The Henry Fund

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Alphabet Inc. (GOOGL)

Communication Services – Internet Content & Information Investment Thesis



September 27, 2025

Stock Rating: BUY

Alphabet lagged peers early in 2025 as an antitrust case threatened its core operations, but a favorable ruling has since lifted the stock to all-time highs. With Alphabet positioned to continue dominating search and advertising, we see its push into artificial intelligence with Gemini, expansion in cloud computing, advances in autonomous driving through Waymo, and development of proprietary Tensor Processing Units (TPUs) driving further upside. Accompanied by a valuation below peers, we recommend a **BUY** rating on Alphabet with **a price target of \$348**, representing a **40.9% upside** from the current stock price.

Drivers of Thesis

- Al features in search will boost query growth and monetization, driving our 8.9% CAGR forecast for Search revenue through 2030.
- With a \$106 billion¹⁰ backlog and rising demand for enterprise Al workloads, we forecast Google Cloud revenue to grow at a 21.4% CAGR through 2030.
- Proprietary TPUs give Alphabet a hardware edge that positions it to emerge as a winner in artificial intelligence.

Risks to Thesis

- Alphabet faces regulatory risk in the U.S. and Europe, where antitrust and privacy actions could restrict ads and data practices.
- We forecast AI CapEx reaching \$122 billion by 2027, which could strain free cash flow and limit shareholder returns.
- Fed reactions to unemployment and inflation could spark recession fears, trigger a market correction, and pressure ad spend.

	Price Target: \$348
Henry Fund DCF	\$345
Henry Fund DDM	\$343
Relative Multiple	\$364
HF % Upside	40.9%
Price Data	
Current Price	\$247
Date of Price	9/26/2025
52wk Range	\$141 – 256
Consensus Price Target	\$242
Consensus % Upside	-2.0%
Key Statistics	
Market Cap (B)	\$2,985
Diluted Shares Out. (M)	12,433
Institutional Ownership	79.7%
Beta	1.13
Dividend Yield	0.3%
LT Growth Rate	10.1%
COOCL VC SDV 8	Industry ETE

GOOGL vs. SPY & Industry ETF 60 40 20 P/E P/FCF EV/EBITDA GOOGL SPY Industry ETF

Earnings / EBITDA Estimates								Price Pe	erformance		
Year	2022	2023	2024	2025e	2026e	2027e	45.00%				
HF EPS	\$4.59	\$5.84	\$8.13	\$8.94	\$10.09	\$11.31	45.0070			M	
% Growth	-19.3	27.2	39.2	10.0	12.9	12.1	35.00%			(
Street EPS	\$4.56	\$5.80	\$8.04	\$9.93	\$10.69	\$12.18	25.00%			J.~	
% Growth	-18.7	27.2	38.6	23.5	7.7	13.9	23.0070		A	No.	
HF EBITDA	88.3	96.2	127.7	149.9	174.4	200.4	15.00%	MV.	ks	Mary Mary	
% Growth	75	8.9	32.7	17.4	16.3	14.9	5.00%	My	M. 1	M	
Street EBITDA	90.7	98.0	127.7	151.4	175.9	198.9	-5.00%	AND	M War	V	
% Growth	3.4	8.0	30.3	18.6	16.2	13.1	-15.00%				
	Balance	Sheet /	Cash Flo	w Snaps	hot			SOND	JFMAM	JJAS	
Net Debt	(99.1)	(99.0)	(84.8)	(77.0)	(75.0)	(71.4)		0 0 11 0	, , ,, ,, ,,	, , ,, ,	
Debt/Equity	0.11	0.09	0.08	0.11	0.12	0.12		GOOGL —	SPX —In	dustry ETF	
FCF	36.6	44.8	45.9	36.0	37.3	38.6					
CFO	91.5	101.7	125.3	131.1	148.8	170.7					
		Prof	fitability								
HF EBITDA	88.3	96.2	127.7	149.9	174.4	200.4	Year	2025e	2026e	2027e	
Gross Margin	55.4%	56.6%	58.2%	57.2%	56.4%	55.7%	AMZN	11.1%	10.3%	10.4%	
Net Margin	21.2%	24.0%	28.6%	27.3%	27.0%	26.9%	GOOGL	13.9%	13.1%	11.7%	
ROA	16.6%	19.2%	23.5%	21.9%	20.6%	19.4%	META	16.4%	16.5%	14.5%	
ROE	23.8%	28.8%	35.3%	33.4%	31.9%	29.7%	MSFT	14.9%	15.2%	14.8%	
ROIC	52.4%	52.7%	61.6%	52.0%	44.2%	38.2%	NVDA	114.2%	58.8%	33.6%	

Company Description

Alphabet Revenue by Product Line (\$B)

200
150
100
50
2022 2023 2024

Search YouTube Network
S, P, & D Cloud Bets

Source: Alphabet 10-K

2024 Alphabet Revenue Breakdown

12.4%

11.5%

8.7%

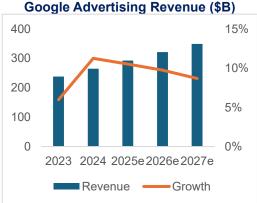
56.6%

Search YouTube Network

S, P, & D Cloud Bets

Source: Alphabet 10-K

Coople Advertising Bayenus (CB)



Source: Alphabet 10-K & HF Estimates

Google was founded in 1998 as a search engine, quickly becoming the dominant entry point to the internet⁸. In 2015, Alphabet Inc. was created as the parent company to provide greater transparency across Google's core businesses and its long-term innovation bets⁴. Today, Alphabet is one of the world's largest technology companies, generating about \$350 billion in annual revenue². Its operations span global digital advertising, consumer services such as YouTube and Google One, enterprise cloud computing through Google Cloud, and long-dated innovation initiatives including Waymo and Verily. This diversified structure enables Alphabet to maintain its leadership in core markets while positioning the company at the center of emerging growth areas like artificial intelligence and autonomous driving.

Alphabet monetizes user activity across its ecosystem through performance-based ads, where advertisers bid in real time to reach users already expressing intent. In 2024, the average conversion rate for Google Ads search campaigns was approximately 7%, which is significantly higher than the 3% to 4% range commonly seen on Facebook and the 1% to 3% range reported for TikTok1. This performance gap reflects the strength of monetizing user intent and underpins Alphabet's ability to command premium pricing in search advertising. Alphabet's advantage lies in its ad targeting ecosystem, which combines query signals, contextual data, and machine learning tools like Performance Max and Demand Gen to optimize placements across Search, YouTube, Gmail, and Display¹⁸. These capabilities deliver a strong return on ad spend, keeping advertisers locked into the platform. Looking ahead, Alphabet is embedding its Gemini Al models into Google Ads to move beyond keyword targeting toward more contextual and predictive audience understanding 18. By combining Gemini with proprietary Tensor Processing Units (TPUs), Alphabet can offer more personalized and efficient campaigns, reinforcing pricing power and sustaining growth as advertisers increasingly demand measurable performance¹⁸.

Google Advertising

While formally reported under Google Services, we break out Google Advertising separately, given its scale and central role in Alphabet's results. The segment consists of Search & Other, YouTube Ads, and Google Network, which together accounted for approximately 75.6% of Alphabet's revenue in 2024².

Google Search & Other

Google Search has been the foundation of Alphabet's business since its founding and remains the company's most critical revenue and profit driver. The segment makes money by selling advertising space that appears alongside user queries, with advertisers bidding in real time to reach consumers who are already expressing interest in products or services. This auction-based model is highly profitable because it captures demand at the point of intent, where conversion rates are strongest and ad pricing is most competitive.

Google processes more than 5 trillion searches per year, or roughly 14 billion per day, which reflects the scale of the product and the consistency of user reliance²⁵. Despite widespread fears that the adoption of generative AI tools would erode search volumes or disrupt Google's ability to monetize queries, Search revenue grew 13.2% in 2024, proving the strength of both the user base and the ad model³. The segment has also faced regulatory challenges, including antitrust scrutiny of distribution agreements that secure default search status, but Alphabet has so far avoided structural remedies that could materially alter its business model.

Google Search & Other Revenue (\$B) 300 250 200 150 100 50 0 2023 2024 2025e 2026e 2027e Revenue Growth

Source: Alphabet 10-K & HF Estimates

Now that the Department of Justice ruling confirmed Alphabet is allowed to continue paying for default placement and will not be required to divest Chrome, we expect the company to maintain substantial payments for key partnerships that ensure default browser status. Additionally, we do not forecast any regulatory actions or fines in the U.S. or globally throughout our projections. Traffic acquisition costs (TAC), which represent payments to partners such as Apple and other distribution providers to ensure Google remains the default search option, rose from \$13.4 billion in Q2 2024 to \$14.7 billion in Q2 2025, an increase of 9.8% year-over-year³. We foresee TAC continuing to trend higher in the years to come because we expect Alphabet to fully take advantage of the opportunity to solidify itself as the default browser wherever possible.

With the near certainty that Google will continue to dominate the search market, currently commanding 89.8% of global query volume²⁶, the question becomes how this segment will sustain revenue growth going forward. As AI becomes more integral to how people search, Google's rollout of AI Overviews and AI Mode is designed to channel that demand into its own platform, reinforcing engagement and protecting monetization. Specifically, AI Overviews are now driving over 10% more queries globally for the types of searches where they are shown, and the feature is already used by over 2 billion monthly users across more than 200 countries³. With AI reshaping the search experience, we forecast Search & Other to grow at a 9.0% CAGR through 2030, capitalizing on both its dominance and its ability to integrate AI more deeply into search behavior.

YouTube Ads

YouTube is one of Alphabet's most important growth drivers, combining unmatched reach with a diversified ad product portfolio that captures both brand budgets and direct response campaigns. The platform's positioning has strengthened as consumer attention shifts from traditional linear television to digital and Connected TV, where YouTube already commands the leading share of viewing. YouTube accounted for 13.4% of U.S. TV viewing in July 2025, up from 12.4% in April 2025, the highest of any distributor²². We believe this shift is structural, with advertisers reallocating dollars from broadcast and cable to Connected TV, where YouTube offers superior targeting and measurable performance. This migration should support steady pricing power as YouTube captures budget share that once flowed almost exclusively to legacy media.

YouTube Ads Revenue (\$B)

60
50
40
30
20
10
0
2023 2024 2025e 2026e 2027e

Revenue Growth

Source: Alphabet 10-K & HF Estimates

Shorts have become a second growth lever by improving engagement with younger audiences and positioning YouTube directly against TikTok and Instagram Reels. While monetization per view has historically lagged behind long form, the economics are improving quickly. Management highlighted in the Q2 2025 earnings call that in the U.S., Shorts now earn as much revenue per watch hour as traditional in-stream ads, and in some countries, Shorts revenue per hour already exceeds in-stream³. We believe this validates Shorts as a sustainable monetization driver that can increasingly complement YouTube's long-form and Connected TV inventory.

Premium subscriptions and ad blocking reduce the pool of ad supported impressions, but the effect on YouTube's revenue path is limited. Premium replaces advertising with recurring subscription revenue that remains stable on a per user basis. For ad blocking, the financial impact is contained because the fastest growing areas of viewing, specifically mobile devices and Connected TV, do not allow third party ad blocking. In addition, Google completed the transition to Manifest V3 in 2024, which restricts the ability of browser extensions to filter network requests in ways that previously enabled full ad blocking. YouTube also introduced direct enforcement actions that included blocking playback for users running ad blocking software, issuing on screen prompts that required users to disable the blocker, and restricting access until the blocker was removed. These steps significantly reduced the number of users who can avoid ads on desktop. As a result, the reduction in ad supported inventory does not outweigh the structural factors that allow YouTube advertising to grow faster than Search advertising.

