



Exeter Student Investment Fund

Learn. Network. Invest.

Alphabet [GOOG]

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Portfolio Manager (Tech, Media and Telecoms)

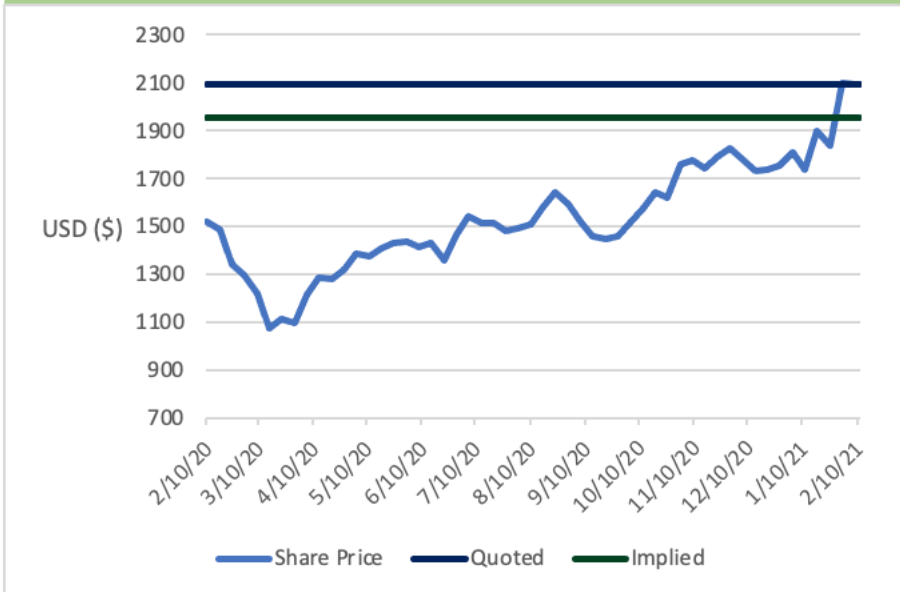
Recommendation



Tech, Media and Telecoms

GOOG - NASDAQ	Tuesday, March 2, 2021	
Stock Rating	BUY	
Implied Share Price	\$	1,952.91
Upside/Downside (%)	-6.82%	
Share Price (12/02/2020)	\$	2,095.89
52-Week Range	\$1013.54 - \$2123.55	
Shares O/S	745,000,000	

Shares Price



Key Statistics & Valuation

Terminal Growth	2.50%
WACC (%)	7.94%

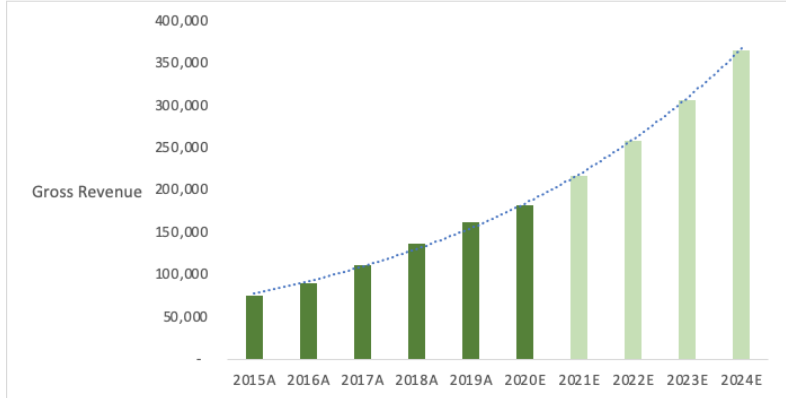
DCF Analysis

Equity Value	1,207,474
Shares Outstanding	745
Implied Share Price	1,621

Comparable Companies Analysis

EV/EBITDA Multiple	30.9
GOOG EBITDA (FY20)	54,921
Enterprise Value	1,695,411
Plus Cash and Cash Equivalents	26,465
Less: Debt	19,521
Equity Value	1,702,355
Shares Outstanding	745
Implied Share Price	2,285

