

Alphabet

Search Wars – January data shows marginal decline in Google search share

Maintain Rating: BUY | PO: 173.00 USD | Price: 143.68 USD

Search share: Other platforms gaining share in mobile

Statcounter January data indicates that Google's global search market share was down 143bps y/y (and 15bps m/m) to 91.5%, with Bing share up 39bps y/y (and up 5bps m/m) to 3.4% and Others (which includes Yandex, Baidu, Naver, DuckDuckGo, and other smaller search engines but not ChatGPT) up 115bps y/y (up 12bps m/m) to 4.0%. On mobile, Google's market share was down 114bps y/y to 95.3% versus Bing's up 4bps y/y and Others up 124bps. On desktop, Google's market share was down 274bps y/y to 82.0% versus Bing's up 165bps y/y and Others up 101bps. Top share gainer in Other category was Yandex (up 93bps y/y), driven by the search engine's growing popularity in Russia, followed by Baidu (up 18bps y/y) and Naver (up 6bps y/y).

ChatGPT visits growing faster but still small % of Google

Similar Web data suggests that web traffic (visits) for all major platforms (ChatGPT, Google, Bing, and Bard) was up m/m. Google visits increased 6% m/m to 2.8bn, Bard visits were up 6% m/m to 10.7mn, and Bing visits increased 2% m/m to 43.8mn. ChatGPT visits were up 26% m/m to 52.9mn and represented ~2.0% of Google's web visits. For downloads, per Sensor Tower, Google app global downloads increased 2% m/m to 13mn, Bing app downloads increased 65% to 11mn, and ChatGPT decreased 6% to 21mn. The Google to Bing download ratio was 1.2x globally and 4.9x in the US, while compared to ChatGPT, Google had lower downloads (0.5x globally and 0.8x in the US).

AI integration into search top stock value driver & risk

Overall, we do not see a major traffic impact for Google and continue to expect progress with AI to be top stock driver. In 2024, we see three important drivers of AI-driven search growth, including 1) increasing number of queries as LLM integration improves search capabilities, 2) more effective targeting and higher monetization for Google Search, and 3) growing advertiser adoption of AI automated tools, such as Performance Max. With a strong base of AI assets and positive initial traction of Gen-AI integrations into Search, we think that Alphabet will likely be a net AI beneficiary and maintain our Buy rating. Top risk remains devaluation of search (loss of traffic) as users can find AI-generated information on other sites.

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)			7.21	8.34	9.09
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	24.9x	19.2x	16.9x	14.9x	13.3x
GAAP P/E	31.5x	24.8x	21.2x	18.7x	16.6x
EV / EBITDA*	16.5x	14.6x	12.7x	11.3x	10.1x
Free Cash Flow Yield*	3.3%	3.9%	4.5%	5.5%	6.3%

* For full definitions of *IQmethod*SM measures, see page 9.

06 February 2024

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Stock Data

Price (NAS / NAS)	143.68 USD / 144.93 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)	1,794,254 USD
Free Float	99.6%
Average Daily Value	4114.77 USD
Shares Outstanding (mn)	12,487.9 / 12,487.9
BofA Ticker / Exchange	GOOGL / NAS
BofA Ticker / Exchange	GOOG / NAS
Bloomberg / Reuters	GOOGL US / GOOGLQQ
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".

AI: artificial intelligence

LLM: large language model

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Timestamp: 06 February 2024 12:57PM EST

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 9.

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	28,285,024
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

Data update

Google's search share down y/y, but web visits and downloads grew in January

Per Statcounter, in January, Google lost 15bps of m/m **market share** globally versus Bing up 5bps m/m. On a y/y basis, Google's market share was down 143bps y/y (versus down 96bps y/y in Dec'23) to 91.5%. Bing gained 39bps market share y/y (versus up 34bps in December 2023).

- On **Mobile**, Google lost 16bp of mobile search market share globally versus Bing down 2bps m/m. On a y/y basis, Google's market share was down 114bps y/y (versus down 69 bps in December) to 95.3 %. Bing's mobile search market share increased 4bps y/y (versus up 4bps in December) to 0.5%.
- On **Desktop**, Google gained 24bps of desktop search market share globally versus Bing down 3bps m/m. On a y/y basis, Google's market share was down 274bps y/y (versus down 237bps in December) to 82.0%. Bing's mobile search market share increased 165bps y/y (versus up 158bps in December) to 10.5%.