We forecast YouTube Ads revenue to grow at a 10.4% CAGR through 2030, reaching \$65.6 billion, up from \$36.1 billion in 2024². This forecast reflects three main assumptions. First, Connected TV continues to expand its share of viewing, supporting higher cost per thousand impressions (CPMs) and strengthening YouTube's brand advertising position. Second, Shorts monetization scales more meaningfully given its improving revenue parity with in-stream ads. Third, advertisers continue consolidating budgets onto platforms that combine both reach and performance, reinforcing YouTube's competitive advantage. In our view, YouTube Ads will remain a central engine of Alphabet's growth as it increasingly competes for both budgets and viewership across traditional television and social media.

Google Network

Google Network includes revenue from AdSense, AdMob, and Ad Manager, which extend Google's advertising technology to third-party publishers across websites, mobile apps, and digital media 18. AdSense allows website owners to serve Google ads on their sites, AdMob provides mobile app developers with ad monetization solutions, and Ad Manager is a platform for publishers to manage and sell their ad inventory programmatically across formats. Google Network revenue has declined in recent years largely because advertisers have shifted spending toward platforms with stronger first party data, reducing demand for open web inventory. Privacy changes, including reduced cross site tracking, also weakened

Google Network Revenue (\$B) 0% 32 31 -1% -2% 30 29 -3% 28 -4% -5% 27 2024 2025e 2026e 2027e Revenue -—Growth

Source: Alphabet 10-K & HF Estimates

targeting accuracy on third party publisher properties, which lowered CPMs across AdSense, AdMob, and Ad Manager.

While these products expand Alphabet's overall advertising footprint, they come with lower margins and far less strategic control than Search or YouTube. Network revenue has declined an average of -1.4% annually over the past three years, and we forecast a -1.7% CAGR through 2030, with 2024 revenue totaling \$31.7 billion². We believe this decline reflects a broader structural shift in digital advertising, as brands increasingly concentrate on walled-garden platforms like Search, YouTube, and Meta, where first-party data creates higher ROI. In our view, Google Network will remain a sticky but shrinking contributor. It provides incremental revenue and keeps Alphabet embedded across the open web, but its role in driving long-term growth or strategic advantage is limited compared to Alphabet's core ad platforms.

Google Services

Google Subscriptions, Platforms, & Devices

This segment consists of revenue from subscription products, digital platforms, and hardware. Subscription offerings include YouTube Premium, YouTube Music, Google One, and YouTube TV. Platform's revenue is primarily driven by Google Play, while devices include Pixel smartphones and Nest smart home products. These businesses strengthen user engagement across Alphabet's ecosystem and diversify revenue beyond advertising.

Devices Revenue (\$B) 70 25% 60 20% 50 15% 40 30 10% 20 5% 10 0% 0 2023 2024 2025e 2026e 2027e ■ Revenue ——Growth

Google Subscriptions, Platforms, &

Source: Alphabet 10-K & HF Estimates

YouTube TV has become the centerpiece of this segment's growth. The NFL's free broadcast of the Chiefs vs. Chargers game on YouTube drew an average of 17.3 million viewers globally¹¹, including 16.2 million in the U.S.¹¹, demonstrating YouTube's ability to deliver mass live-event audiences rivaling traditional broadcast networks¹⁶. We see YouTube TV as a major beneficiary of cord-cutting trends, providing Alphabet with a subscription anchor product that positions it as a direct challenger to cable and satellite television. Other subscriptions continue to add scale and recurring revenue. YouTube Premium and YouTube Music now reach 125 million subscribers globally²⁶, while Google One benefits from rising consumer storage needs across photos, videos, and files, particularly in Android's installed base. The Play Store provides steady, ecosystem-linked revenue, while hardware like Pixel and Nest remains modest and lower-margin.

In 2024, Subscriptions, Platforms, and Devices generated \$40.3 billion in revenue², and we forecast a 12.3% CAGR through 2030. Although this segment does not match the revenue scale of advertising, we believe its strategic value is underappreciated. By deepening user lock-in and creating habitual touchpoints across media, storage, and devices, Services strengthens Alphabet's ecosystem and ultimately feeds higher monetization opportunities within its advertising business.

Google Cloud

Google Cloud delivered another step-up in scale and profitability in Q2 2025. Revenue rose 32.0% year-over-year to \$13.6 billion.

Google Cloud Revenue (\$B) 100 80 60 40 100 35% 25% 20% 15% 10%

5%

0%

2023 2024 2025e 2026e 2027e

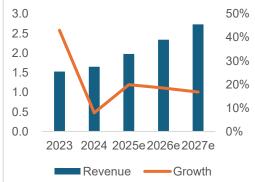
Revenue ——Growth

Source: Alphabet 10-K & HF Estimates

20

0

Other Bets Revenue (\$B)



Source: Alphabet 10-K & HF Estimates

Segment operating margin expanded from 11.3% in Q2 2024 to 20.7% in Q2 2025, producing \$2.8 billion of operating income. For full year 2024, Google Cloud reported \$43.2 billion in revenue and \$6.1B in operating income ¹⁰. Large enterprise demand continues to accelerate. Management noted that deals above \$250.0 million doubled year-over-year, and billion-dollar agreements signed in the first half of 2025 already matched the total for all of 2024. The committed backlog reached \$106.0 billion in Q2, up 38.0% year-over-year, providing multi-year revenue visibility²⁹.

A critical differentiator for Google Cloud is its proprietary Tensor Processing Units (TPUs). These custom-built Al chips are optimized for training and deploying large language models and generative Al workloads. By offering TPU-powered infrastructure through Vertex Al and the broader platform, Google Cloud provides enterprises with performance and efficiency advantages over traditional GPUs²⁸. We believe Google Cloud is not just a growth driver but the backbone of Alphabet's broader Al strategy, ensuring enterprise adoption of Gemini and TPUs directly translates into recurring revenue. In 2024, Google Cloud generated \$43.2 billion in revenue, and we forecast it to grow at a 21.4% CAGR through 2030. Growth will be driven by surging enterprise adoption of its Al offerings, expansion of its record backlog, and the scaling of TPU-based infrastructure.

Other Bets

Other Bets is the segment in which Alphabet houses its speculative, long-term ventures that it refers to as "moonshots." The term reflects management's acknowledgment that these initiatives may take many years to become material and often require significant ongoing investment². We forecast 16.0% CAGR through 2030 for Other Bets revenue, recognizing that while near-term results remain modest, Waymo in particular has the potential to become a meaningful business over time. Waymo operates commercial robotaxi services in Phoenix, San Francisco, Los Angeles, Austin, and Atlanta³¹. Its fleet has now driven more than 100⁹ million autonomous miles without a human driver, a milestone that underscores both scale and safety progress³². This breadth of real-world testing provides a strong data advantage, positioning Waymo as one of the few companies globally with the operational experience to deploy driverless ride-hailing services at scale.

In our view, the long-term value of Other Bets hinges on whether Waymo can expand beyond pilot markets and translate its technological lead into sustained revenue growth. Success would likely require regulatory approval across additional geographies and growing consumer trust, both of which remain hurdles. If achieved, Waymo could evolve into a significant revenue contributor, though the timeline remains uncertain. Sustained growth for Waymo would likely lead to it being spun out of Other Bets and reported as its own revenue segment, but for our forecast period we keep all projected growth within the Other Bets category.

Revenue by Geography

In 2024, Alphabet generated \$350.0 billion of revenue. The United States (US) contributed \$170.4 billion or 49%² of the total. Europe,

Middle East, and Africa (EMEA) accounted for \$102.1 billion or 29%, Asia-Pacific (APAC) contributed \$56.8 billion or 16%, and Other Americas added \$20.4 billion or 6%². This distribution reflects a business still anchored in the US yet with slightly more than half of revenue sourced internationally. The US remains the company's profit engine due to dominant search monetization, YouTube advertising, and a deep enterprise cloud footprint, tying Alphabet's performance closely to US digital ad cycles, consumer spending, and corporate IT investment.

International markets, representing 51% of revenue, are central to Alphabet's long-term growth trajectory. EMEA, nearly one third of total revenue, is large and strategically important but faces the most stringent regulatory environment, including privacy rules, platform restrictions, and evolving Al governance frameworks that can influence monetization efficiency. APAC is smaller in absolute contribution but structurally faster growing, supported by rising digital penetration and expanding advertiser sophistication across major markets. Competitive dynamics and geopolitical risk, however, require careful monitoring. Other Americas remains a modest contributor but offers upside as digital advertising and cloud adoption accelerate in Latin America.

Overall, Alphabet's geographic mix provides a balance between a highly profitable US core and diversified international exposure. At the same time, it introduces regulatory, competitive, and currency considerations that materially influence Alphabet's long-term earnings durability and valuation framework.

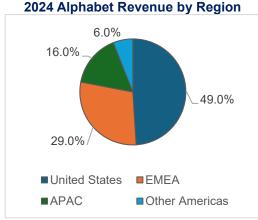
Cost Structure Analysis

Cost of Revenues and Gross Margin

Alphabet's cost of revenues is primarily driven by traffic acquisition costs (TAC) and depreciation. We expect TAC to rise in dollar terms as Alphabet continues to pay partners for default placement, but to slightly decrease as a percentage of sales throughout our forecast. The more significant driver of change is depreciation. Alphabet is in the middle of a rapid buildout of Al infrastructure, including new data centers and servers, which materially increases property, plant, and equipment. As these assets enter the depreciation cycle, expense rises sharply, moving from 4.4% of sales in 2024 to 10.0% by 2030. This expansion pushes total costs of revenues up from 41.8% in 2024 to 45.2% in 2030, compressing gross margin from 58.2% to 54.8% over the same period.

Operating Expenses

Research and development will remain a significant expense as Alphabet continues to invest in AI, though we forecast R&D at a steady 14.0% of sales. While there can be fluctuations in compensation to recruit AI talent, Alphabet has historically maintained consistency in R&D as a percentage of sales rather than making abrupt shifts. Sales and marketing, along with general and administrative expenses, are modeled to continue their five-year historical decline as a percentage of sales, reflecting operating efficiency and Alphabet's ability to scale revenue faster than overhead costs.



Source: Alphabet 10-K



Source: Alphabet 10-K and HF Estimates

Operating Margin Trends and Taxes

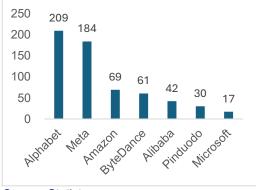
Operating margin is forecast to expand slightly from 32.1% in 2024 to 33.1% in 2030, as leverage in advertising and scaling in Google Cloud offset higher depreciation tied to AI infrastructure. Net margin is forecast to move from 28.6% in 2024 to 28.1% in 2030, reflecting rising depreciation and ongoing investment needs. We believe these trends demonstrate Alphabet's ability to balance near-term cost pressures with long-term profitability as AI becomes increasingly embedded across its business.

Additional Company Analysis

Target Market & Strategic Positioning

Alphabet operates at the center of the global digital advertising market, which totaled roughly \$600 billion in 2023 and is projected to reach \$715 billion in 2025²⁶. Within this market, Alphabet commands a leading position through its dominance in search advertising, its rapidly scaling YouTube platform, and its broad display and network reach. This diversified presence allows the company to capture spending across both brand and performance advertising budgets. Alphabet's positioning is differentiated by its unmatched data ecosystem, spanning billions of daily search queries, over two billion logged-in YouTube users, and deep integration into the Android mobile ecosystem. These assets give Alphabet superior targeting capabilities, industry-leading conversion rates, and sustainable pricing power, reinforcing its central role in the digital ad economy.

Worldwide Digital Advertising Revenue



Source: Statista

Peer Differentiation

Alphabet's core advantage over peers is its ability to monetize users at the moment they are actively seeking products or services. This real-time intent targeting produces higher conversion rates and stronger pricing power than social or display ads offered by platforms like Meta or TikTok. Amazon has built strength in retail media, but its opportunity set remains tied to transactional queries, while Alphabet's ecosystem spans nearly all consumer categories. Alphabet further differentiates itself through its artificial intelligence capabilities. The integration of Gemini models into ad tools, along with proprietary Tensor Processing Units (TPUs), enhances campaign performance and automation. These advantages give advertisers measurable ROI improvements that rivals cannot match, supporting Alphabet's long-term market leadership even as competition intensifies.

