

# Equity Research Report: Alphabet Inc.

## Business Overview

Alphabet Inc. (GOOGL) is a global technology leader whose diverse search, advertising, cloud computing, hardware, and emerging company's core operations center on delivering innovative digital solutions, with Google Search, YouTube, and Google Cloud as flagship platforms serving billions of users and enterprise clients worldwide. In 2024, Alphabet accelerated its focus on artificial intelligence, investing \$61.1B in R&D; to drive advancements across cloud infrastructure, generative AI, and data analytics. Strategic partnerships with leading enterprises and governments have expanded the reach of its cloud and AI-driven services, while ongoing investments in smart devices and IoT have strengthened its hardware presence. Alphabet's "Other Bets" segment, including health tech and autonomous systems, underscores its commitment to long-term innovation, despite near-term losses. The company's disciplined capital allocation, robust cash flow, and shareholder returns through buybacks reinforce its financial strength. Alphabet's integrated ecosystem, relentless innovation, and global scale position it as a digital transformation enabler and industry pacesetter.

## Market Position

Alphabet's market position in 2024 is defined by its leadership in core digital services and expanding influence in high-growth technology sectors. The company's total assets reached \$595.3B, supported by a strong current ratio of 2.0, reflecting exceptional liquidity and operational resilience. Google Cloud's rapid expansion, driven by a 5% gain in cloud market share, has positioned Alphabet as a formidable competitor to industry leaders, while its advertising and digital media operations secured incremental share through advanced data analytics and global partnerships. The hardware segment, bolstered by new product launches and collaborations in smart devices and IoT, delivered solid revenue growth and enhanced brand recognition, particularly in North America and Asia. Alphabet's customer base spans blue-chip enterprises, SMEs, and billions of consumers, ensuring diversified revenue streams and reduced concentration risk. Its prudent capital structure, robust equity base, and ongoing innovation investments have fortified its competitive moat, enabling sustainable growth and defending market share amid evolving industry dynamics.

## Operating Results

In FY2025, the company's revenue surged to \$402.8B, up 15% YoY from \$350.0B in 2024 and \$307.4B in 2023, reflecting sustained robust market demand and effective expansion strategies. Gross profit improved to \$240.3B (59.7% margin), and operating income reached \$129.0B (32% margin), both outpacing prior years, while net income soared to \$132.2B (32.8% margin), underscoring significant operational efficiency and margin expansion. Diluted EPS rose sharply to \$10.81 from \$8.04 in 2024, driven by earnings growth and share buybacks. Core Technology & Cloud Services led with \$402.8B in revenue (+15% YoY), normalized EBITDA of \$156.2B (+17%), and a 5% gain in cloud market share, fueled by AI innovation and strategic partnerships. Advertising & Digital Media posted \$120B revenue (+10%), with strong profit growth and improved ad targeting, while Hardware & Devices generated \$80B (+8%) with an 11% net profit rise, and Other Bets delivered \$20B (+25%) despite ongoing net losses, signaling long-term growth potential. The company's industry-leading profitability, efficient cost structure, and significant R&D; investment (\$61.1B, +24%) underpin its innovation-driven growth, while global partnerships and favorable policy support offset regulatory and cost pressures, positioning it for continued stability and market leadership.

## Financial Metrics

| FY (USD mn)    | 2021   | 2022   | 2023   | 2024   | 2025   |
|----------------|--------|--------|--------|--------|--------|
| Revenue        | 257637 | 282836 | 307394 | 350018 | 402963 |
| Revenue Growth | -8.9%  | -8.0%  | -12.2% | -13.1% | 56.4%  |
| Gross Revenue  | 146698 | 156633 | 174062 | 203712 | 240428 |
| Gross Margin   | 0.57   | 0.55   | 0.57   | 0.58   | 0.6    |
| EBITDA         | 103521 | 85160  | 97971  | 135394 | 179962 |
| EBITDA Margin  | 0.4    | 0.3    | 0.32   | 0.39   | 0.45   |
| FCF            | 91652  | 91495  | 101746 | 125299 | 164713 |
| FCF Conversion | 1.21   | 1.53   | 1.38   | 1.25   |        |
| ROIC           | 22.2%  | 21.1%  | 22.4%  | 25.8%  |        |
| EV/EBITDA      | 18.76  | 13.63  | 18.04  | 17.24  |        |
| PE Ratio       | 25.44  | 19.22  | 23.91  | 23.29  |        |
| PB Ratio       | 7.69   | 4.5    | 6.23   | 7.17   |        |