Outlook

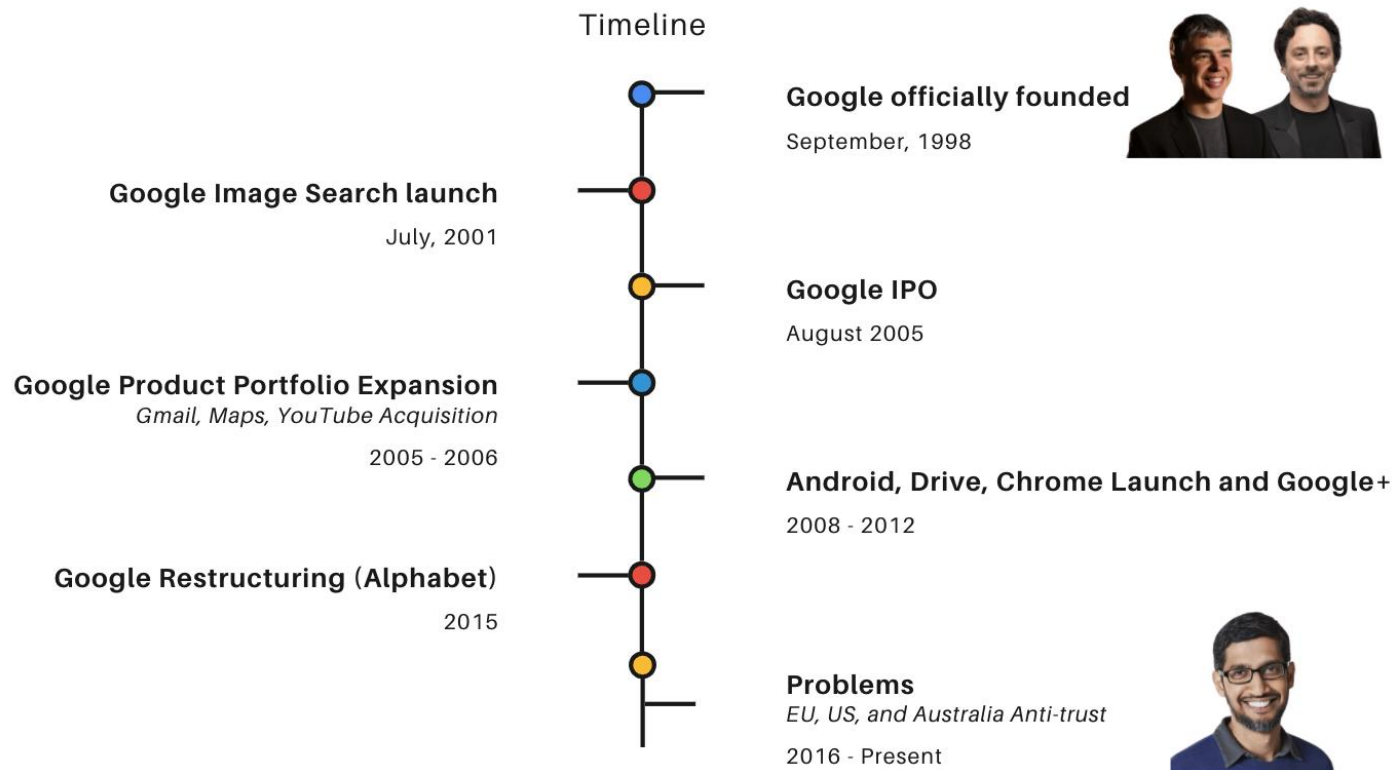




“Google has the strongest economic moat of any company in any industry by far as well as one of the best-looking balance sheet of any public company in the world. Their ability to become instant top players in any tech related industries like e-commerce and cloud computing makes them a very attractive company to invest in long-term.”



Alphabet





Business Model:

- *Google*: Google Cloud, Suite, Play, Search, Mail, Android, and YouTube
- *Other Bets*: Nest, Waymo and DeepMind.