Sustainability of Business Model

Alphabet's business model is sustainable because it secures distribution through default search agreements, ensuring billions of users start with Google. These traffic acquisition payments deliver strong returns but could face volatility if regulatory scrutiny or political shifts limit the practice. Even so, Alphabet has consistently shown a willingness to pay to protect this advantage, with traffic acquisition costs rising 9.8% year-over-year in Q2 2025 to \$14.7 billion, underscoring how critical default placement is to its model³. Sustainability is further supported by diversification across search, YouTube, and cloud. Unlike Meta, which is tied primarily to social ads, or Amazon, which depends on retail media, Alphabet captures both intent-based and brand budgets. Heavy Al investment through

Gemini and proprietary TPUs adds another moat by enhancing ad efficiency and advertiser ROI. Together, these factors make Alphabet's model more durable than its peers while still exposed to cyclical ad demand and regulatory risk.

Debt Maturity Analysis

Alphabet's long-term debt increased from \$10.9 billion at year-end 2024 to \$23.6 billion in Q2 20256, following new issuances to support data center and Al infrastructure investments. The only detailed maturity breakout available is from the 2024 Form 10-K, which lists \$12.0 billion of total face value: \$1.0 billion maturing in 2025, \$2.0 billion in 2026, \$1.0 billion in 2027, and \$8.0 billion thereafter. This schedule is not provided in quarterly filings, making the 10-K the most recent source for year-by-year maturities. The reported \$10.9 billion long-term debt balance reflects the scheduled maturities minus the \$1.0 billion current portion due within one year and unamortized discounts and issuance costs, which reconcile the totals.

Alphabet generated \$125.3 billion in operating cash flow in 2024⁶, providing ample liquidity relative to upcoming maturities. Management's choice to issue additional debt despite strong cash flow reflects a strategic financing approach. Low-cost borrowing preserves cash for higher-return Al and cloud investments, reduces the weighted average cost of capital, and maintains financial flexibility. The company's AA+ credit rating supports this strategy by enabling long-term financing at favorable terms with minimal refinancing risk.

ESG Analysis

Alphabet holds a Sustainalytics ESG Risk Rating of 20.1, placing it in the medium-risk category¹⁴. While progress has been made, key risks remain across each ESG pillar. On the environmental side, Alphabet has pledged to operate on 24/7 carbon-free energy by 2030, and it is already the largest corporate buyer of renewable energy worldwide⁴. However, the rapid buildout of Al and cloud infrastructure has sharply increased electricity demand and water usage at data centers, raising questions about whether sustainability targets can keep pace with operational growth¹⁰.

In the social dimension, Alphabet faces ongoing scrutiny over user privacy, data collection, and platform safety. Regulators in both the U.S. and EU continue to question how Google Search and YouTube handle personal data and harmful content²⁴. While Alphabet has rolled out stronger privacy controls and moderation policies, the scale of its platforms ensures it will remain under close oversight.

For governance, Alphabet's dual-class share structure gives cofounders Larry Page and Sergey Brin outsized voting power, limiting shareholder influence⁵. This remains a point of criticism despite improvements in transparency, such as clearer segment reporting and enhanced board oversight of cybersecurity and sustainability issues². Overall, while Alphabet's ESG profile is supported by ambitious climate initiatives and strong disclosure practices, risks remain in environmental strain from Al-driven growth, social

Debt Maturity Analysis

Fiscal Year	Coupon (%)	Payment (\$M)
2026	2.00	2,000
2025-2060	.45-2.25	10,000
2030-2065	4.00-5.30	5,000
2029-2054	2.50-4.00	7,903
Total		24,903

Source: Alphabet Q2 2025 10-Q

ESG RISK Analysis									
Ticker	Score	Risk-level							
AAPL	14.2	Low							
AMZN	18.4	Low							
GOOGL	20.1	Medium							
META	25.0	Medium							
MSFT	13.4	Low							
NVDA	13.8	Low							
ORCL	15.4	Low							

Source: FactSet

exposure to privacy and content regulation, and a governance structure that constrains shareholder rights.

Recent Developments

7/23/2025 Earnings Announcement

Alphabet's Q2 2025 results exceeded expectations across revenue, profit, and segment performance. Consolidated revenue was \$96.4 billion, up 14% year-over-year, compared with consensus of \$93.9-94.0 billion³. EPS was \$2.31, ahead of consensus at \$2.17–2.18. while net income rose 19% to \$28.2 billion¹⁰. Segment strength was broad-based. Google Cloud grew 32% year-over-year to \$13.6 billion, surpassing analyst estimates of \$13.1 billion. YouTube ad revenue reached \$9.8 billion vs. \$9.6 billion consensus, while total advertising revenue was \$71.3B, above Street at \$69.7 billion²⁴. Operating margin expanded to 32.4%, reflecting sustained revenue growth and expense discipline, partly offset by legal settlement charges. The beat was driven by resilient double-digit growth in core advertising, rapid enterprise adoption of Google Cloud's Al-driven offerings, and ongoing cost discipline despite higher technology investment. Management raised 2025 capital expenditure guidance to \$85 billion, \$10 billion above its prior outlook and well above Street's \$73-75 billion, citing strong demand for data centers, advanced AI chipsets, and next-generation servers²⁴. This aligns with our forecast for the year.

GOOGL vs. DOJ

In September 2025, the Department of Justice (DOJ) antitrust case against Google concluded with a ruling that imposed meaningful restrictions but stopped short of forcing structural breakups. Judge Amit Mehta found that Google had unlawfully maintained its dominance in online search through default agreements with firms such as Apple and Samsung, but the remedies fell well short of requiring divestitures of Chrome or Android²⁴. Instead, Google must end exclusive pre-installation and default-search agreements, though it may continue paying partners for placement as long as the arrangements are not exclusive¹⁰. The court also required Google to share limited forms of search index and user-interaction data with qualified competitors in an effort to reduce scale disadvantages that have historically limited rival search engines³³. A technical oversight committee was established to monitor compliance, and Google is required to disclose any material changes to its ad auction processes for six years¹⁰.

Crucially, the ruling rejected more disruptive remedies such as forced divestitures or public choice screens, acknowledging Google's innovations while targeting specific business practices viewed as anti-competitive²⁴. The outcome ensures Google avoids the existential risk of losing Chrome but faces years of oversight and heightened competition from new entrants in Al-driven search. Following the ruling, Alphabet's stock rose modestly as investors welcomed the clarity and the avoidance of harsher penalties, signaling confidence that the company's core search and advertising model remains intact³³.

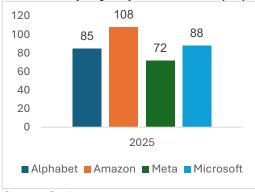
Industry Trends

AI-Driven CapEx Expansion

The technology sector is in the midst of an unprecedented capital expenditure cycle, with artificial intelligence at its core. Alphabet's recent \$7 billion commitment to expand its UK data center and Al capabilities is emblematic of the scale and urgency of this investment wave²⁴. Google's peers are making similarly aggressive moves: Microsoft has invested \$10 billion in OpenAl and is rapidly building new data centers to support Azure's Al workloads¹⁰, while Amazon is expanding AWS infrastructure and launching custom Al chips to power generative Al services²⁸. Meta is also scaling its data center footprint and investing in custom silicon to support its Aldriven content and advertising platforms²¹.

This surge in CapEx is being driven by the need to process exponentially larger AI workloads, deliver lower-latency and more reliable services, and maintain a competitive edge as demand for Al-powered products accelerates. The industry is moving toward a future where Al infrastructure is a core differentiator, not just a support function. Over the next several years, we expect CapEx intensity to remain high as companies race to build out the infrastructure required for large-scale AI, including custom chips, advanced networking, and massive data storage. However, as the sector matures and efficiency gains are realized, we anticipate a gradual moderation in CapEx growth. Companies will likely shift focus from rapid expansion to optimizing and monetizing their Al investments, seeking to balance innovation with sustainable returns¹⁰. The winners in this environment will be those able to scale quickly, adapt to evolving Al workloads, and extract value from their infrastructure at a lower marginal cost than competitors.

2025 Company CapEx Guidance (\$B)



Source: Statista

Industry Al Products & Platforms

industry Ai Froducts & Flationns						
Ticker	Al Integration					
AAPL	Apple Intelligence					
	Alexa					
AMZN	Amazon Bedrock					
	Rufus					
GOOGL	Gemini					
GOOGL	Vertex AI					
META	Meta Al					
MEIA	Meta Advantage+					
MSFT	Copilot					
MOFI	Azure					
NVDA	Omniverse					
INVDA	Al Enterprise					
TSLA	Full Self-Driving					

Source: Bloomberg

Accelerated Integration of Al

Artificial intelligence is rapidly becoming the defining feature of the technology and digital advertising landscape. Alphabet is embedding AI across its product suite, from Google Search's AI Overviews to Gemini models in Google Cloud, driving higher user engagement and unlocking new monetization opportunities³. Microsoft is integrating Copilot into Office and Bing, leveraging OpenAI's models to transform productivity and search. Amazon is rolling out generative AI features in Alexa and AWS, while Meta is using AI to improve content recommendations and automate ad targeting²¹.

Looking forward, the integration of AI is expected to accelerate even further. As models become more capable and infrastructure more robust, AI will enable new product categories, more personalized user experiences, and entirely new business models. For example, generative AI is poised to transform search, content creation, and customer service, while AI-powered analytics will drive smarter decision-making for enterprises. Industry analysts estimate that generative AI could add up to \$4.4 trillion in annual global economic

value, with digital platforms and cloud providers among the biggest beneficiaries¹⁹.

In the coming years, we expect competition to intensify as companies race to develop proprietary models, secure access to high-quality data, and differentiate their AI offerings. Regulatory scrutiny around data privacy, model transparency, and ethical use of AI will also shape the industry's evolution. Ultimately, the companies that can most effectively integrate AI into their products, scale their infrastructure, and adapt to changing user and regulatory expectations will be best positioned to capture outsized growth and shape the future of the technology sector.

Markets and Competition

GOOGL's Peer Group

For this analysis, we selected Microsoft (MSFT), Amazon (AMZN), Meta Platforms (META), Nvidia (NVDA), and Apple (AAPL) as Alphabet's most relevant peers. This group was determined based on overlapping scale, business models, and centrality to the technology and AI ecosystem. Each company competes directly or through adjacent services in cloud infrastructure, digital advertising, Al hardware, consumer devices, and broader software and services platforms. Apple was included due to its significant investment in Al integration across its devices, its expanding services ecosystem, and its position as one of the largest global technology companies influencing user behavior and platform economics. Selection criteria included market capitalization, product breadth, global reach, and recent financial performance as reported in their 10-Ks and 10-Qs. The industry is not in a strategic equilibrium. Firms are engaged in ongoing battles for market share, especially in AI, cloud, and digital advertising. The last five years have seen the rise of generative Al. massive capital expenditure expansion for data centers and custom chip development, and a renewed focus on proprietary technology. While cloud and advertising are scaled businesses, the emergence of generative AI has reset the industry into a new high growth cycle fueled by unprecedented levels of investment and innovation.