For **Web traffic**, Similarweb daily traffic data through January 31 suggest that ChatGPT, Google, Bing, and Bard all saw m/m increase. Google 7-days average visits through January 31 were up 6% m/m to 2.8bn, while Bing visits were up 2% m/m to 44mn. ChatGPT traffic was up 26% m/m to 53mn, representing just ~2.0% of Google web traffic.

For **downloads**, Bing and ChatGPT global downloads remain volatile and in January were up 65% and -6% m/m, respectively, while Google downloads increased 2% m/m. In the US, Google downloads increased 6% m/m, while Bing downloads decreased 25%, and ChatGPT decreased 7%. In January, Google to Bing download ratio was 1.2x globally and 4.9x in the US, while compared to ChatGPT, Google had lower downloads globally (0.5x) and in the US (0.8x).

Statcounter Market share data

Total Search Share (Desktop, Mobile, Tablet, and Console)

Per Statcounter, in January, Google lost 15bps of Search market share globally m/m versus Bing up 5bps m/m. On a y/y basis, Google's market share was down 143bps y/y to 91.5%, Bing's gained 39bps y/y to 3.4%, and Others gained 115bps y/y to 4.0%. Top share gainer in Other category was Yandex (up 93bps y/y), driven by the search engine's growing popularity in Russia, followed by Baidu (up 18bps y/y) and Naver (up 6bps y/y).

Exhibit 1: Global Search Engine Market Share

In January, Google's overall search market share of 91.5% declined 143bps y/y.

All Search	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Google	91.5%	92.0%	92.4%	92.3%	92.2%	92.6%	92.9%	93.4%	93.2%	92.8%	93.1%	92.6%	92.1%	91.9%	91.6%	91.6%	91.5%	91.6%	91.5%
Bing	3.3%	3.3%	3.5%	3.6%	3.4%	3.0%	3.0%	2.8%	2.9%	2.8%	2.8%	2.8%	3.0%	3.0%	3.0%	3.1%	3.2%	3.4%	3.4%
Yahoo	1.3%	1.3%	1.3%	1.3%	1.2%	1.2%	1.2%	1.1%	1.1%	1.1%	1.1%	1.1%	1.2%	1.2%	1.2%	1.2%	1.2%	1.1%	1.1%
Other	3.9%	3.3%	2.8%	2.8%	3.2%	3.2%	2.9%	2.7%	2.8%	3.3%	3.0%	3.5%	3.8%	4.0%	4.2%	4.1%	4.0%	3.9%	4.0%
Y/Y (bps)																			
Google	(38)	(3)	38	68	79	64	100	137	165	73	63	78	61	(15)	(84)	(78)	(67)	(96)	(143)
Bing	96	86	79	85	28	17	15	(16)	(24)	(26)	(31)	(43)	(30)	(31)	(44)	(49)	(22)	34	39
Yahoo	(13)	(16)	(16)	(19)	(30)	(26)	(30)	(38)	(34)	(28)	(19)	(23)	(17)	(17)	(8)	(11)	(1)	(12)	(11)
Other	(42)	(70)	(102)	(134)	(76)	(53)	(84)	(83)	(106)	(20)	(14)	(11)	(15)	66	138	135	89	73	115
M/M (bps)																			
Google	(40)	54	42	(8)	(13)	37	32	47	(16)	(39)	29	(47)	(57)	(22)	(27)	(2)	(2)	8	(15)
Bing	9	5	11	14	(17)	(39)	0	(22)	5	(10)	1	0	22	4	(2)	9	10	17	5
Yahoo	2	0	(2)	(1)	(8)	1	(3)	(8)	0	(2)	0	(2)	8	0	7	(4)	2	(10)	(2)
Other	32	(63)	(51)	(2)	38	1	(30)	(17)	12	49	(31)	51	28	18	21	(5)	(8)	(15)	12

Source: Statcounter, BofA Global Research

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Mobile search share

Per Statcounter, in January, Google lost 16bps of mobile search market share globally m/m versus Bing down 2bps m/m. On a y/y basis, Google's market share was down 114bps y/y to of 95.3%, a 45bps deceleration from December. Bing's mobile search market share was up 4bps y/y (stable versus December) to 0.5%, and Others was up 124bps y/y to 3.7%. Top share gainers in Others category was Yandex (up 87bps y/y) and Baidu (up 26bps y/y).