Strategic Analysis:

- *Strengths and Opportunities*
 - King of the Jungle
 - Market Expansion
 - Moon-shot Ventures
- *Weaknesses and Threats*
 - Government Witch-hunt
 - Unlevered Ads
 - Market Share Fallout

Risk Analysis:

- Governments and Amazon

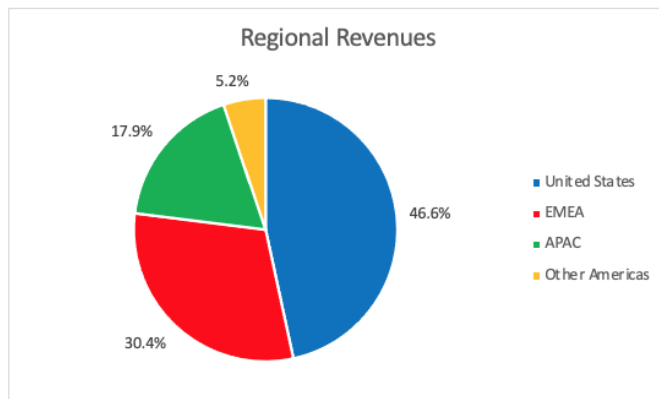
Industry Analysis:

- *No Shortage of Competitors*
 - Advertising competition from Twitter, Amazon, Pinterest, Snapchat, TikTok.
 - Cloud computing competition from Azure, Microsoft, AWS
- *Still Dominant in*
 - Search with Chrome
 - Streaming with YouTube
 - Android Smartphone OS
- *Porter's 5 Forces*
 - Competition in the Industry → High
 - Power of Consumers → Low
 - Potential of New Entrants → Low
 - Power of Suppliers → Low
 - Threat of Substitutes → Low

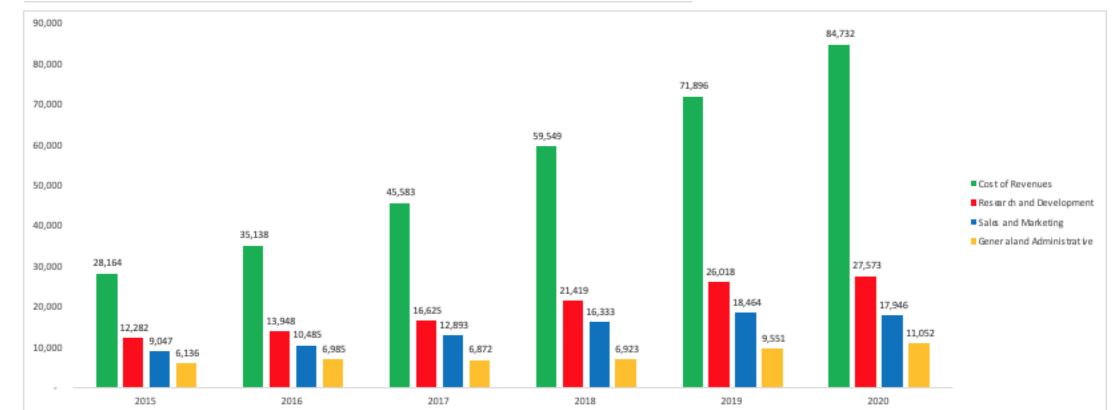


Income Statement:

- *Revenues:*
 - In FY20, Alphabet recorded an annual net revenue of \$182.53 Billion (+8.7%).
 - Net revenues grew 15.9% on average over the last 5 years, lowest being FY20.
 - *Google* recorded (+14%) \$181.9 billion and *Other Bets* (-0.30%) recorded \$657 million in revenues.
 - Geographic revenue stream:



Cost of Revenues:



- R&D is Alphabet's largest expenditure (27.0% of Net Revenues each year on average)
- R&D mostly go to technical and engineering employees, equipment, consulting and outsourcing services.
- R&D would revolve Android, Chrome, Google Cloud, Google Play, Hardware, Machine Learning, Other Bets, Search and YouTube (% of how much goes into the forementioned segments were disclosed).



- Net Income & EBITDA

- FY20 Alphabet recorded a Net Income of \$40.3 billion (+17.3%) and EBITDA of \$54.9 billion (+19.4%).
- Net Income fluctuated over the last 5 years (-35.2% in FY17 and +143.4% in FY18). Primarily due to tax.
- EBITDA fluctuated as well over the last five years, however it has maintained an excellent level of growth. On 5-year average it is 17.8%.
- Tax burdens might become a huge problem as anti-trust lawsuits grow, in FY17 income tax expense was \$14.3 billion.