Microsoft (MSFT)

Microsoft is Alphabet's closest peer in cloud infrastructure and enterprise Al. As confirmed in their most recent financial filing, Microsoft Cloud revenue reached \$106.3 billion¹⁴ in fiscal year 2025 and includes Azure, Microsoft 365 Commercial cloud, LinkedIn, and Dynamics 365. Azure holds about 20% of the global cloud market, second only to Amazon AWS²⁶. Microsoft's \$10 billion partnership with OpenAl has accelerated its Al product rollout, including Copilot in Office and Bing, which directly challenges Google's Gemini and Al Overviews¹⁰. Microsoft's global reach encompasses data centers and enterprise customers across North America, Europe, and Asia-Pacific. Both firms are scaling CapEx for Al infrastructure, but Microsoft enjoys greater stability from its broader enterprise base and strong recurring software revenue, while Google's strength remains focused on search and advertising. Profitability is supported by software ecosystem depth, yet both face rising costs



Source: FactSet

due to Al investment and competitive intensity. The basis of competition is innovation, cloud scale, and platform integration, and both must navigate risk from disruptive AI models and regulatory scrutiny.

Amazon (AMZN)

Amazon is Alphabet's primary rival in cloud computing via AWS, which holds about 30% of the global cloud market and reported \$30.9 billion in Q2 2025 revenue, with a \$124 billion annual run rate⁷. Amazon's global cloud presence is supported by major data centers in North America, Europe, and Asia-Pacific. Both Amazon and Google are investing in custom AI chips, Amazon with Trainium and Inferentia and Google with TPUs, with the goal of lowering costs and improving efficiency²⁸. Amazon benefits from diversified revenue streams in ecommerce and logistics, while Google is more concentrated in digital services and advertising. They compete mainly in cloud scale and AI capabilities, but both face substantial CapEx burdens and the risk of disruption from ongoing tech advances.

Meta Platforms (META)

Meta Platforms is Alphabet's closest competitor in digital advertising and social media. Meta reported \$164.5 billion in revenue for 2024, with strong profitability and a focus on Al-powered content recommendations²⁰. Meta and Google together account for over 38% of global digital ad spend, with Google at 24.8% and Meta at 13.8% in 2025¹³. Meta's platforms, including Facebook and Instagram, have global reach and revenue contribution across North America, Europe, and Asia-Pacific. Both firms leverage data and Al for ad targeting, but Meta's initiative into the metaverse and immersive technologies introduces additional risk and investment requirements. Regulatory and privacy changes impact both, but Meta is more sensitive to shifts in social media use, while Google leans on search's stability. Major points of competition revolve around user engagement, ad innovation, and platform ecosystem strength. Both must contend with new competitors, regulatory change, and evolving consumer habits.

Nvidia (NVDA)

Nvidia dominates AI hardware, providing GPUs for most large language models and cloud data centers. Nvidia reported \$60.9 billion in revenue and \$29.8 billion in net income for 2024²³. The company's customer base spans North America, Europe, and Asia-Pacific. Google competes using its proprietary TPUs, tailored for high-performance AI workloads within Google Cloud¹⁷. Nvidia is focused on hardware and ecosystem partnerships, while Google integrates its chips into broad consumer and cloud services. Nvidia enjoys premium margins but faces new competition from cloud providers developing their own silicon. The main axes of competition are hardware innovation, speed to market, and ecosystem depth, while disruption risk comes from vertical integration and rapid technological advances in Al chips and models.

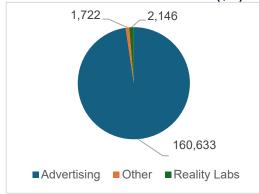


■ Subscription services

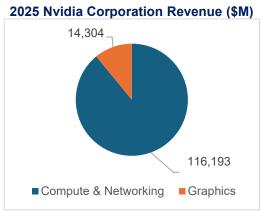
Source: FactSet

■AWS

2024 Meta Platforms Revenue (\$M)



Source: FactSet

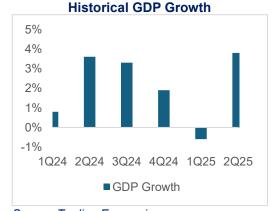


Source: FactSet

2024 Apple Revenue (\$M) 96,169 201,183 37,005 26,694 29,984 iPhone Mac iPad Wearables, Home and Accessories Services

Source: FactSet

2,936 5,233 5,201 44,029 Cloud Services and License Support Cloud License and On-Premise License Hardware Services Source: FactSet



Source: Trading Economics

Apple (AAPL)

Apple is included as a core peer due to its global scale, expanding services ecosystem, and increasing focus on Al integration across devices. Apple reported about \$391.0 billion in revenue for 2024, supported by strong iPhone performance and continued growth in services. Its competitive position is anchored in an integrated hardware and software ecosystem with more than two billion active devices across major global regions. Apple and Google compete in mobile operating systems, app distribution, and search presence on iOS, which remains essential to Google's mobile search economics. Apple's rollout of Apple Intelligence and ongoing investment in custom silicon increase its influence over user behavior and platform economics. While Apple is less exposed to advertising cyclicality. both firms face rising AI related CapEx, regulatory pressure, and platform competition. Key competitive dimensions include ecosystem strength, Al integration, and long-term services monetization.

Oracle (ORCL)

Oracle is included as a relevant peer due to its scale in enterprise software, database management, and cloud infrastructure. Oracle reported \$57.4 billion in revenue for fiscal 2025, driven by growth in its Cloud Services and License Support segment and continued adoption of autonomous database solutions. The company's competitive position is anchored in its longstanding leadership in relational databases, its broad enterprise customer base, and its accelerating shift toward cloud-based delivery through Oracle Cloud Infrastructure. Oracle and Google Cloud increasingly compete for enterprise workloads, particularly in AI training and inference, data analytics, and industry-specific cloud solutions. Oracle's strategic partnerships with Nvidia and Microsoft further strengthen its cloud positioning and expand customer reach.

While Oracle maintains higher exposure to legacy on-premise software than Alphabet, it is benefiting from rising demand for cloud infrastructure, increased Al-driven workload migration, and ongoing modernization of enterprise data architectures. Both firms face similar investment requirements tied to data center expansion and custom silicon development. The primary competitive overlaps involve enterprise cloud adoption, Al workload optimization, data storage modernization, and integration of generative Al into mission-critical enterprise applications.

Economic Outlook

Real GDP

Google's advertising revenue is highly correlated with macroeconomic activity, particularly GDP growth. Advertising spend has historically tracked between 1.3% and 2.0% of GDP, rising when economic activity strengthens and contracting in downturns²⁷. In 2024 and early 2025, a robust U.S. economy, with GDP expanding at a 3.8% annualized rate in Q2 2025, fueled higher ad budgets. Digital channels now account for more than 65% of U.S. ad spend, a shift that reinforces Google's dominant positioning¹². We forecast

GDP growth to moderate to 3.0% over the next six months. This suggests advertising budgets will continue to expand, but at a slower pace than in early 2025. For Google, this implies sustained revenue growth, though at a more measured rate that reflects the broader macro trajectory.

CPI & Unemployment

We had forecasted that U.S. inflation would rise to 3.1% and unemployment would reach 4.3% over the next six months. Both thresholds have already been surpassed, with inflation hitting 2.9% in August 2025 and unemployment reaching 4.3% during the same period³⁴. We expect both measures to continue trending higher into year-end 2025. Inflationary pressures are likely to persist due to demand-side stimulus from recent rate cuts and cost-push effects from new tariffs. Rising unemployment, driven by ongoing layoffs across the tech and corporate sectors, will weigh on consumer confidence and reduce discretionary spending¹⁵. For Google, these dynamics present a two-sided challenge. Higher inflation raises operating costs, particularly for wages, energy, and data center infrastructure, while a softening labor market may constrain advertiser budgets. Together, these trends risk slowing the pace of advertising growth. However, Google's scale and efficiency in monetizing ad spending should allow it to defend market share, even in a weaker macro environment.

Foreign Exchange Rates

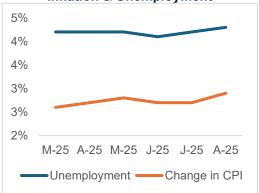
Given Alphabet's global revenue mix, foreign exchange fluctuations are an important macroeconomic factor affecting near-term reported results. With roughly half of Alphabet's revenue generated outside the U.S., a stronger U.S. dollar reduces the translated value of international sales, creating headwinds for reported revenue and operating income even when local-currency performance remains stable. Conversely, a weaker U.S. dollar provides a positive translation effect. Over our forecast horizon, diverging monetary policy paths between the Federal Reserve, the European Central Bank, and major Asia-Pacific central banks are likely to keep currency movements volatile. While foreign exchange does not alter Alphabet's underlying fundamentals, it introduces quarter-to-quarter noise in reported growth, particularly in Europe, the Middle East, and Africa and in Asia-Pacific, and should be considered when evaluating short-term performance.

Valuation

Revenue Assumptions

Alphabet's consolidated revenue is projected to grow at a 10.8% CAGR through 2030, driven by resilience in advertising and accelerating contributions from subscriptions and cloud. Search, with nearly 90% global market share, remains the foundation of growth. Integration of AI Overviews and AI Mode is expected to lift query volume and sustain monetization, supporting a 9.0% CAGR for Search. YouTube Ads add another strong engine, as Connected TV continues gaining share of budgets and Shorts monetization scales, producing forecasted growth of 10.4%.





Source: Trading Economics

U.S. Dollar to Euro Spot Exchange Rate



Source: St. Louis Fed

Alphabet Total Revenue (\$B) 700 600 500 400 300 200 100 0 2025e 2026e 2027e 2028e 2029e Revenue Growth

Source: HF Estimates

Subscriptions within Google Services expand the user base and provide recurring revenue, with YouTube TV and Premium subscriptions leading segment growth at a 12.3% CAGR. Google Cloud is the fastest-growing segment, underpinned by a \$106 billion backlog and adoption of proprietary Tensor Processing Units, supporting 21.4% CAGR through 2030. Other Bets remain smaller in scale but contribute optionality, with Waymo's commercial deployments supporting a 16.0% CAGR. Together, these assumptions provide a diversified set of growth drivers that balance durability in advertising with higher-growth contributions from subscriptions and cloud, resulting in Alphabet's projected 10.8% consolidated CAGR over the forecast horizon.

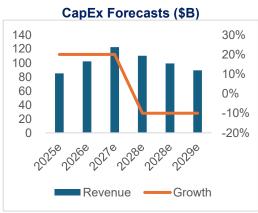
Cost Assumptions

Alphabet's cost structure reflects both rising investment in Al infrastructure and continued efficiency in operating expenses. Cost of revenues is projected to increase from 41.8% of sales in 2024 to 45.2% in 2030, driven by higher traffic acquisition costs and a stepup in depreciation expense from property, plant, and equipment tied to data center expansion. Depreciation alone rises from 4.4% of sales in 2024 to 10.0% by 2030. Research and development is modeled flat at 14.0% of sales, consistent with Alphabet's historical consistency compared with peers aggressively hiring Al talent. Sales and marketing and general and administrative expenses are forecasted to decline modestly as a share of sales, extending multiyear efficiency trends. As a result, operating income margins expand slightly from 32.1% of sales in 2024 to 33.1% in 2030. Net income margins remain stable, moving from 28.6% in 2024 to 28.1% in 2030, underscoring that while Al infrastructure raises near-term costs, efficiency gains across other expense categories preserve profitability.

CapEx Assumptions

Our capital expenditure assumptions reflect both management guidance and our view of the competitive AI investment cycle. For 2025, we used Alphabet's guided CapEx of \$85.0 billion, up sharply from \$52.5 billion in 2024, as the company accelerates spending on AI infrastructure, data centers, and custom chips. Beyond 2025, we forecast CapEx to rise 20% annually in 2026 and 2027, reaching \$102.0 billion and \$122.4 billion, respectively. This assumption reflects the rapid pace of AI investment across the technology sector and our expectation that Alphabet will need to match or exceed peers to maintain leadership. For example, Alphabet recently committed \$7.0 billion to expand data center capacity in the United Kingdom³³, underscoring the scale of global investment needed to support AI workloads.

After 2027, we model CapEx declining 10% per year through 2030, reaching \$89.2 billion by the end of the period. This reflects our belief that such elevated levels of spending are unsustainable over the long term, even for companies with Alphabet's scale. While forecasting infrastructure spending several years out remains inherently uncertain, we view a tapering trend as more realistic once near-term Al infrastructure demand is met.