Exhibit 2: Global Mobile Search Engine Market Share

In January, Google's mobile search market share declined 114bps y/y to of 95.3%.

Mobile	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Google	95.0%	95.6%	96.3%	96.4%	96.1%	96.2%	96.5%	96.7%	96.6%	95.9%	96.1%	95.9%	95.4%	95.2%	94.9%	94.9%	95.2%	95.5%	95.3%
bing	0.6%	0.6%	0.5%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Yahoo!	0.8%	0.8%	0.8%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.5%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%
Other	3.7%	3.0%	2.4%	2.3%	2.8%	2.7%	2.5%	2.3%	2.4%	3.0%	2.8%	3.1%	3.5%	3.7%	3.9%	4.0%	3.8%	3.5%	3.7%
Y/Y (bps)																			
Google	45	74	148	197	157	129	149	149	179	49	21	60	44	(40)	(133)	(147)	(89)	(69)	(114)
bing	10	8	4	9	(1)	(9)	(8)	(10)	(12)	(2)	1	(5)	(6)	(9)	(3)	(4)	(3)	4	4
Yahoo!	(7)	(5)	(8)	(10)	(18)	(19)	(24)	(31)	(27)	(20)	(16)	(20)	(19)	(21)	(14)	(14)	(14)	(19)	(16)
Other	(45)	(76)	(143)	(195)	(136)	(102)	(116)	(106)	(137)	(24)	(7)	(34)	(19)	69	150	165	102	85	124
M/M (bps)																			
Google	(34)	66	65	13	(34)	11	29	25	(8)	(71)	20	(22)	(50)	(18)	(28)	(1)	24	31	(16)
bing	6	0	(5)	3	(2)	(5)	(2)	(2)	(1)	6	0	(3)	5	(3)	1	2	(1)	2	(2)
Yahoo!	4	1	(3)	(1)	(7)	0	(4)	(8)	1	3	(1)	(5)	5	(1)	4	(1)	(7)	(5)	(1)
Other	26	(68)	(58)	(13)	45	(9)	(21)	(16)	9	62	(21)	30	41	20	23	2	(18)	(26)	18

Source: Statcounter, BofA Global Research

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Desktop search share

Per Statcounter, in January, Google gained 24bps of desktop search market share globally m/m versus Bing down 3bps m/m. On a y/y basis, Google's market share was down 274bps y/y to 82.0%, while Bing's gained 165bps y/y to 10.5%, and Others was up 101bps to 4.9%. Share gainers in Others category were Yandex (up 111bps y/y) and Naver (up 11bps y/y).

Exhibit 3: Global Desktop Search Engine Market Share

In January, Google's desktop search market share declined 274bps y/y to 82.0%.