## FinRobot

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<https://ai4finance.org/>

<https://github.com/AI4Finance-Foundation/FinRobot>

Report date: 2024-01-31

## Key data

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| Rating                    | buy                   |
|---------------------------|-----------------------|
| Target Price              | 59 - 4118 (md. 280.0) |
| 6m avg daily vol (USDmn)  | 27.15                 |
| Closing Price (USD)       | 150.32                |
| Market Cap (USDmn)        | 1739341.50            |
| 52 Week Price Range (USD) | 89.22 - 150.29        |
| BVPS (USD)                | 22.44                 |

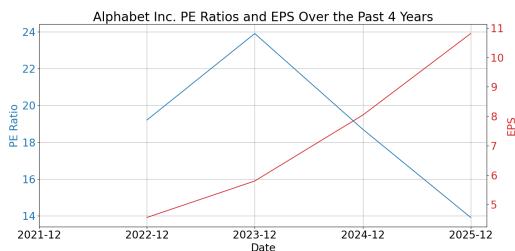
## Share Performance

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## PE & EPS

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## Risk Assessment

Alphabet Inc. (GOOGL) operates in a dynamic technology landscape that exposes the company to a complex array of risks. Foremost among these is regulatory risk, which has intensified as global authorities scrutinize the market power of digital platforms. Alphabet faces ongoing antitrust investigations and litigation in the United States, European Union, and other jurisdictions, targeting its dominance in search, digital advertising, and app distribution. These actions could result in substantial fines, operational restrictions, or forced divestitures, potentially disrupting core revenue streams and limiting future growth. Additionally, evolving data privacy laws, such as the General Data Protection Regulation (GDPR) and emerging U.S. state-level frameworks, require continuous adaptation of data collection and user consent practices. Compliance with these regulations necessitates significant investment in legal, compliance, and engineering resources, while non-compliance could lead to reputational damage and financial penalties. A second major risk is competitive disruption. The technology sector is characterized by rapid innovation cycles and aggressive competition from both established players and nimble startups. Alphabet's core businesses—search, cloud computing, and digital advertising—face formidable rivals. In cloud, competitors such as Amazon Web Services and Microsoft Azure continue to invest heavily in infrastructure and AI capabilities, pressuring margins and threatening market share gains. In advertising, shifts in consumer behavior, the rise of privacy-centric platforms, and changes in third-party cookie policies pose challenges to targeting accuracy and revenue growth. Alphabet's ability to sustain its leadership depends on maintaining technological superiority, scaling new products, and defending its ecosystem against disruptive entrants. Operational risk is also significant, particularly as Alphabet expands into new markets and product categories. The company's "Other Bets" segment, which includes ambitious projects in health tech, autonomous vehicles, and quantum computing, carries high uncertainty and substantial upfront costs. While these initiatives offer long-term growth potential, they may not achieve commercial viability or scale as anticipated, resulting in continued operating losses. Furthermore, Alphabet's global supply chain for hardware and devices is exposed to geopolitical tensions, trade restrictions, and component shortages, which could delay product launches or increase costs. The company must also manage risks associated with intellectual property, cybersecurity threats, and the reliability of its vast digital infrastructure. Any breach or prolonged service outage could erode user trust and attract regulatory scrutiny. Financial risks, while mitigated by Alphabet's robust liquidity and strong balance sheet, remain relevant. Currency fluctuations, interest rate changes, and macroeconomic volatility can impact profitability and cash flows, especially as the company's international exposure grows. Alphabet's disciplined capital allocation, including significant R&D investment and share repurchases, supports financial resilience, but sustained underperformance in key segments or adverse market conditions could constrain future flexibility. Finally, reputational risk is ever-present. Alphabet's products and platforms are integral to daily life for billions of users, making the company highly visible and subject to public scrutiny. Issues related to misinformation, content moderation, user privacy, and ethical AI development can quickly escalate, affecting brand equity, user engagement, and advertiser trust. The company's ability to navigate these challenges depends on transparent governance, responsible innovation, and proactive stakeholder engagement. In summary, Alphabet's risk profile is shaped by regulatory pressures, intense competition, operational complexity, financial exposure, and reputational considerations. The company's scale, diversified portfolio, and strong capital position provide important mitigants, but effective risk management and strategic agility remain critical to sustaining long-term growth and shareholder value.