Source: Alphabet 10-K and HF Estimates

WACC Calculation

Our discount rate is 9.66%, calculated using the weighted average cost of capital (WACC). The cost of equity was estimated using the Capital Asset Pricing Model, incorporating a 4.09% risk-free rate from the 10-year U.S. Treasury bond, a beta of 1.13 based on the average of 2, 3, 4, and 5-year weekly betas, and a 5.0% equity risk premium. We determined our equity risk premium by combining an assumption for the current market level with a historical geometric average. The cost of debt was derived from the yield to maturity on Alphabet's 40-year corporate bond, adjusted for the company's 16.44% marginal tax rate. Market value weights were applied, using 12,211 million shares outstanding and a share price of \$250 at the time of the model to value equity at \$3.0 trillion, representing 98.7% of the firm's capital structure, while total debt accounted for 1.3%. These inputs yield a WACC of 9.66%, which we apply directly in our valuation.

DCF/EP

The valuation of Alphabet was conducted using both a discounted cash flow (DCF) model and an economic profit (EP) model, each applying a cost of equity of 9.73% and a weighted average cost of capital (WACC) of 9.66%. For the DCF model, future free cash flows were projected and discounted, with a continuing value based on 7.5% growth in NOPLAT and a 32.5% return on invested capital. The EP model used the same assumptions but emphasized the spread between returns and the cost of capital to calculate economic profits. In both models, non-operating adjustments were applied to arrive at equity value. The implied price as of today is \$345 per share under both valuation frameworks. This valuation method accounted for 40% of our final price target.

The 7.5% continuing value growth rate of NOPLAT, while above the long-term U.S. GDP growth range of 2.0% to 4.0%, is justified by Alphabet's exposure to structural growth markets. The company continues to benefit from secular trends in digital advertising, rapid expansion in cloud services, and growing monetization of artificial intelligence. These areas offer significantly higher growth potential than the broader economy, supporting the assumption that Alphabet can sustain NOPLAT expansion above GDP levels well into the forecast horizon.

DDM

The dividend discount model (DDM) provides another valuation lens by projecting Alphabet's earnings per share (EPS), dividends, and terminal growth assumptions. The model applies a 7.5% continuing value growth rate of EPS, which is consistent with the growth rate of NOPLAT used in the DCF and EP models. This assumption reflects the company's exposure to secular growth drivers such as digital advertising, cloud, and Al monetization, which position it to grow faster than the broader economy.

Our dividend and share repurchase forecasts required additional consideration given Alphabet's limited dividend history and elevated

investment cycle. For dividends, we assume the company holds its quarterly dividend at \$0.21 per share and apply an annual growth rate of 3.75%, derived from the annualized 2024 dividend per share and expected 2025 dividend per share. We maintain this rate throughout the forecast period, reflecting our view that dividend growth will be steady but not a capital allocation priority relative to AI and infrastructure reinvestment. For share repurchases, we assume Alphabet will temporarily scale back activity as AI-related capital expenditures rise. Despite having \$74.8 billion authorized for repurchases, we project buybacks to decline 8.5% annually through 2027, consistent with the year-over-year decline observed in Q2. Beginning in 2028, once we see AI CapEx peaking, we model an annual increase in repurchases through the end of our forecast horizon as Alphabet returns to a more normalized capital return profile.

Using a cost of equity of 9.73% and a terminal return on equity of 25.94%, the model generates an implied price of \$343 per share. This valuation method was assigned 40% of our final price target, providing a complementary perspective to the cash flow–based approaches and reinforcing confidence in Alphabet's long-term earnings and dividend potential.

Relative Multiple

For the relative valuation, we used a peer group of Apple (devices), Amazon (cloud and e-commerce ads), Meta Platforms (social advertising), Microsoft (enterprise software and cloud), NVIDIA (Al infrastructure), and Oracle (enterprise cloud and databases). These companies collectively capture the different verticals where Alphabet competes. Tesla was initially considered due to its robotaxi initiatives, but we excluded it from the set because its P/E multiple was far too high to provide a meaningful comparison.

Using the derived P/E ratios for the peer group and our calculated 2025 EPS of \$8.94 for Alphabet, we arrived at an implied relative valuation of \$364. This outcome shows that Alphabet is trading at a discount relative to peers despite competing across nearly every vertical represented in the set. While this points to undervaluation, we chose to place more emphasis on company-specific modeling that better reflects Alphabet's fundamentals. As a result, the relative valuation was assigned only a 20% weight in our blended valuation.

Henry Fund vs. The Street

We are relatively in line with consensus revenue expectations. By 2029, the Street estimates Alphabet's revenue will reach \$596.2 billion¹⁴, while our forecast stands slightly higher at \$600.8 billion. This narrow variance demonstrates broad agreement that Alphabet's topline trajectory remains durable, anchored by search dominance, YouTube's structural growth, and an accelerating cloud business.

Where we differentiate is in our forecasted capital expenditures. Consensus expects Alphabet to spend \$91.3 billion¹⁴ in 2027, while our model peaks materially higher at \$122.4 billion. In our view, the Al race has not yet stabilized and will demand more aggressive





Source: FactSet and HF Estimates

Estimates									
		2025e							
	Rev	EPS	EBITDA						
HF	398.5	8.94	149.9						
Street	395.1	9.93	151.4						
% Diff.	.86	-9.97	99						

Estimates			
		2026e	
	Rev	EPS	EBITDA
HF	450.7	10.09	174.4
Street	441.2	10.69	175.9
% Diff.	2.15	-5.61	85

Estimates			
		2027e	
	Rev	EPS	EBITDA
HF	503.7	11.31	200.4
Street	489.8	12.18	198.9
% Diff.	2.84	-7.14	.75

investment before efficiency gains are realized. This assumption directly impacts our profitability outlook, as higher near-term capital intensity flows through to depreciation and weighs on net income and EPS relative to the Street. While consensus anticipates smoother operating leverage over the forecast horizon, we see a more drawn-out path as Alphabet continues to build the infrastructure necessary to secure long-term leadership in AI.

The result is that our EPS and EBITDA projections are consistently below consensus despite revenue alignment. For example, we estimate EPS of \$8.94 in 2025 versus the Street at \$9.93¹⁴, and EBITDA of \$149.9 billion compared with \$151.4 billion¹⁴. By 2027, this divergence grows, with our EPS at \$11.31 versus the Street at \$12.18¹⁴ and EBITDA at \$200.4 billion versus \$198.9 billion¹⁴. These differences reflect our conviction that Alphabet's near-term earnings power will be tempered by front-loaded investment, not structural weakness.

Importantly, while our estimates reflect below-consensus profitability results, this does not diminish our bullish long-term outlook. The market continues to underappreciate Alphabet's centrality in multiple expanding markets. The DOJ ruling ensures Google can preserve its dominance in search, which remains the foundation of its business model. On top of this, Alphabet is positioned to lead in AI integration across search and advertising, enterprise cloud adoption powered by TPUs, and long-dated opportunities such as autonomous driving through Waymo. With unmatched scale, proprietary technology, and proven ability to commercialize innovation, Alphabet stands uniquely capable of becoming not just the leader in digital advertising, but a defining force across several high-growth industries simultaneously. We maintain our BUY recommendation with a \$348 price target, implying approximately 40.9% upside from the current share price.

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Revenue Decomposition

(\$ in millions)

Fiscal Years Ending Dec. 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Google Search & other	162,450	175,033	198,084	221,299	245,266	268,468	290,268	310,993	331,425
Growth	9.06%	7.75%	13.17%	11.72%	10.83%	9.46%	8.12%	7.14%	6.57%
YouTube ads	29,243	31,510	36,147	41,435	46,565	51,706	56,499	61,126	65,564
Growth	1.38%	7.75%	14.72%	14.63%	12.38%	11.04%	9.27%	8.19%	7.26%
Google Network	32,780	31,312	30,359	29,658	29,050	28,536	28,113	27,759	27,476
Growth	3.40%	-4.48%	-3.04%	-2.31%	-2.05%	-1.77%	-1.48%	-1.26%	-1.02%
Google advertising	224,473	237,855	264,590	292,392	320,881	348,710	374,880	399,878	424,465
Growth	7.15%	5.96%	11.24%	10.51%	9.74%	8.67%	7.50%	6.67%	6.15%
Google subscriptions, platforms, and devices	29,055	34,688	40,340	47,900	55,573	62,937	69,457	75,465	80,883
Growth	3.65%	19.39%	16.29%	18.74%	16.02%	13.25%	10.36%	8.65%	7.18%
Google Services total	253,528	272,543	304,930	340,292	376,454	411,646	444,337	475,343	505,348
Growth	6.74%	7.50%	11.88%	11.60%	10.63%	9.35%	7.94%	6.98%	6.31%
Google Cloud	26,280	33,088	43,229	55,960	71,550	88,966	105,878	121,622	138,090
Growth	36.83%	25.91%	30.65%	29.45%	27.86%	24.34%	19.01%	14.87%	13.54%
Other Bets	1,068	1,527	1,648	1,975	2,339	2,730	3,148	3,577	4,020
Growth	41.83%	42.98%	7.92%	19.86%	18.42%	16.73%	15.28%	13.64%	12.37%
Hedging gains (losses)	1,960	236	211	295	369	327	278	250	237
Growth	1215.44%	-87.96%	-10.59%	40.00%	25.00%	-11.50%	-15.00%	-10.00%	-5.00%
Total revenues	282,836	307,394	350,018	398,523	450,713	503,669	553,641	600,792	647,695
Growth	9.78%	8.68%	13.87%	13.86%	13.10%	11.75%	9.92%	8.52%	7.81%

Alphabet Inc.
Income Statement
(\$ in millions)

Fiscal Years Ending Dec. 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Revenues	282,836	307,394	350,018	398,523	450,713	503,669	553,641	600,792	647,695
Costs and expenses:									
Depreciation expense	13,475	11,946	15,311	22,757	31,038	40,480	51,380	59,201	64,515
Other cost of revenues	112,728	121,386	130,995	147,661	165,317	182,862	198,939	213,641	227,903
Cost of revenues	126,203	133,332	146,306	170,418	196,356	223,342	250,319	272,841	292,418
Research and development	39,500	45,427	49,326	55,947	63,274	70,708	77,723	84,343	90,927
Sales and marketing	26,567	27,917	27,808	29,781	31,555	32,886	33,537	33,558	33,122
General and administrative	15,724	16,425	14,188	15,209	16,131	16,832	17,188	17,227	17,035
Total costs and expenses	207,994	223,101	237,628	271,355	307,316	343,768	378,767	407,969	433,503
Income from operations	74,842	84,293	112,390	127,168	143,397	159,901	174,873	192,823	214,192
Other income (expense), net	(3,514)	1,424	7,425	2,876	2,372	2,210	1,978	2,351	3,480
Income before income taxes	71,328	85,717	119,815	130,044	145,770	162,111	176,852	195,174	217,672
Provision for income taxes	11,356	11,922	19,697	21,379	23,964	26,650	29,074	32,086	35,784
Net income	59,972	73,795	100,118	108,666	121,806	135,461	147,778	163,089	181,888
Basic earnings per share (EPS)	4.59	5.84	8.13	8.94	10.09	11.31	12.48	13.99	15.88
Year end shares outstanding (basic)	12,849	12,460	12,211	12,102	12,031	11,932	11,755	11,560	11,344
Weighted average basic shares outstanding class A, B, & C (basic)	13,063	12,630	12,319	12,157	12,067	11,982	11,843	11,658	11,452
Annual dividends per share	-	-	0.60	0.83	0.86	0.89	0.93	0.96	1.00

Alphabet Inc. Balance Sheet (\$ in millions)