Desktop	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Google	84.2%	84.8%	84.8%	83.7%	83.8%	84.1%	84.7%	85.6%	85.5%	86.8%	87.7%	83.9%	83.5%	83.5%	83.8%	83.5%	82.8%	81.7%	82.0%
bing	8.8%	8.8%	9.2%	9.9%	9.6%	9.0%	8.9%	8.2%	8.2%	7.1%	6.8%	8.7%	9.2%	9.1%	8.7%	9.1%	9.6%	10.5%	10.5%
Yahoo!	2.5%	2.5%	2.5%	2.6%	2.5%	2.6%	2.6%	2.5%	2.4%	2.1%	2.1%	2.6%	2.7%	2.7%	2.7%	2.7%	2.9%	2.8%	2.7%
Other	4.5%	4.0%	3.6%	3.8%	4.1%	4.4%	3.9%	3.7%	3.8%	4.0%	3.5%	4.7%	4.6%	4.7%	4.8%	4.7%	4.8%	5.0%	4.9%
Y/Y (bps)																			
Google	(258)	(118)	(183)	(229)	(186)	(211)	(86)	34	56	163	223	(78)	(66)	(123)	(97)	(20)	(103)	(237)	(274)
bing	314	222	236	272	175	175	124	29	14	(100)	(151)	7	35	37	(49)	(81)	(8)	158	165
Yahoo!	(15)	(47)	(29)	(30)	(33)	(17)	(26)	(40)	(32)	(50)	(39)	3	18	19	26	13	46	20	8
Other	(40)	(59)	(21)	(13)	41	53	(14)	(22)	(40)	(13)	(29)	69	16	66	118	88	65	59	101
M/M (bps)																			
Google	(57)	61	5	(107)	4	30	61	95	(11)	131	81	(371)	(45)	4	31	(30)	(79)	(104)	24
bing	17	(8)	39	77	(28)	(69)	(10)	(67)	1	(114)	(24)	193	45	(6)	(47)	45	45	97	(3)
Yahoo!	(4)	(6)	(2)	9	(8)	13	(1)	(11)	(5)	(30)	(5)	53	11	(5)	5	(4)	25	(13)	(13)
Other	43	(45)	(40)	19	32	26	(50)	(18)	14	14	(50)	124	(10)	5	12	(11)	9	20	(8)

Source: Statcounter, BofA Global Research

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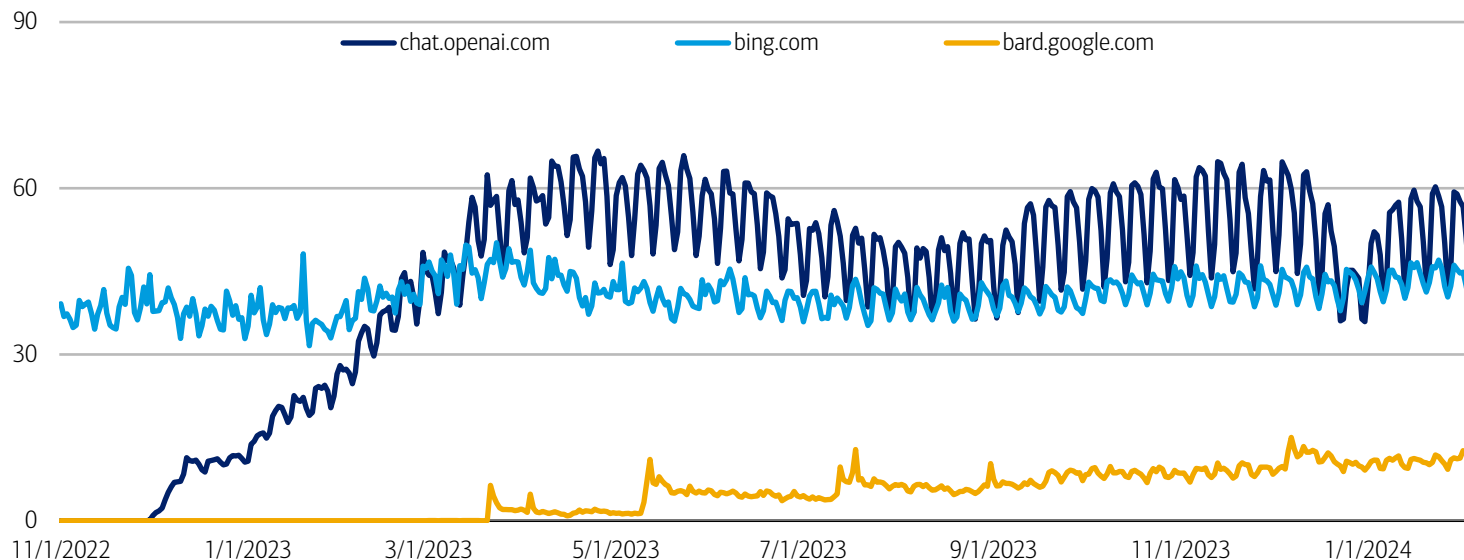
Web Traffic

ChatGPT Web traffic remains above Bard but a small fraction of Google

Similarweb web traffic data suggests that ChatGPT, Bing, Google, and Bard all saw m/m increases in January. As of January 31, on a 7-day moving average, visits to ChatGPT were 53.0mn (up 26% m/m) versus Bing's 44mn (up 2% m/m). Bard traffic was up 6% m/m and at 10.7mn. Bard visits are gaining ground but remain well below ChatGPT.