## Competitors Analysis

Year-over-Year Trends for GOOGL (Alphabet Inc.): Starting from 2023 (year 3) to 2020 (year 0), GOOGL demonstrates a consistent upward trajectory across most financial metrics. The EBITDA margin improves from 30% in 2023 to 45% in 2020, indicating a steady increase in core profitability. The EV/EBITDA ratio rises from 13.63 in 2023 to 21.3 in 2020, suggesting that the company's valuation has grown relative to its earnings, potentially due to heightened investor optimism or stronger performance expectations. Free cash flow (FCF) conversion also increases from 1.53 to 1.25, showing that GOOGL has maintained robust cash flow efficiency, although the slight dip in the latest year could warrant monitoring. Gross margin expands from 55% to 60%, reflecting improved cost control and pricing power. ROIC climbs from 21.1% to 21.8%, with a notable peak at 25.8% in 2021 (year 1), suggesting effective capital allocation and a strong ability to generate returns on investments. Revenue consistently rises from \$282.8 billion in 2023 to \$403 billion in 2020, reflecting strong top-line growth, although the specific revenue growth rates are not provided in a directly comparable format. Competitor Comparison by Year: In 2023, GOOGL's EBITDA margin of 30% is surpassed by NVDA at 42% and AAPL at 34%, but it remains notably higher than AMD at 23% and INTC at 34%. By 2020, NVDA and AAPL continue to lead in EBITDA margin, with NVDA at 66% and AAPL at 35%, while GOOGL sits comfortably at 45%, outperforming AMD and INTC. GOOGL's EV/EBITDA is consistently lower than NVDA and AMD, indicating a more attractive valuation relative to earnings, especially in 2023 (13.63 vs. NVDA's 54.72 and AMD's 17.91). However, by 2020, GOOGL's EV/EBITDA increases to 21.3, still remaining below AMD and NVDA, which see higher multiples, suggesting that GOOGL is less aggressively valued. FCF conversion for GOOGL remains strong and stable, outperforming NVDA in most years and consistently ahead of INTC, which experiences negative or highly volatile FCF conversion, particularly in 2020. Gross margin for GOOGL is robust, trailing only behind NVDA and AAPL, but consistently ahead of AMD and INTC, indicating effective cost management. ROIC for GOOGL is solid, with only AAPL and NVDA occasionally outperforming, particularly in recent years where NVDA's ROIC spikes significantly. In terms of revenue, GOOGL and AAPL are the clear leaders, with GOOGL's revenue steadily increasing and outpacing all competitors except AAPL, which maintains the highest revenue figures. Metric-Specific Insights: For EBITDA margin, GOOGL demonstrates strong and improving profitability, but NVDA and AAPL consistently outperform, particularly in the most recent years. This highlights that while GOOGL is efficient, it operates in a highly competitive landscape where certain peers, especially in the semiconductor space (NVDA), are achieving superior margins, likely driven by unique market dynamics or product mix. Regarding EV/EBITDA, GOOGL's lower multiples relative to NVDA and AMD across all years suggest that it is valued more conservatively by the market, possibly due to its more mature business profile or lower growth expectations compared to high-flying semiconductor peers. This could indicate undervaluation, especially given GOOGL's consistent profitability and growth. In terms of FCF conversion, GOOGL's performance is exemplary, maintaining ratios above 1 in most years, indicative of strong cash generation relative to earnings. This compares favorably to NVDA and especially INTC, the latter of which struggles with negative or inconsistent FCF conversion, hinting at operational or capital allocation challenges. Gross margin analysis shows that

GOOGL is highly efficient, with margins consistently in the upper echelon of the peer group. Only NVDA and AAPL occasionally exceed GOOGL's gross margins, and the gap remains relatively stable, pointing to effective cost management and pricing strategies at GOOGL. ROIC trends for GOOGL are positive, with the company consistently generating high returns on invested capital, indicative of strong management and capital deployment. While AAPL and, more recently, NVDA post higher ROIC figures, GOOGL's performance remains robust and stable, reinforcing its reputation as a capital-efficient business. Revenue and revenue growth reinforce GOOGL's leadership position, with only AAPL posting higher revenue figures. GOOGL's consistent revenue expansion, even without explicit growth rates, signals sustained demand for its products and services and a strong market position. Conclusion: Overall, GOOGL exhibits a trajectory of solid financial health, marked by improving profitability, strong cash flow generation, and efficient capital allocation. Its lower EV/EBITDA multiples relative to high-growth peers like NVDA and AMD suggest that the market may be undervaluing GOOGL's consistent performance and robust fundamentals. While some competitors, particularly NVDA and AAPL, outperform GOOGL in select metrics such as EBITDA margin and ROIC, GOOGL's stable and improving metrics across the board make a compelling case for its resilience and long-term value. The company's strong revenue base, high gross and EBITDA margins, and superior FCF conversion position it as a leader in its sector. Unless the market anticipates a significant slowdown in growth or emerging risks not captured in these metrics, GOOGL's current valuation appears justified, if not conservative, given its financial strength and operational excellence.