(\$ in millions)									
Fiscal Years Ending Dec. 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Assets									
Current assets:									
Cash and cash equivalents	21,879	24,048	23,466	26,255	26,814	26,416	40,704	74,259	124,736
Marketable securities	91,883	86,868	72,191	74,797	77,497	80,295	83,194	86,197	89,309
Total cash, cash equivalents, and marketable securities	113,762	110,916	95,657	101,052	104,311	106,711	123,897	160,456	214,045
Accounts receivable, net	40,258	47,964	52,340	59,500	67,292	75,199	82,660	89,700	96,702
Income taxes receivable, net	-	-	-	-	-	-	-	-	-
Inventory	-	-	-	-	-	-	-	-	-
Other current assets	10,775	12,650	15,714	16,281	16,869	17,478	18,109	18,763	19,440
Total current assets	164,795	171,530	163,711	176,834	188,473	199,388	224,666	268,918	330,187
Non-marketable securities	30,492	31,008	37,982	39,534	41,150	42,832	44,582	46,405	48,301
Deferred income taxes	5,261	12,169	17,180	25,618	35,076	45,594	57,069	69,733	83,856
Property and equipment, net	112,668	134,345	171,036	233,279	304,241	386,161	444,941	484,885	509,599
Operating lease assets	14,381	14,091	13,588	18,533	24,170	30,679	35,348	38,522	40,485
Intangible assets, net	-	-	-	-	-	-	-	-	-
Goodwill	28,960	29,198	31,885	31,885	31,885	31,885	31,885	31,885	31,885
Other non-current assets	8,707	10,051	14,874	15,411	15,967	16,544	17,141	17,760	18,401
Total assets	365,264	402,392	450,256	541,094	640,962	753,082	855,633	958,107	1,062,715
Liabilities and Stockholders' Equity									
Current liabilities:									
Accounts payable	5,128	7,493	7,987	9,515	10,761	12,025	13,218	14,344	15,464
Accrued compensation and benefits	14,028	15,140	15,069	17,157	19,404	21,684	23,835	25,865	27,885
Accrued expenses and other current liabilities	37,866	46,168	51,228	57,179	64,667	72,265	79,434	86,200	92,929
Accrued revenue share	8,370	8,876	9,802	10,844	11,906	12,905	13,745	14,438	15,051
Deferred revenue	3,908	4,137	5,036	5,448	6,162	6,886	7,569	8,214	8,855
Income taxes payable, net		-	-	-	-	-	-	-	_
Total current liabilities	69,300	81,814	89,122	100,143	112,900	125,765	137,802	149,061	160,184
Long-term debt	14,701	11,870	10,883	24,070	29,355	35,356	40,026	43,631	46,422
Deferred revenue, non-current	599	-	-	-	-	-	-	-	-
Income taxes payable, non-current	9,258	8,474	8,782	13,875	15,553	17,296	18,869	20,824	23,225
Deferred income taxes	514	-	-	-	-	-	-	-	-
Operating lease liabilities	12,501	12,460	11,691	16,330	21,297	27,031	31,146	33,942	35,672
Other long-term liabilities	2,247	4,395	4,694	5,254	6,407	7,717	8,736	9,523	10,132
Total liabilities	109,120	119,013	125,172	159,671	185,511	213,166	236,579	256,982	275,634
Stockholders' equity:									
Preferred stock	-	-	-	-	-	-	-	-	-
Commom stock and additional paid-in capital	68,184	76,534	84,800	99,483	114,167	121,508	121,508	121,508	121,508
Accumulated other comprehensive income (loss)	(7,603)	(4,402)	(4,800)	(4,800)	(4,800)	(4,800)	(4,800)	(4,800)	(4,800)
Retained earnings	195,563	211,247	245,084	286,740	346,085	423,209	502,346	584,417	670,372
Total stockholders' equity	256,144	283,379	325,084	381,423	455,451	539,917	619,054	701,125	787,080
Total liabilities and stockholders' equity	365,264	402,392	450,256	541,094	640,962	753,082	855,633	958,107	1,062,715

Historical Cash Flow Statement

(\$ in millions)

Fiscal Years Ending Dec. 31	2022	2023	2024
Operating activities			
Net income	59,972	73,795	100,118
Adjustments:			
Depreciation of property and equipment	13,475	11,946	15,311
Stock-based compensation expense	19,362	22,460	22,785
Deferred income taxes	(8,081)	(7,763)	(5,257)
Loss (gain) on debt and equity securities, net	5,519	823	(2,671)
Other	3,483	4,330	3,419
Changes in assets and liabilities, net of effects of acquisitions:			
Accounts receivable, net	(2,317)	(7,833)	(5,891)
Income taxes, net	584	523	(2,418)
Other assets	(5,046)	(2,143)	(1,397)
Accounts payable	707	664	359
Accrued expenses and other liabilities	3,915	3,937	(1,161)
Accrued revenue share	(445)	482	1,059
Deferred revenue	367	525	1,043
Net cash provided by operating activities	91,495	101,746	125,299
Investing activities			
Purchases of property and equipment	(31,485)	(32,251)	(52,535)
Purchases of marketable securities	(78,874)	(77,858)	(86,679)
Maturities and sales of marketable securities	97,822	86,672	103,428
Purchases of non-marketable securities	(2,531)	(3,027)	(5,034)
Maturities and sales of non-marketable securities	150	947	882
Acquisitions, net of cash acquired, and purchases of intangible assets	(6,969)	(495)	(2,931)
Other investing activities	1,589	(1,051)	(2,667)
Net cash used in investing activities	(20,298)	(27,063)	(45,536)
Financing activities			
Net payments related to stock-based award activities	(9,300)	(9,837)	(12,190)
Repurchases of stock	(59,296)	(61,504)	(62,222)
Dividend payments	-	-	(7,363)
Proceeds from issuance of debt, net of costs	52,872	10,790	13,589
Repayments of debt	(54,068)	(11,550)	(12,701)
Proceeds from sale of interest in consolidated entities, net	35	8	1,154
Net cash used in financing activities	(69,757)	(72,093)	(79,733)
Effect of exchange rate changes on cash and cash equivalents	(506)	(421)	(612)
Net increase (decrease) in cash and cash equivalents	934	2,169	(582)
Cash and cash equivalents at beginning of period	20,945	21,879	24,048
Cash and cash equivalents at end of period	21,879	24,048	23,466
Supplemental disclosures of cash flow information	40.000	40.404	07.400
Cash paid for income taxes, net of refunds	18,892	19,164	27,400

Alphabet Inc.
Forecasted Cash Flow Statement
(\$\forall in \text{ millions})

(\$ in millions)						
Fiscal Years Ending Dec. 31	2025E	2026E	2027E	2028E	2029E	2030E
Operating activities						'
Net income	108,666	121,806	135,461	147,778	163,089	181,888
Adjustments:						
Depreciation and amortization	22,757	31,038	40,480	51,380	59,201	64,515
Change in accounts receivable, net	(7,160)	(7,792)	(7,907)	(7,461)	(7,040)	(7,003)
Change in other current assets	(567)	(588)	(609)	(631)	(654)	(677)
Change in deferred income taxes	(8,438)	(9,458)	(10,518)	(11,475)	(12,664)	(14,123)
Change in operating lease assets	(4,945)	(5,638)	(6,508)	(4,670)	(3,173)	(1,963)
Change in accounts payable	1,528	1,246	1,264	1,193	1,126	1,120
Change in accrued compensation and benefits	2,088	2,247	2,280	2,151	2,030	2,019
Change in accrued expenses and other current liabilities	5,951	7,488	7,598	7,170	6,765	6,729
Change in accrued revenue share	1,042	1,062	999	840	693	613
Change in deferred revenue	412	714	724	683	645	641
Change in income taxes payable, non-current	5,093	1,678	1,744	1,573	1,955	2,400
Change in operating lease liabilities	4,639	4,967	5,734	4,115	2,796	1,730
Net cash provided by operating activities	131,065	148,770	170,742	192,647	214,768	237,889
Investing activities						
Change in marketable securities	(2,606)	(2,700)	(2,798)	(2,899)	(3,003)	(3,112)
Change in non-marketable securities	(1,552)	(1,616)	(1,682)	(1,751)	(1,822)	(1,897)
Capital expenditures	(85,000)	(102,000)	(122,400)	(110,160)	(99,144)	(89,230)
Net cash used in investing activities	(89,158)	(106,316)	(126,879)	(114,809)	(103,969)	(94,238)
Financing activities						
Change in long-term debt	13,187	5,284	6,002	4,669	3,606	2,791
Change in other non-current assets	(537)	(556)	(576)	(597)	(619)	(641)
Change in other long-term liabilities	560	1,153	1,310	1,019	787	609
Share repurchases	(56,920)	(52,070)	(47,632)	(57,663)	(69,807)	(84,507)
Dividend payouts	(10,090)	(10,391)	(10,704)	(10,978)	(11,211)	(11,426)
Change in commom stock and additional paid-in capital	14,683	14,683	7,342	0	0	0
Net cash used in financing activities	(39,117)	(41,896)	(44,260)	(63,550)	(77,244)	(93,174)
Change in cash	2,789	559	(398)	14,288	33,555	50,477
Beginning of year cash	23,466	26,255	26,814	26,416	40,704	74,259
End of year cash	26,255	26,814	26,416	40,704	74,259	124,736
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Alphabet Inc.
Common Size Income Statement

Fiscal Years Ending Dec. 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Revenues	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Costs and expenses:									
Depreciation expense	4.76%	3.89%	4.37%	5.71%	6.89%	8.04%	9.28%	9.85%	9.96%
Other cost of revenues	39.86%	39.49%	37.43%	37.05%	36.68%	36.31%	35.93%	35.56%	35.19%
Cost of revenues	44.62%	43.37%	41.80%	42.76%	43.57%	44.34%	45.21%	45.41%	45.15%
Research and development	13.97%	14.78%	14.09%	14.04%	14.04%	14.04%	14.04%	14.04%	14.04%
Sales and marketing	9.39%	9.08%	7.94%	7.47%	7.00%	6.53%	6.06%	5.59%	5.11%
General and administrative	5.56%	5.34%	4.05%	3.82%	3.58%	3.34%	3.10%	2.87%	2.63%
Total costs and expenses	73.54%	72.58%	67.89%	68.09%	68.18%	68.25%	68.41%	67.91%	66.93%
Income from operations	26.46%	27.42%	32.11%	31.91%	31.82%	31.75%	31.59%	32.09%	33.07%
Other income (expense), net	-1.24%	0.46%	2.12%	0.72%	0.53%	0.44%	0.36%	0.39%	0.54%
Income before income taxes	25.22%	27.89%	34.23%	32.63%	32.34%	32.19%	31.94%	32.49%	33.61%
Provision for income taxes	4.02%	3.88%	5.63%	5.36%	5.32%	5.29%	5.25%	5.34%	5.52%
Net income	21.20%	24.01%	28.60%	27.27%	27.03%	26.89%	26.69%	27.15%	28.08%