Exhibit 4: Daily web traffic (mn)

As of January 31, on a 7-day moving average, visits to Bard were 10.7mn, up 6% m/m.



Source: Similarweb, BofA Global Research

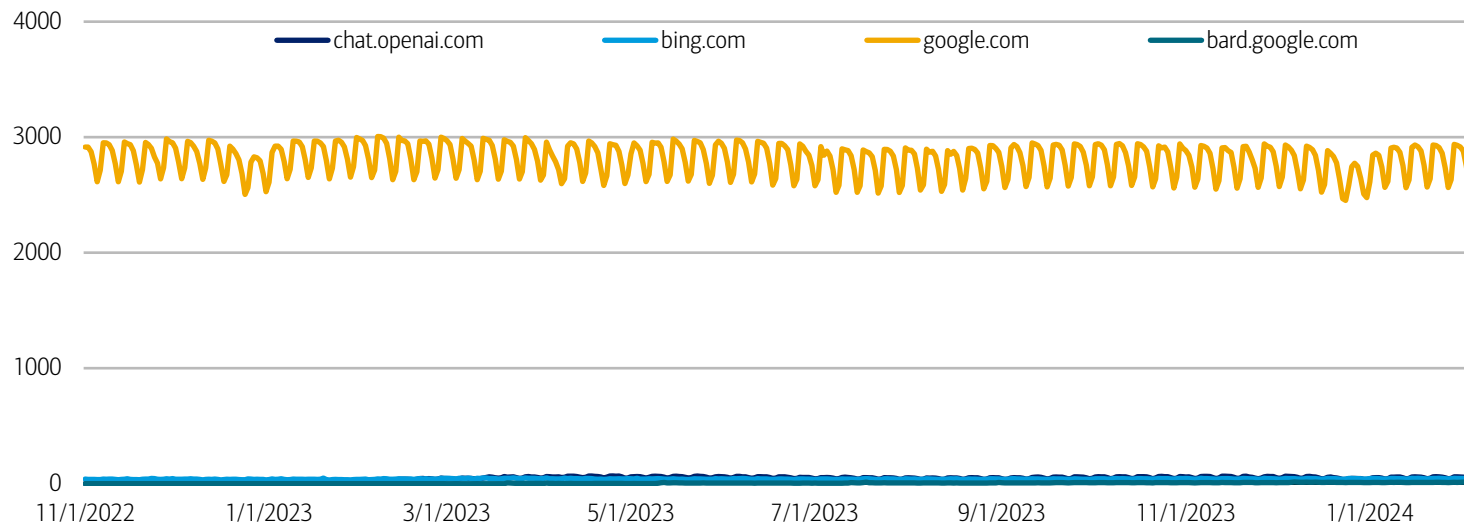
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Google web traffic up m/m

Daily visits to Google continue to be stable and in January were up m/m. As of January 31, Google Web traffic of 2.8bn (on a 7-day moving average) was up 6% m/m (versus ChatGPT up 26% m/m), which was 64x that of Bing and 53x that of ChatGPT.

Exhibit 5: Daily web traffic (mn)

As of January 31, Google Web traffic of 2.8bn was 64x that of Bing and 53x that of ChatGPT.



