media Services sub-industry index fell 46.3% vs. a 19.1% decline for the broader S&P 1500.

/ Angelo Zino, CFA

GICS Sector: Communication Services  
Sub-Industry: Interactive Media and Services

Based on S&P 1500 Indexes  
Five-Year market price performance through Feb 03, 2024



NOTE: A sector chart appears when the sub-industry does not have sufficient historical index data.  
All Sector & Sub-Industry information is based on the Global Industry Classification Standard (GICS).  
Past performance is not an indication of future performance and should not be relied upon as such.  
Source: CFRA, S&P Global Market Intelligence

Sub-Industry: Interactive Media and Services

Peer Group\*: Interactive Media and Services

Peer Group	Stock Symbol	Exchange	Currency	Recent Stock Price	Stk. Mkt. Cap. [M]	30-Day Price Chg. [%]	1-Year Price Chg. [%]	P/E Ratio	Fair Value Calc.	Yield [%]	Return on Equity [%]	LTD to Cap [%]
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\*For Peer Groups with more than 10 companies or stocks, selection of issues is based on market capitalization.  
NA-Not Available; NM-Not Meaningful.  
Note: Peers are selected based on Global Industry Classification Standards and market capitalization. The peer group list includes companies with similar characteristics, but may not include all the companies within the same industry and/or that engage in the same line of business.

# Alphabet Inc.

## Analyst Research Notes and other Company News

### January 30, 2024

11:24 PM ET... CFRA Maintains Buy Opinion on Shares of Alphabet Inc. [GOOG 153.05\*\*\*\*]:

We bump our 12-month target to \$166 from \$157, on a slightly higher revised P/E of 22x our '25 EPS view but still below historical forward averages. We adjust our '24 EPS estimate to \$6.77 from \$6.65 and '25 to \$7.54 from \$7.50. GOOG posts Q4 EPS of \$1.64 vs. \$1.05, beating the \$1.60 consensus estimate. Sales rose 13%, better than expected, as higher digital ad spend drove growth for Search [+13%] and YouTube [+16%]. Cloud growth of 26% accelerated from 22% in Q3 and was a pleasant surprise, as greater AI workloads help support revenue in '24 and alleviate some concern about recent share loss. While GOOG typically avoids forward guidance, consensus Search/Cloud expectations in '24 still appear reasonable. Capex spend was above our view [\$11B in Q4 vs. \$10.5B view] and will be elevated through '24 given AI investments, as GOOG also emphasizes organizational cost savings. We like subscriber growth [\$15B annual run rate; up 5x since '19] and AI monetization prospects [e.g., SGE, LLMs, Bard, on-device AI]. / Angelo Zino, CFA

### December 06, 2023

12:56 PM ET... CFRA Maintains Buy Opinion on Shares of Alphabet Inc. [GOOG 132.35\*\*\*\*]:

GOOG unveils Gemini, its much-anticipated new generative AI model [upgraded to Palm2]. Gemini will be available in three models: 1) Ultra, the largest/most capable for highly complex tasks; 2) Pro, for a wide range of tasks; and 3) Nano, for Android users who want to build Gemini-powered apps. Although the first iteration of Gemini offers a notable step up in inferencing capabilities, we believe it is still inferior to OpenAI's GPT-4, which we view as the highest bar in the industry. Gemini will help power Bard and Search Generative Experience [not widely accessible yet] as well as Google Ads, customer cloud models/APIs, other apps, and the Chrome browser. We note that Gemini runs on internally designed TPUs, but we see future upgrades/iterations also leveraging the most advanced GPUs. Although we believe GOOG may still be a step behind MSFT/OpenAI, AI advancements are moving incredibly fast, and we think future Gemini upgrades will allow GOOG to keep up with the competition and be a major AI beneficiary. / Angelo Zino, CFA

### October 25, 2023

06:50 AM ET... CFRA Maintains Buy Opinion on Shares of Alphabet Inc. [GOOG 138.81\*\*\*\*]:

We keep our 12-month target at \$157, on a P/E of 21x our 2025 EPS estimate of \$7.50 [raised from \$7.46], below its historical forward averages. We up our 2023 EPS estimate to \$5.78 from \$5.70 and 2024 to \$6.65 from \$6.57. GOOG posts Q3 EPS of \$1.55 vs. \$1.06, beating our \$1.48 estimate. Sales rose 11%, better than expected, as improving digital ad spend drove accelerating growth from both Search [+11%] and YouTube [+12%]. Cloud growth was a big disappointment [+22% vs. 26%-28% estimate], as customers are looking to optimize spending amid macro uncertainty, but we think will create concern of share loss [Microsoft Azure +29%; limited cloud guidance offered]. We are encouraged by YouTube subscriber growth given momentum from the NFL Sunday Ticket, greater efficiencies as we note employee headcount was down Y/Y, and AI opportunities ahead [e.g., Workspace ARPU growth, Search Generative Experience, LLM/Bard monetization]. Regulatory uncertainty remains a risk while capex spend will remain elevated through 2024. / Angelo Zino, CFA

### October 16, 2023

12:35 AM ET... CFRA Maintains Buy Opinion on Shares of Alphabet Inc. [GOOG 138.58\*\*\*\*]:

We up our 12-month target to \$157 from \$142, on a P/E of 21x our 2025 EPS estimate, which we initiate at \$7.46, below its historical forward averages. We keep our 2023 EPS estimate at \$5.70 but raise 2024 to \$6.57 from \$6.44. Ahead of Q3 results set after the close on 10/24, we see upside to Q3/Q4 consensus views given improving trends within both Search and YouTube along with robust cloud growth. We conservatively look for GOOG Search growth of 6% to 8% in Q3/Q4 [5% in Q2/2% in Q1], as digital ad trends remain favorable while greater AI emphasis supports higher ROI and overall ad spend. We see YouTube growth accelerating to over 10% in Q3/Q4 [+4% in Q2], on easier comps, greater Shorts monetization, and NFL Sunday Ticket traction. We see cloud growth of 28%-30% in Q3/Q4, near the 28% pace in Q2 and improving operating profit from greater scale. Although we view AI momentum as more of a 2024 story, timing/availability on initiatives like GOOG's SGE and Gemini will be critical to monitor. / Angelo Zino, CFA

### July 26, 2023

12:38 AM ET... CFRA Maintains Buy Opinion on Shares of Alphabet Inc. [GOOG 122.21\*\*\*\*]:

We up our 12-month target to \$142 from \$135, on P/E of 22x our 2024 EPS view, but still below its historical five-year forward averages. We raise our 2023 EPS estimate to \$5.70 from \$5.33 and 2024 to \$6.44 from \$6.20. GOOG posts Q2 EPS of \$1.44 vs. \$1.21, beating our \$1.30 estimate. Sales rose 7% [+9% CC], driven by better-than-expected growth in Search [+5% vs. our +2% forecast] and YouTube [+4%; first positive Y/Y growth pace since Q2 last year]. Cloud rose an impressive 28%. We remain excited about the AI opportunities attached to GOOG, which includes revenue potential in the cloud, new enterprise AI tools, and efforts on the Search/YouTube side. We like improving profitability across the cloud [\$395M; 5% operating margin] and smaller losses from Other Bets given prior cost cuts and greater focus on efficiencies. We see growth from YouTube accelerating in the 2H, partly aided by increasing prices and momentum from the Sunday NFL ticket while recent search acceleration will bump on easier 2H comparisons. / Angelo Zino, CFA

### July 17, 2023

01:06 PM ET... CFRA Maintains Buy Opinion on Shares of Google Inc. [GOOG 117.50\*\*\*\*]:

We increase our 12-month target price to \$135 from \$120 on a higher revised P/E of 21.8x our 2024 EPS view [implies 20x on a net cash basis], but still below its historical five-year forward average of 24.6x and ten-year at 23.5x. We keep our 2023 EPS estimate at \$5.33 and raise 2024's to \$6.20 from \$6.00. Following up on our note yesterday after GOOG's annual I/O conference, we think GOOG has soundly put to rest concerns about the demise of its ad-based Search business model. In fact, GOOG actually demonstrated a more superior look/capabilities to its Search platform with AI, proving that concerns of Microsoft gobbling up share now appear overblown. In addition, GOOG showcased ways that it will monetize AI across Workspace apps [similar to Microsoft's Copilot] throughout the enterprise space, while we see it capitalizing on AI across other categories. Despite our greater conviction on the GOOG story, we note risks remain related to regulatory uncertainties [e.g., DoJ case] and ad-spend given macro factors. / Angelo Zino, CFA

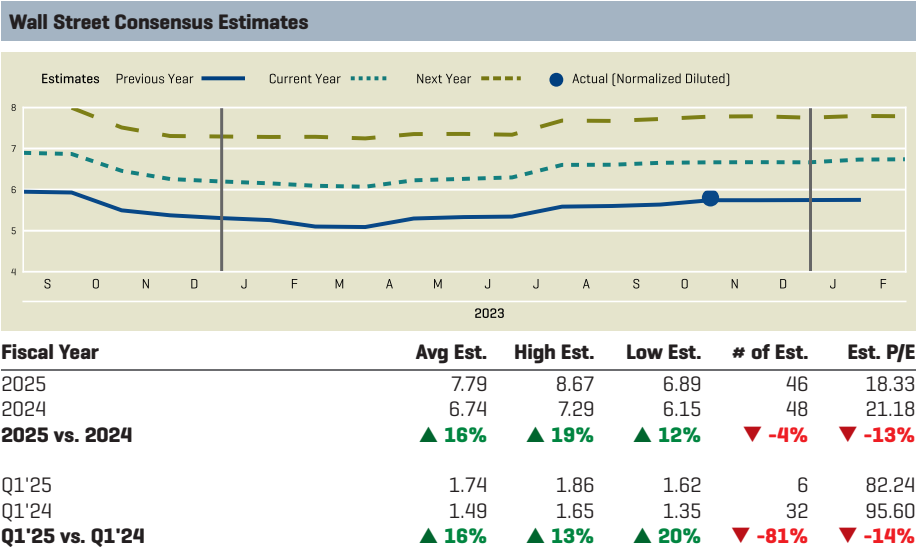
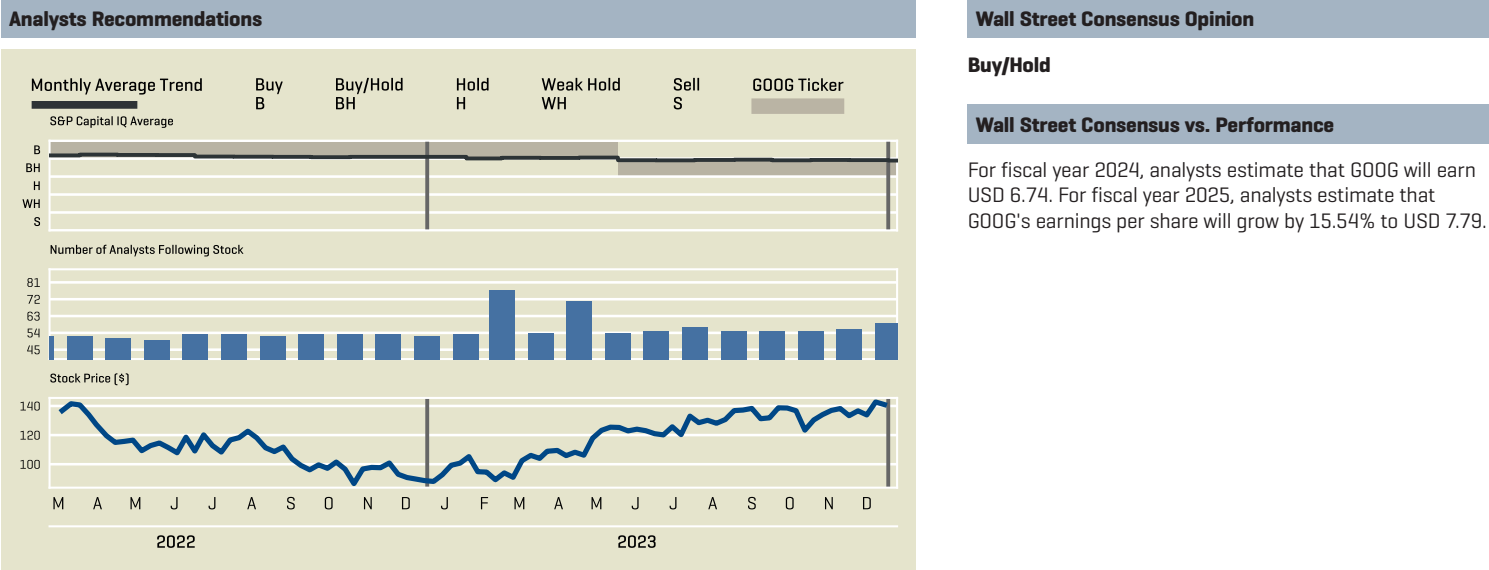
### May 10, 2023