Alphabet Inc.
Common Size Balance Sheet

Fiscal Years Ending Dec. 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Assets									
Current assets:									
Cash and cash equivalents	7.74%	7.82%	6.70%	6.59%	5.95%	5.24%	7.35%	12.36%	19.26%
Marketable securities	32.49%	28.26%	20.62%	18.77%	17.19%	15.94%	15.03%	14.35%	13.79%
Total cash, cash equivalents, and marketable securities	40.22%	36.08%	27.33%	25.36%	23.14%	21.19%	22.38%	26.71%	33.05%
Accounts receivable, net	14.23%	15.60%	14.95%	14.93%	14.93%	14.93%	14.93%	14.93%	14.93%
Income taxes receivable, net	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Inventory	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other current assets	3.81%	4.12%	4.49%	4.09%	3.74%	3.47%	3.27%	3.12%	3.00%
Total current assets	58.27%	55.80%	46.77%	44.37%	41.82%	39.59%	40.58%	44.76%	50.98%
Non-marketable securities	10.78%	10.09%	10.85%	9.92%	9.13%	8.50%	8.05%	7.72%	7.46%
Deferred income taxes	1.86%	3.96%	4.91%	6.43%	7.78%	9.05%	10.31%	11.61%	12.95%
Property and equipment, net	39.84%	43.70%	48.86%	58.54%	67.50%	76.67%	80.37%	80.71%	78.68%
Operating lease assets	5.08%	4.58%	3.88%	4.65%	5.36%	6.09%	6.38%	6.41%	6.25%
Intangible assets, net	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Goodwill	10.24%	9.50%	9.11%	8.00%	7.07%	6.33%	5.76%	5.31%	4.92%
Other non-current assets	3.08%	3.27%	4.25%	3.87%	3.54%	3.28%	3.10%	2.96%	2.84%
Total assets	129.14%	130.90%	128.64%	135.77%	142.21%	149.52%	154.55%	159.47%	164.08%
Liabilities and Stockholders' Equity									
Current liabilities:									
Accounts payable	1.81%	2.44%	2.28%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%
Accrued compensation and benefits	4.96%	4.93%	4.31%	4.31%	4.31%	4.31%	4.31%	4.31%	4.31%
Accrued expenses and other current liabilities	13.39%	15.02%	14.64%	14.35%	14.35%	14.35%	14.35%	14.35%	14.35%
Accrued revenue share	2.96%	2.89%	2.80%	2.72%	2.64%	2.56%	2.48%	2.40%	2.32%
Deferred revenue	1.38%	1.35%	1.44%	1.37%	1.37%	1.37%	1.37%	1.37%	1.37%
Income taxes payable, net	_	_	_	_	_	_	_	_	_
Total current liabilities	24.50%	26.62%	25.46%	25.13%	25.05%	24.97%	24.89%	24.81%	24.73%
Long-term debt	5.20%	3.86%	3.11%	6.04%	6.51%	7.02%	7.23%	7.26%	7.17%
Deferred revenue, non-current	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Income taxes payable, non-current	3.27%	2.76%	2.51%	3.48%	3.45%	3.43%	3.41%	3.47%	3.59%
Deferred income taxes	0.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating lease liabilities	4.42%	4.05%	3.34%	4.10%	4.73%	5.37%	5.63%	5.65%	5.51%
Other long-term liabilities	0.79%	1.43%	1.34%	1.32%	1.42%	1.53%	1.58%	1.59%	1.56%
Total liabilities	38.58%	38.72%	35.76%	40.07%	41.16%	42.32%	42.73%	42.77%	42.56%
Stockholders' equity:									
Preferred stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Commom stock and additional paid-in capital	24.11%	24.90%	24.23%	24.96%	25.33%	24.12%	21.95%	20.22%	18.76%
Commom stock and additional paid-in capital Accumulated other comprehensive income (loss)	24.11% -2.69%	24.90% -1.43%	24.23% -1.37%	24.96% -1.20%	25.33% -1.06%	24.12% -0.95%	21.95% -0.87%	20.22% -0.80%	18.76% -0.74%
Commom stock and additional paid-in capital	24.11%	24.90%	24.23%	24.96%	25.33%	24.12%	21.95%	20.22%	18.76%

(\$ in millions)	2022	2022	2024	20255	20265	20275	20205	20205	20205
Fiscal Years Ending Dec. 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
NOPLAT:									
EBITA:									
Revenues	282,836	307,394	350,018	398,523	450,713	503,669	553,641	600,792	647,695
Operating Costs and Expenses:	202,030	307,334	330,010	330,323	450,715	303,003	333,041	000,732	047,033
Depreciation expense	13,475	11,946	15,311	22,757	31,038	40,480	51,380	59,201	64,515
Other cost of revenues	112,728	121,386	130,995	147,661	165,317	182,862	198,939	213,641	227,903
Research and development	39,500	45,427	49,326	55,947	63,274	70,708	77,723	84,343	90,927
Sales and marketing	26,567	27,917	27,808	29,781	31,555	32,886	33,537	33,558	33,122
General and administrative	15,724	16,425	14,188	15,209	16,131	16,832	17,188	17,227	17,035
Income from operations:	74,842	84,293	112,390	127,168	143,397	159,901	174,873	192,823	214,192
Plus: Implied interest on operating leases	666	747	762	735	1,014	1,323	1,679	1,934	2,108
EBITA:	75,508	85,040	113,152	127,903	144,411	161,224	176,552	194,757	216,300
Less: Adjusted Taxes									
Provision for income taxes	11,356	11,922	19,697	21,379	23,964	26,650	29,074	32,086	35,784
Minus: Tax on interest income	(357)	(635)	(737)	(125)	(132)	(136)	(139)	(161)	(209)
Minus: Tax on other income (expense), net	876	351	(528)	-	-	-	-	-	-
Plus: Tax shield on interest expense	59	51	44	95	210	256	308	349	380
Plus: Tax shield on implied lease interest	109	123	125	121	167	217	276	318	347
Total Adjusted Taxes:	12,043	11,811	18,602	21,470	24,209	26,988	29,519	32,591	36,302
Change in deferred taxes	(8,081)	(7,763)	(5,257)	(8,438)	(9,458)	(10,518)	(11,475)	(12,664)	(14,123)
NOPLAT:	55,384	65,466	89,293	97,996	110,745	123,718	135,559	149,503	165,875
Invested Capital (IC):									
Operating Current Assets:									
Normal cash	18,962	20,608	23,466	26,718	30,217	33,767	37,117	40,278	43,423
Accounts receivable	40,258	47,964	52,340	59,500	67,292	75,199	82,660	89,700	96,702
Other current assets	10,775	12,650	15,714	16,281	16,869	17,478	18,109	18,763	19,440
Total Operating Current Assets:	69,995	81,222	91,520	102,499	114,378	126,444	137,886	148,741	159,565
Non-Interest Bearing Operating Current Liabilities:									
Accounts payable	5,128	7,493	7,987	9,515	10,761	12,025	13,218	14,344	15,464
Accrued compensation and benefits	14,028	15,140	15,069	17,157	19,404	21,684	23,835	25,865	27,885
Accrued expenses and other current liabilities	37,866	46,168	51,228	57,179	64,667	72,265	79,434	86,200	92,929
Accrued revenue share	8,370	8,876	9,802	10,844	11,906	12,905	13,745	14,438	15,051
Deferred revenue	3,908	4,137	5,036	5,448	6,162	6,886	7,569	8,214	8,855
Total Non-Interest Bearing Operating Current Liabilities:	69,300	81,814	89,122	100,143	112,900	125,765	137,802	149,061	160,184
Net Operating Working Capital:	695	(592)	2,398	2,356	1,479	679	84	(321)	(618)
Net Operating Working Capital.	093	(332)	2,330	2,330	1,473	073	04	(321)	(010)
Property and Equipment, Net:	112,668	134,345	171,036	233,279	304,241	386,161	444,941	484,885	509,599
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	,	,		*		
Net Other Operating Assets:									
Operating lease assets	14,381	14,091	13,588	18,533	24,170	30,679	35,348	38,522	40,485
Intangible assets, net	· -	-	-	· -	· -	-	-	_	· -
Other non-current assets	8,707	10,051	14,874	15,411	15,967	16,544	17,141	17,760	18,401
Total Net Other Operating Assets:	23,088	24,142	28,462	33,944	40,138	47,222	52,489	56,282	58,886
Other Operating Liabilities:									
Deferred revenue, non-current	599	-	-	-	-	-	-	-	-
Income taxes payable, non-current	9,258	8,474	8,782	13,875	15,553	17,296	18,869	20,824	23,225
Other long-term liabilities	2,247	4,395	4,694	5,254	6,407	7,717	8,736	9,523	10,132
Total Other Operating Liabilities	12,104	12,869	13,476	19,129	21,960	25,013	27,605	30,347	33,357
Invested Capital (IC):	124,347	145,026	188,420	250,451	323,897	409,049	469,909	510,498	534,510
Free Cash Flow (FCF):									
NOPLAT	55,384	65,466	89,293	97,996	110,745	123,718	135,559	149,503	165,875
Change in IC	18,742	20,679	43,394	62,031	73,447	85,152	60,860	40,590	24,012
FCF	36,641	44,787	45,900	35,965	37,298	38,566	74,699	108,913	141,863
Return on Invested Capital (ROIC):									
NOPLAT	55,384	65,466	89,293	97,996	110,745	123,718	135,559	149,503	165,875
Beginning IC	105,605	124,347	145,026	188,420	250,451	323,897	409,049	469,909	510,498
ROIC	52.44%	52.65%	61.57%	52.01%	44.22%	38.20%	33.14%	31.82%	32.49%
Economic Profit (EP):									
Beginning IC	105,605	124,347	145,026	188,420	250,451	323,897	409,049	469,909	510,498
x (ROIC - WACC)	42.78%	42.99%	51.91%	42.35%	34.56%	28.53%	23.48%	22.15%	22.83%
EP	45,180	53,451	75,280	79,790	86,545	92,421	96,034	104,098	116,548

Weighted Average Cost of Capital (WACC) Estimation

	Estimated WACC	9.66%
arket Value of the Firm	3,087,491	100.00%
IVIV OI TOLAI DEDL	40,400.31	1.31/0
MV of Total Debt	40,480.51	1.31%
Long-Term Debt PV of Operating Leases	23,607 13,874	
Short-Term Debt Current Portion of LTD	2,000 1,000	Q2 2025 10-Q
arket Value of Debt:	2,000	02 2025 40 0
MV of Equity	3,047,011	98.69%
Current Stock Price	\$249.53	00.500/
Total Shares Outstanding	12,211	
arket Value of Common Equity:	40.044	MV Weights
After-Tax Cost of Debt	4.43%	
Marginal Tax Rate	16.44%	
Pre-Tax Cost of Debt	5.30%	YTM on company's 40-year corporate bond
Implied Default Premium	1.21%	
Risk-Free Rate	4.09%	10-year Treasury bond
ost of Debt:		
Cost of Equity	9.73%	
Equity Risk Premium	5.00%	Henry Fund Estimate
Beta	1.13	Average of 2, 3, 4, and 5-year weekly beta
Risk-Free Rate	4.09%	10-year Treasury bond
		ASSUMPTIONS:

. Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Ir	iputs:
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Implied Price as of Today

CV Growth of NOPLAT	7.50%
CV Year ROIC	32.49%
WACC	9.66%
Cost of Equity	9.73%

2000 0. 240.07	017070					
Fiscal Years Ending Dec. 31	2025E	2026E	2027E	2028E	2029E	2030E
DCF Model:						
Free Cash Flow (FCF)	35,965	37,298	38,566	74,699	108,913	141,863
Continuing Value (CV)	55,555	07,200	00,000	,000		5,900,086
PV of FCF	32,796	31,015	29,244	51,651	68,674	3,720,217
Value of Operating Assets:	3,933,596					
Non-Operating Adjustments:						
Excess Cash	0					
Marketable Securities	110,173					
Less: Total Debt	(40,481)					
Less: ESOP	(41,240)					
Less: Legal Expenses	(6,322)					
Value of Equity	3,955,726					
Shares Outstanding	12,211					
Intrinsic Value of Last FYE	\$ 323.95					
Implied Price as of Today	\$ 345.36					
EP Model:						
Economic Profit (EP)	79,790	86,545	92,421	96,034	104,098	116,548
Continuing Value (CV)						5,389,587
PV of EP	72,759	71,966	70,081	66,404	65,637	3,398,329
T-+- DV - f ED	2 745 476					
Total PV of EP	3,745,176					
Invested Capital (last FYE)	188,420					
Value of Operating Assets:	3,933,596					
Non-Operating Adjustments: Excess Cash	0					
Marketable Securities	0 110,173					
Less: Total Debt	(40,481)					
Less: ESOP	(41,240)					
Less: Legal Expenses	(6,322)					
Value of Equity	3,955,726					
Shares Outstanding	12,211					
Intrinsic Value of Last FYE	\$ 323.95					
	·					