Source: Similarweb, BofA Global Research

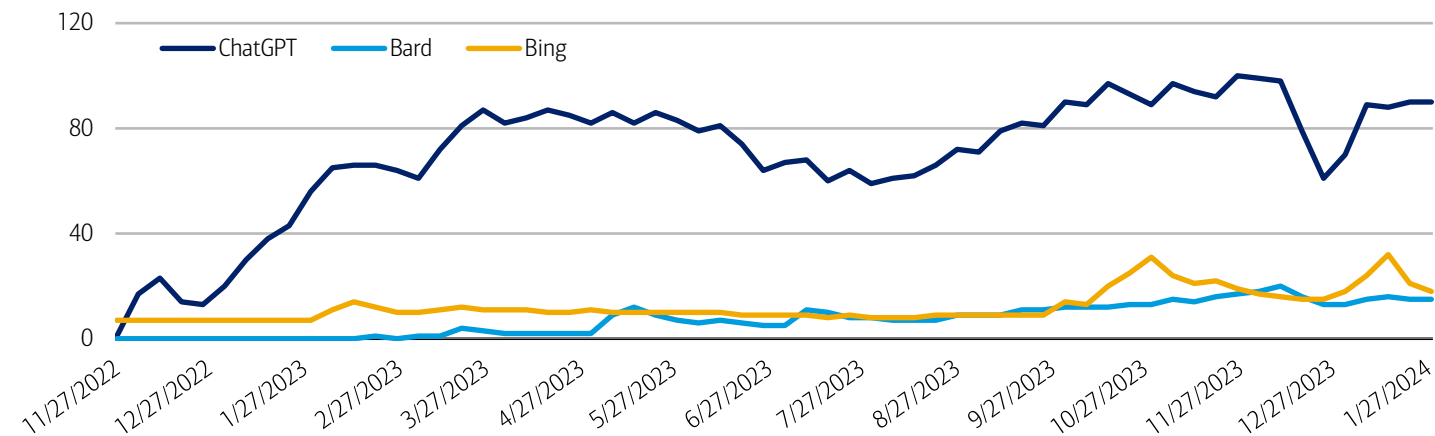
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Search interest for ChatGPT continues to increase

Global search interest for “ChatGPT” has rebounded after bottoming in mid-July 2023. On a 7-day average basis as of January 31, Google Trends data suggest a 10% m/m increase in search interest for ChatGPT. Bing search interest increased 47% m/m, while Bard search interest declined 5% m/m and remains well below ChatGPT.

Exhibit 6: Global Keyword Search Interest

Search interest in ChatGPT and Bing increased, but Bard declined in January on m/m basis.



Source: Google Trends, BofA Global Research

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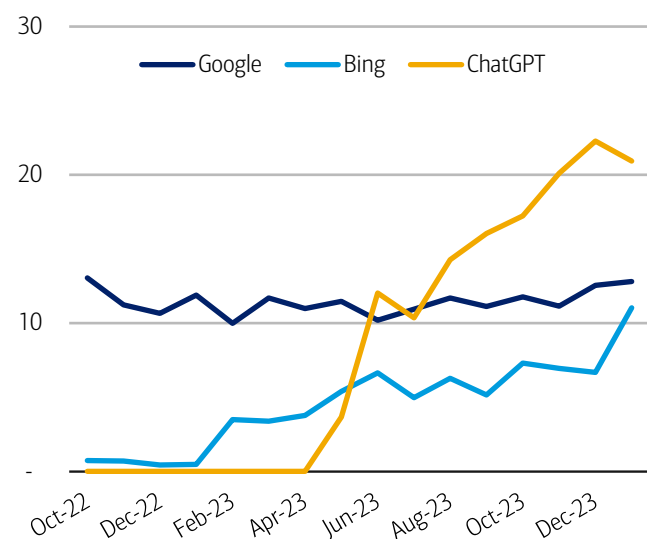
Downloads

Downloads increase for Google in January, ChatGPT highest downloads

Per Sensor Tower, in January, Google Chrome app global downloads increased 2% m/m to 12.8mn, while Bing app downloads increased 65% m/m to 11mn, and ChatGPT app downloads were down 6% m/m to 20.9mn. In US, Google app downloads increased 6% m/m to 2.9mn, while Bing app downloads were down 25% m/m to 0.59mn, and ChatGPT app downloads declined 7% m/m to 3.4mn.

Exhibit 7: Global Monthly Downloads (mn)

In January, Google app global downloads increased 2% m/m to 12.8mn.