- Income Statement Ratios

Ratios	2017	2018	2019	2020
Gross Profit Margin	24%	20%	21%	23%
Net Profit Margin	11%	22%	21%	22%
Return on Equity	8%	17%	17%	18%



Balance Sheet:

- Assets
 - Total Assets increased by 15.8% in FY20 and 17.5% on average over the last five years.
 - This is predominantly driven by computer software and equipment, which have increased by an average of 27% over the last five years. Amounting to \$35.2 billion in FY20 from just \$13.6 billion in FY15.
 - COVID-19 has a microscopic impact towards Alphabet's business. Shift in advertising customer segment, F&B saw a drastic decrease, whereas healthcare increased phenomenally.
- Liabilities
 - Total Liabilities increased by 30.1% in FY20 and 36.5% on average over the last five years.
 - This is predominantly driven by the increase in long-term debt to finance acquisitions and investments to prepare the company for AI and cloud computing. Long-term debt rose by 205.9% from \$4.6 billion to \$13.9 billion. This represents Alphabet's strong desire to invest in long-term technologies.



- Balance Sheet Ratios

Debt-to-Equity Ratio	2017	2018	2019	2020
Google	0.21	0.30	0.35	0.44
Amazon	3.68	2.67	2.52	2.44
Facebook	0.11	0.15	0.32	0.24
Microsoft	2.27	1.81	1.57	1.34

Current Ratio	2017	2018	2019	2020
Google	5.54	3.92	3.37	3.07
Amazon	1.04	1.10	1.10	1.05
Facebook	12.92	7.19	4.40	5.05
Microsoft	2.89	3.12	2.80	2.58

Debt-to-Asset Ratio	2017	2018	2019	2020
Google	0.23	0.24	0.27	0.30
Amazon	0.79	0.73	0.72	0.71
Facebook	0.12	0.14	0.24	0.19
Microsoft	0.71	0.64	0.60	0.58

Cash Flow Statement

- Alphabet has a 137% Cash Flow to Debt ratio which shows how high their operating cash flow is relative to their liabilities.
- PPE have decreased over the last three years from \$25.1 billion in FY18 to \$22.3 billion in FY20.
- Net cash used for investing and financing activities have increased over the last three years. Net cash used for investing activities increased from \$28.5 billion in FY18 to \$32.8 billion in FY20. Net cash used for financing activities increased from \$13.2 billion in FY18 to \$24.4 billion in FY20.
- Cash and cash equivalents have increased 43% in FY20 from 18.5 billion to \$26.5 billion.
- Alphabet has a 24% Asset Efficiency, which shows how well the company uses its assets to generate cash flow, in comparison, Amazon and Facebook has an Asset Efficiency of 21% and 18% respectively



Product Launches:

- YouTube monetization with more advertising and YouTube Premium subscription.
- Increase use of Android OS.
- Cash cow continuation from advertising.

Acquisitions:

- Nine acquisitions since 2018 for Google Cloud infrastructure.
- Fitbit acquisition in 2021, diversifying into healthcare.

Google is going to war against Microsoft's Azure and Amazon Web Services in the cloud computing arena.

- Google Cloud made up 7.15% (\$13.1 billion) of total revenues in FY20.
- Google Cloud is still third place, however, Pichai said that this segment will be the company's main focus for the next decade.
- Even if Cloud is still making a loss, it is hedged by Alphabet's other segments.

Self-driving cars: Lyft and Waymo

Gaming: Stadia

Alphabet has seven products with over one billion users: Gmail, Android, Chrome, Maps, Search, YouTube and Playstore.



Comparable Companies Analysis (“Trading Comps”):

- The comparable list includes:
 - Amazon, Facebook and Microsoft
- Due to there being no direct comparable to Alphabet, with regard to providing the exact same products and services, it was difficult to find an exact mirror company. Since the forementioned companies offer a few similar products to Alphabet, I’ll be using the three as comparable. (Note: relative valuations may be distorted due to price movements, Trading Comps Valuations should be taken with a grain of salt).