\$ 345.36

Alphabet Inc.
Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

Fiscal Years Ending	2025E	2025E		2026E		2027E		2029E	2029E	
EPS	\$ 8.94	\$	10.09	\$	11.31	\$	12.48	\$ 13.99	\$	15.88
Key Assumptions										
CV growth of EPS	7.50%									
CV Year ROE	25.94%									
Cost of Equity	9.73%									
Future Cash Flows P/E Multiple (CV Year) EPS (CV Year) Future Stock Price									\$	31.85 15.88 505.87
Dividends Per Share	0.83		0.86		0.89		0.93	0.96		1.00
Discounted Cash Flows	0.76		0.72		0.68		0.64	0.60		317.96
Intrinsic Value as of Last FYE Implied Price as of Today	\$ 321.35 \$ 342.59									

Alphabet Inc. *Relative Valuation Models*

Ticker	Company	Price	EPS 2025E	EPS 2026E	P/E 25	P/E 26	Enterprise Value (M)	EBITDA 2025E	EBITDA 2026E	EV/EBITDA 2025	EV/EBITDA 2026
AAPL	Apple	\$245.50	\$7.38	\$8.01	33.27	30.65	3,648,847	143,515	152,216	25.42	23.97
AMZN	Amazon	\$231.48	\$6.66	\$7.59	34.76	30.50	2,495,219	165,871	195,199	15.04	12.78
META	Meta Platforms	\$782.52	\$28.22	\$29.98	27.73	26.10	2,029,693	119,507	138,516	16.98	14.65
MSFT	Microsoft	\$515.19	\$13.64	\$15.53	37.77	33.17	3,828,243	162,681	191,914	23.53	19.95
NVDA	NVIDIA	\$175.65	\$2.99	\$4.52	58.75	38.86	4,286,980	88,652	129,697	48.36	33.05
ORCL	Oracle	\$312.52	\$6.03	\$6.84	51.83	45.69	1,000,686	31,208	36,882	32.07	27.13
TSLA	Tesla	\$438.35	\$1.74	\$2.50 –	251.93 -	175.34	1,482,320	13,170	15,839	112.55	93.59
			А	verage	40.68	34.16				26.90	21.92
GOOGL	Alphabet Inc.	\$249.53	\$8.94	\$10.09	27.9	24.7	3,087,491	149,924	174,436	20.59	17.70

Implied Relative Value:

P/E (EPS25)	\$ 363.65
P/E (EPS26)	\$ 344.84
EV/EBITDA (EBITDA 25)	\$ 326.97
EV/EBITDA (EBITDA 26)	\$ 309.87

Sensitivity Tables

	DCF			CV Gro	wth of NOI	PLAT				DDM			CV G	rowth of EF	PS		
	345.36	6.50%	6.75%	7.25%	7.50%	7.75%	8.00%	8.25%		342.59	7.20%	7.30%	7.40%	7.50%	7.60%	7.70%	7.80%
	3.79%	278.21	300.07	359.27	400.74	455.02	529.12	636.33		8.83%	493.23	522.44	555.74	594.05	638.58	691.00	753.60
ag	3.89%		iξ	9.13%	412.02	432.04	454.37	479.44	507.79	540.11	577.28						
Risk-Free Rate	3.99%	259.69	278.40	327.95	361.72	404.77	461.57	539.94	Cost of Equity	9.43%	352.73	367.17	383.03	400.54	419.96	441.62	465.94
ž	4.09%	251.54	268.95	314.61	345.36	384.14	434.59	502.89	of E	9.73%	307.29	318.09	329.81	342.59	356.57	371.92	388.86
ž	4.19%	243.41	259.58	301.56	329.50	364.38	409.14	468.69	st o	10.03%	272.00	280.35	289.33	299.02	309.51	320.90	333.31
ig	4.29%	235.99	251.06	289.86	315.41	347.01	387.10	439.61	S	10.33%	243.31	249.90	256.94	264.48	272.57	281.27	290.67
	4.39%	229.00	243.07	279.01	302.45	331.20	367.27	413.88		10.63%	219.67	224.97	230.60	236.59	242.98	249.80	257.10
-									•								
	DCF			Depr	eciation Ra	ite				DCF				WACC			
Г	345.36	10.31%	11.31%	12.31%	13.31%	14.31%	15.31%	16.31%		345.36	8.46%	8.86%	9.26%	9.66%	10.06%	10.46%	10.86%
<u> </u>	5.00%	393.52	390.08	386.96	384.15	381.60	379.33	377.31	ح .	-1.27%	959.73	672.49	515.89	416.85	349.65	300.29	262.72
26-2027 Capital Expenditures Growth Rate	10.00%	382.11	378.32	374.86	371.72	368.86	366.29	363.98	of owtl	-0.97%	904.42	633.79	486.25	392.94	329.62	283.11	247.71
	15.00%	370.24	366.08	362.27	358.79	355.60	352.71	350.09	er Cost of ues Growth 2025-2030	-0.67%	849.11	595.09	456.61	369.02	309.59	265.94	232.71
를 를 달. 1	20.00%	357.91	353.37	349.18	345.36	341.81	338.59	335.66		-0.37%	794.37	556.79	427.27	345.36	289.77	248.94	217.87
2026-2027 Expendi Growth	25.00%	345.11	340.17	335.60	331.41	327.51	323.94	320.67	Other C Revenues Rate 202	-0.07%	738.49	517.70	397.32	321.20	269.54	231.59	202.71
26 E	30.00%	331.84	326.50	321.53	316.95	312.68	308.75	305.14	Oth teven Rate	0.23%	683.19	479.00	367.68	297.28	249.51	214.42	187.71
7	35.00%	318.12	312.34	306.97	301.99	297.33	293.03	289.05	% L	0.53%	627.88	440.31	338.04	273.37	229.48	197.25	172.71
•									'								
_	DCF	Ger	neral and A	dministrati	ve Annual (Growth Rat	e 2025-203	0		DDM		2025 G	ogle Searc	h & Other F	Revenue Gr	owth	
	345.36	-0.84%	-0.64%	-0.44%	-0.24%	-0.04%	0.16%	0.36%		342.59	8.72%	9.72%	10.72%	11.72%	12.72%	13.72%	14.72%
Sales	11.04%	434.70	418.76	402.82	386.66	370.93	354.99	339.05	உ	15.24%	341.39	343.74	346.08	348.42	350.76	353.11	355.45
Sa	12.04%	420.93	404.99	389.05	372.88	357.16	341.22	325.28	Rai	15.44%	340.44	342.78	345.11	347.45	349.78	352.12	354.46
5	13.04%	407.16	391.22	375.27	359.11	343.39	327.45	311.50	ste ax	15.94%	338.06	340.38	342.70	345.02	347.34	349.66	351.98
a %	14.04%	393.40	377.46	361.52	345.36	329.63	313.69	297.75	Forecasted Effective Tax Rate	16.44%	335.68	337.98	340.29	342.59	344.89	347.20	349.50
as s	15.04%	379.61	363.67	347.73	331.56	315.84	299.90	283.96	itiv (16.84%	333.78	336.07	338.36	340.65	342.94	345.23	347.52
R&D	16.04%	365.84	349.90	333.95	317.79	302.07	286.13	270.18	fec F	17.24%	331.88	334.16	336.44	338.71	340.99	343.27	345.55
22	17.04%	352.06	336.12	320.18	304.02	288.29	272.35	256.41	ū	17.64%	329.99	332.25	334.52	336.78	339.05	341.31	343.58

Valuation of Options Granted under ESOP

Current Stock Price \$249.53

Risk Free Rate 4.09% 10-year Treasury bond

Current Dividend Yield 0.33%

Annualized St. Dev. of Stock Returns 29.49% Bloomberg 5-year Average

Dange of	Number	Average	Average	B-S	Value
Range of Outstanding Options	Number of Shares	Price	Remaining Life (yrs)	Option Price	of Options Granted
Range 1	299	122.77	2.50 \$	137.93 \$	41,240
Total	299 \$	122.77	2.50 \$	139.94 \$	41,240

Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding

Number of Options Outstanding (shares):299Average Time to Maturity (years):2.50Expected Annual Number of Options Exercised:120

Current Average Strike Price:\$ 122.77Cost of Equity:9.73%Current Stock Price:\$249.53

Fiscal Years Ending Dec. 31	2025E	2026E	2026E 2027E		2029E	2030E
Increase in Shares Outstanding:	120	120	60	0	0	0
Average Strike Price:	\$ 122.77 \$	122.77 \$	122.77 \$	122.77 \$	122.77 \$	122.77
Increase in Common Stock Account:	14,683	14,683	7,342	-	-	-
Share Repurchases (\$)	56,920	52,070	47,632	57,663	69,807	84,507
Expected Price of Repurchased Shares:	\$ 249.53 \$	272.98 \$	298.64 \$	326.71 \$	357.42 \$	391.02
Number of Shares Repurchased:	228	191	159	176	195	216
Shares Outstanding (beginning of the year)	12,211	12,102	12,031	11,932	11,755	11,560
Plus: Shares Issued Through ESOP	120	120	60	0	0	0
Less: Shares Repurchased in Treasury	228	191	159	176	195	216
Shares Outstanding (end of the year)	 12,102	12,031	11,932	11,755	11,560	11,344

Alphabet Inc. *Key Management Ratios*

Fiscal Years Ending Dec. 31	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Liquidity Ratios:									
Current Ratio (Current Assets/Current Liabilities)	2.38	2.10	1.84	1.77	1.67	1.59	1.63	1.80	2.06
Cash Ratio (Cash/Current Liabilities)	0.32	0.29	0.26	0.26	0.24	0.21	0.30	0.50	0.78
Net Working Capital to Revenue Ratio (NWC/Revenue)	0.34	0.29	0.21	0.19	0.17	0.15	0.16	0.20	0.26
Asset-Management Ratios:									
Net Working Capital Ratio (Revenue/Net Working Capital)	2.96	3.43	4.69	5.20	5.96	6.84	6.37	5.01	3.81
Cash Turnover Ratio (Revenue/Cash)	12.93	12.78	14.92	15.18	16.81	19.07	13.60	8.09	5.19
Asset Turnover Ratio (Revenue/Average Total Assets)	0.78	0.80	0.82	0.80	0.76	0.72	0.69	0.66	0.64
Financial Leverage Ratios:									
Debt Ratio (Total Debt/Total Assets)	0.08	0.07	0.05	0.07	0.07	0.07	0.06	0.06	0.06
Debt-to-Equity Ratio (Total Debt/Total Equity)	0.00	0.09	0.03	0.07	0.12	0.12	0.12	0.12	0.11
LT Debt/Total Assets	0.04	0.03	0.02	0.04	0.05	0.05	0.05	0.05	0.04
Profitability Ratios:									
Return on Equity (NI/Beg TSE)	23.83%	28.81%	35.33%	33.43%	31.93%	29.74%	27.37%	26.34%	25.94%
Return on Assets (NI/Avg Total Assets)	16.55%	19.23%	23.48%	21.92%	20.61%	19.43%	18.37%	17.98%	18.00%
Gross Margin ((Revenue - COGS)/Revenue)	56.94%	55.38%	56.63%	58.20%	57.24%	56.43%	55.66%	54.79%	54.59%
Gross Wargin (Inevenue Gods)/ Nevenue/	30.5470	33.3070	30.0370	30.2070	37.2470	30.4370	33.0070	34.7370	34.3370
Payout Policy Ratios:									
Dividend Payout Ratio (Dividend/EPS)	0.00%	0.00%	7.38%	9.29%	8.53%	7.90%	7.43%	6.87%	6.28%
Total Payout Ratio ((Divs. + Repurchases)/NI)	98.87%	83.34%	69.50%	61.67%	51.28%	43.07%	46.45%	49.68%	52.74%