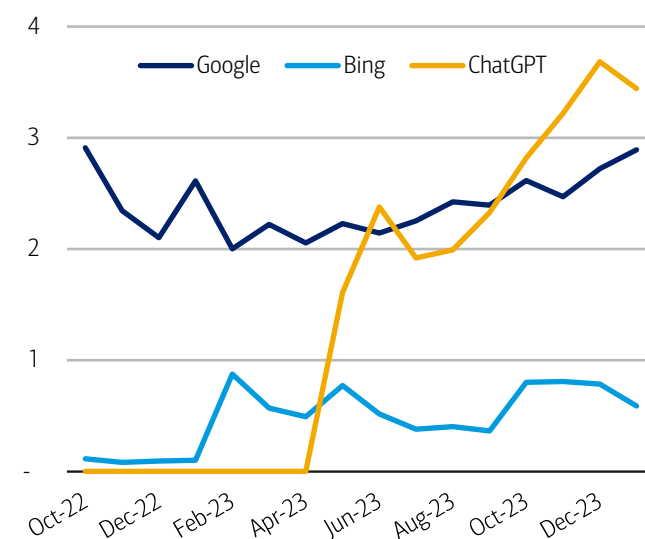


Source: Sensor Tower

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Exhibit 8: US Monthly Downloads (mn)

In January, Google app US downloads increased 6% m/m to 2.9mn.



Source: Sensor Tower

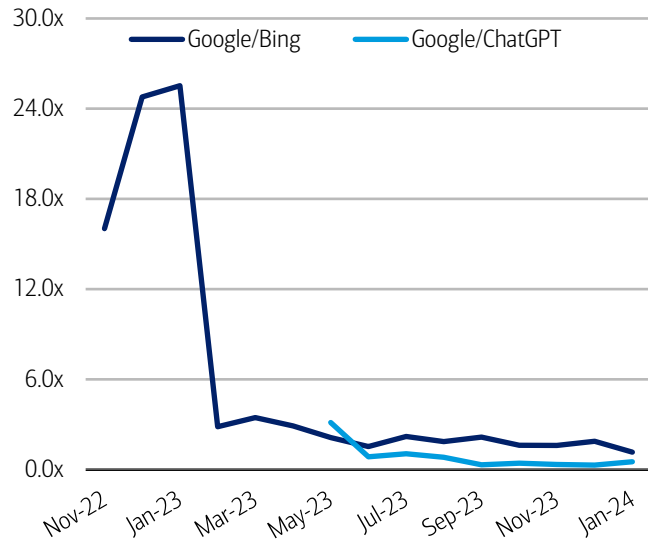
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Google versus Bing & ChatGPT App Download Ratio

Per Sensor Tower, in January, Google to Bing download ratio was 1.2x globally and 4.9x in US, while compared to ChatGPT, Google had 0.5x downloads globally and 0.8x in US.

Exhibit 9: Global Google-to Bing and ChatGPT download ratio

In January, global Google/Bing download ratio was 1.2x and ChatGPT 0.5x.

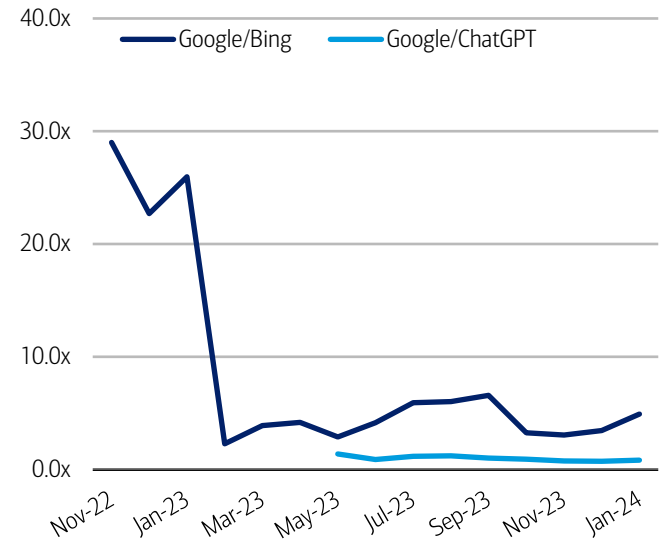


Source: Sensor Tower

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Exhibit 10: US Google-to Bing and ChatGPT download ratio

In January, US Google/Bing download ratio was 4.9x and ChatGPT 0.8x.