05:02 PM ET... CFRA Maintains Buy Opinion on Shares of Google Inc. [GOOG 112.28\*\*\*\*]:

GOOG held its annual Google I/O event. We believe the conference was enough to shift the narrative for GOOG as not only an AI winner, but also demonstrated that Search will be able to evolve without destroying the advertising engine that feeds at the core of the business. At the event, GOOG announced Duet AI chatbot, a collection of AI tools across Workspace apps [e.g., Sheets can create/populate spreadsheets, Slides can provide images/notes for presentations, Docs can help with writing essays/resumes]. Duet AI also acts as a coding/cloud assistant. Bard [opening to +180 countries; soon in 40 languages] is now on GOOG's new PaLM 2 large language model and already announced its successor, Gemini, showing how fast AI is moving. On hardware, GOOG unveils a new \$1,799 foldable phone, a \$499 tablet [with charging dock], and the Pixel 7a budget phone. Overall, we view the event as a big success, showcasing new AI revenue potential as well as the ability to leverage AI across GOOG's entire ecosystem of products. / Angelo Zino, CFA

Note: Research notes reflect CFRA's published opinions and analysis on the stock at the time the note was published. The note reflects the views of the equity analyst as of the date and time indicated in the note, and may not reflect CFRA's current view on the company.

Alphabet Inc.



Forecasts are not reliable indicator of future performance.

Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance.

Note: For all tables, graphs and charts in this report that do not cite any reference or source, the source is S&P Global Market Intelligence.



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Glossary

STARS

Since January 1, 1987, CFRA Equity and Fund Research Services, and its predecessor S&P Capital IQ Equity Research has ranked a universe of U.S. common stocks, ADRs [American Depositary Receipts], and ADSs [American Depositary Shares] based on a given equity's potential for future performance. Similarly, we have ranked Asian and European equities since June 30, 2002. Under proprietary STARS [Stock Appreciation Ranking System], equity analysts rank equities according to their individual forecast of an equity's future total return potential versus the expected total return of a relevant benchmark [e.g., a regional index [MSCI AC Asia Pacific Index, MSCI AC Europe Index or S&P 500® Index]], based on a 12-month time horizon. STARS was designed to help investors looking to put their investment decisions in perspective. Data used to assist in determining the STARS ranking may be the result of the analyst's own models as well as internal proprietary models resulting from dynamic data inputs.