Comparable Companies	Share Price	Equity Value	Enterprise Value (EV)	Adjusted EBITDA	EV/EBITDA Multiple
Amazon	\$ 3,091.11	\$ 1,586,487,000	\$ 1,610,000,000	\$ 36,330,000	44.32
Facebook	\$ 251.21	\$ 689,400,000	\$ 717,110,000	\$ 29,727,000	24.12
Microsoft	\$ 213.52	\$ 1,517,822,000	\$ 1,590,000,000	\$ 65,755,000	24.18
Average					30.87

- The average EV/EBITDA multiple was 30.87x. This multiple is then applied to Alphabet’s EBITDA (FY20) to arrive at the company’s EV. EV plus cash and cash equivalents minus total debt equals to the Equity Value, this is then divided by the number of S/O.

Alphabet EBITDA (FY20)	54,921
EV/EBITDA Multiple	30.9
Enterprise Value (EV)	1,695,411
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Plus: Cash and Cash Equivalents	26,465
Less: Preferred Stock + Minority Interest	-
Less: Debt	19,521
Equity Value	1,702,355
Shares Outstanding	745
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Discounted Cash Flow ('DCF Analysis'):

	Historical	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Terminal Value
DISCOUNTED CASH FLOW (IN MILLIONS OF USD)													
Free Cash Flow		38,391	42,677	38,591	43,545	65,437	88,829	58,796	69,967	83,261	99,081	117,906	1,279,422
Total Cash Flow From Operating Activities		26,572	36,036	37,091	47,971	54,520	65,124						
Capital Expenditure		(9,950)	(10,212)	(13,184)	(25,139)	(23,548)	(22,281)						
Net Borrowings		21,769	16,853	14,684	20,713	34,465	45,986						
Discount Factor								1.079	1.165	1.258	1.357	1.465	1.465
PV of Future Cash Flow								54,472	60,055	66,210	72,995	80,476	873,266
Required Return		7.94%											
Perpetual Growth Rate		2.50%											
Today's Value		1,207,474											
Shares Outstanding		745											
Fair Value of Equity		1,620.77											

WEIGHTED AVERAGE COST OF CAPITAL	
S&P 500 Returns	10%
Risk Free Rate (US 10Y Treasury Bond)	1.14%
Market Risk Premium	9%
Levered Beta	0.99
Cost of Equity	10%
Cost of Debt	0.67%
Effective Tax Rate	13.33%
Cost of Debt (after-tax)	1%
Shares Outstanding	745,000,000
Share Price	2,095.89
Market Capitalization	1,561,438,050,000
Net Debt	45,986,000,000
Total Financing	217,409,000,000
Proportion of Equity	79%
Proportion of Debt	21%
WACC	7.94%



- Social Risks
 - Business Ethics: Anti-competitive practices:
 - EU Antitrust → Google alleged for paying financial incentives to smartphone manufacturers that use Android OS to pre-install Google Search on their devices.
 - US Antitrust → Google is alleged for manipulating search results to favor their own products and services so that users will only see what Google wants them to see rather than the best option they're looking for.
 - AUS Standoff → Google threatened to pull the search engine plug in Australia as lobbyist are trying to pass a law that forces Google to pay local news publishers.
 - Data Privacy and Security:
 - Google+ data breach in 2018 with over five million user's data was compromised.
- Environmental Risks
 - Low due to them being a Software company.
 - Alphabet is the biggest corporate renewable buyer in the US
- Governance Risks
 - Corporate Governance:
 - Multi-class stock structure made Alphabet impossible to be accountable.
 - Human Capital:
 - Sexual misconduct accusation against four Google and Alphabet executives: David Drummond (Google Chief Legal Officer), Andy Rubin (Head of Android), Rich DeVaul (Head of Moonshot Ventures), Amit Singhal (Head of Google Search).
 - Ellen Naughton, VP of People Operations stepped down in 2020 due to the amounting number of employee protest.

Closing Summary



Implied Share Price		
Valuation		Weight
Comps	\$ 2,285.04	50%
DCF	\$ 1,620.77	50%
Final Share Price	\$ 1,952.91	

Pros:

- Unprecedented Dominance
- Highly Competent Management
- Financial Stability with Cash-cow-esque business model

Cons:

- Monopolistic Company → Anti-competitive strategies
- Unhedged business model, reliance on Advertising
- Government being a Gordian knot

Proposal:

Second largest position in ExSIF with a target buying price of \$1,200 - \$1,500