Source: Sensor Tower

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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 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, 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
	Zillow	Z	Z US	Curtis Nagle, CFA

US - Internet Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
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

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

EV / EBITDA

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Other LT Liabilities

Enterprise Value

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization

Shareholders' Equity

Sales

N/A

N/A

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

Market Cap = Current Share Price × Current Basic Shares

Sales

Basic EBIT + Depreciation + Amortization

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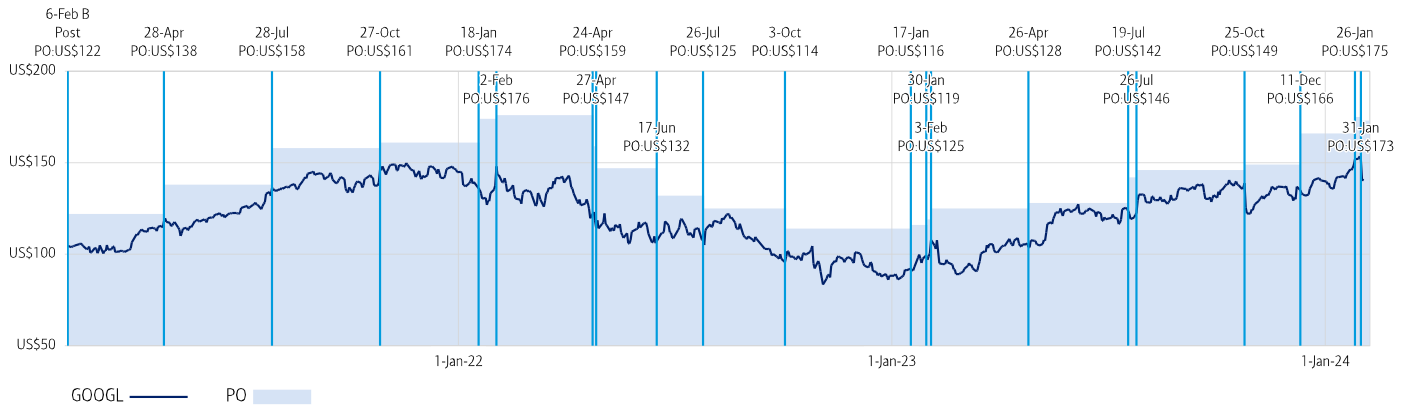
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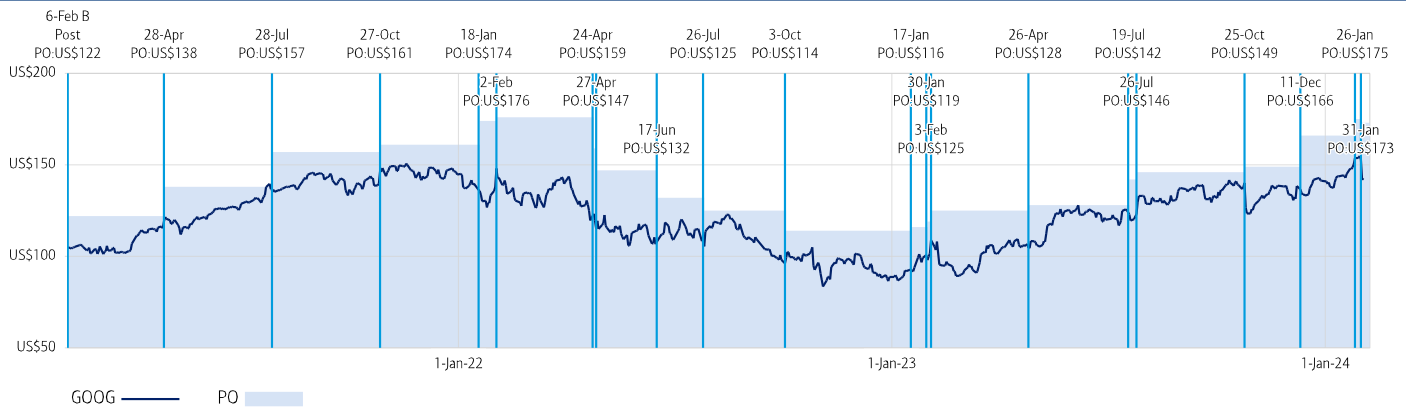
Alphabet A (GOOGL) Price Chart



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

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Equity Investment Rating Distribution: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R2}Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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