S&P Global Market Intelligence's Quality Ranking

[also known as **S&P Capital IQ Earnings & Dividend Rankings**] - Growth and S&P Capital IQ Earnings & Dividend Rankings stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to capsize the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

A+ Highest	B Below Average
A High	B- Lower
A Above	C Lowest
B+ Average	D In Reorganization
NC Not Ranked	

EPS Estimates

CFRA's earnings per share [EPS] estimates reflect analyst projections of future EPS from continuing operations, and generally exclude various items that are viewed as special, non-recurring, or extraordinary. Also, EPS estimates reflect either forecasts of equity analysts; or, the consensus [average] EPS estimate, which are independently compiled by S&P Global Market Intelligence, a data provider to CFRA. Among the items typically excluded from EPS estimates are asset sale gains; impairment, restructuring or merger-related charges; legal and insurance settlements; in process research and development expenses; gains or losses on the extinguishment of debt; the cumulative effect of accounting changes; and earnings related to operations that have been classified by the company as discontinued. The inclusion of some items, such as stock option expense and recurring types of other charges, may vary, and depend on such factors as industry practice, analyst judgment, and the extent to which some types of data is disclosed by companies.

12-Month Target Price

The equity analyst's projection of the market price a given security will command 12 months hence, based on a combination of intrinsic, relative, and private market valuation metrics, including Fair Value.

Abbreviations Used in Equity Research Reports

- CAGR - Compound Annual Growth Rate
- CAPEX - Capital Expenditures
- CY - Calendar Year
- DCF - Discounted Cash Flow
- DDM - Dividend Discount Model
- EBIT - Earnings Before Interest and Taxes
- EBITDA - Earnings Before Interest, Taxes, Depreciation & Amortization
- EPS - Earnings Per Share
- EV - Enterprise Value
- FCF - Free Cash Flow
- FFO - Funds From Operations
- FY - Fiscal Year
- P/E - Price/Earnings
- P/NAV - Price to Net Asset Value
- PEG Ratio - P/E-to-Growth Ratio
- PV - Present Value
- R&D - Research & Development
- ROCE - Return on Capital Employed
- ROE Return on Equity
- ROI - Return on Investment
- ROIC - Return on Invested Capital
- ROA - Return on Assets
- SG&A - Selling, General & Administrative Expenses
- SOTP - Sum-of-The-Parts
- WACC - Weighted Average Cost of Capital

**Dividends on American Depositary Receipts (ADRs) and American Depositary Shares (ADSs) are net of taxes [paid in the country of origin].**

Qualitative Risk Assessment

Reflects an equity analyst's view of a given company's operational risk, or the risk of a firm's ability to continue as an ongoing concern. The Qualitative Risk Assessment is a relative ranking to the U.S. STARS universe, and should be reflective of risk factors related to a company's operations, as opposed to risk and volatility measures associated with share prices. For an ETF this reflects on a capitalization-weighted basis, the average qualitative risk assessment assigned to holdings of the fund.

STARS Ranking system and definition:

★★★★★ 5-STARS (Strong Buy):

Total return is expected to outperform the total return of a relevant benchmark, by a notable margin over the coming 12 months, with shares rising in price on an absolute basis.

★★★★★ 4-STARS (Buy):

Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months.

★★★★★ 3-STARS (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months.

★★★★★ 2-STARS (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months.

★★★★★ 1-STAR (Strong Sell):

Total return is expected to underperform the total return of a relevant benchmark by a notable margin over the coming 12 months, with shares falling in price on an absolute basis.

Relevant benchmarks:

In North America, the relevant benchmark is the S&P 500 Index, in Europe and in Asia, the relevant benchmarks are the MSCI AC Europe Index and the MSCI AC Asia Pacific Index, respectively.



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## Disclosures

Stocks are ranked in accordance with the following ranking methodologies:

### STARS Stock Reports:

Qualitative STARS rankings are determined and assigned by equity analysts. For reports containing STARS rankings refer to the Glossary section of the report for detailed methodology and the definition of STARS rankings.

### Quantitative Stock Reports:

Quantitative rankings are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative rankings refer to the Glossary section seof the report for detailed methodology and the definition of Quantitative rankings.

### STARS Stock Reports and Quantitative Stock Reports:

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### STARS Stock Reports:

Global STARS Distribution as of December 31, 2023

Ranking	North America	Europe	Asia	Global
Buy	39.1%	34.9%	41.7%	38.8%
Hold	52.9%	50.5%	52.0%	52.2%
Sell	8.0%	14.6%	6.3%	8.9%
Total	100.0%	100.0%	100.0%	100.0%

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