# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**Washington, D.C. 20549**

# FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _______ to _______

Commission file number: **001-37580**

# Alphabet Inc.

(Exact name of registrant as specified in its charter)

| **Delaware** | **61-1767919** |
| --- | --- |
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification Number) |

**1600 Amphitheatre Parkway**
**Mountain View, CA 94043**
(Address of principal executive offices, including zip code)
**(650) 253-0000**
(Registrant's telephone number, including area code)

**Securities registered pursuant to Section 12(b) of the Act:**

| Title of each class | Trading Symbol(s) | Name of each exchange on which registered |
| --- | --- | --- |
| **Class A Common Stock, $0.001 par value** | **GOOGL** | **Nasdaq Stock Market LLC (Nasdaq Global Select Market)** |
| **Class C Capital Stock, $0.001 par value** | **GOOG** | **Nasdaq Stock Market LLC (Nasdaq Global Select Market)** |

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | | | |
| --- | --- | --- | --- |
| Large accelerated filer | ☒ | Accelerated filer | ☐ |
| Non-accelerated filer | ☐ | Smaller reporting company | ☐ |
| Emerging growth company | ☐ | | |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of July 23, 2020, there were 300,471,156 shares of Alphabet’s Class A common stock outstanding, 46,061,366 shares of Alphabet's Class B common stock outstanding, and 333,631,113 shares of Alphabet's Class C capital stock outstanding.

**Alphabet Inc.**
**Form 10-Q**
**For the Quarterly Period Ended June 30, 2020**

**TABLE OF CONTENTS**

## Note About Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include, among other things, statements regarding:

- the ongoing effect of the novel coronavirus pandemic ("COVID-19"), including its macroeconomic effects, on our business, operations, and financial results, including the effect of governmental lockdowns, restrictions and new regulations on our operations and processes;
- the growth of our business and revenues and our expectations about the factors that influence our success and trends in our business;
- the potential for declines in our revenue growth rate and operating margin;
- our expectation that the shift from an offline to online world will continue to benefit our business;
- our expectation that the portion of our revenues that we derive from non-advertising revenues will continue to increase and may affect our margins;
- our expectation that our traffic acquisition costs ("TAC") and the associated TAC rate will fluctuate, which could affect our overall margins;
- our expectation that our monetization trends will fluctuate, which could affect our revenues and margins;
- fluctuations in our revenue growth, as well as the change in paid clicks and cost-per-click on Google properties and the change in impressions and cost-per-impression on Google Network Members' properties, and various factors contributing to such fluctuations;
- our expectation that we will continue to periodically review, refine, and update our methodologies for monitoring, gathering, and counting the number of paid clicks on Google properties and impressions on Google Network Members' properties;
- our expectation that our results will be affected by our performance in international markets as users in developing economies increasingly come online;
- our expectation that our foreign exchange risk management program will not fully offset our net exposure to fluctuations in foreign currency exchange rates;
- the expected variability of gains and losses related to hedging activities under our foreign exchange risk management program;
- the amount and timing of revenue recognition from customer contracts with commitments for performance obligations, including our estimate of the remaining amount of commitments and when we expect to recognize revenue;
- fluctuations in our capital expenditures;
- our plans to continue to invest in new businesses, products, services and technologies, systems, land and buildings for data centers and offices, and infrastructure, as well as to continue to invest in acquisitions;
- our pace of hiring and our plans to provide competitive compensation programs;
- our expectation that our cost of revenues, research and development ("R&D") expenses, sales and marketing expenses, and general and administrative expenses may increase in amount and/or may increase as a percentage of revenues and may be affected by a number of factors;
- estimates of our future compensation expenses;
- our expectation that our other income (expense), net ("OI&E"), will fluctuate in the future, as it is largely driven by market dynamics;
- fluctuations in our effective tax rate;
- seasonal fluctuations in internet usage and advertiser expenditures, underlying business trends such as traditional retail seasonality (including developments and volatility arising from COVID-19), which are likely to cause fluctuations in our quarterly results;
- the sufficiency of our sources of funding;
- our potential exposure in connection with pending investigations, proceedings, and other contingencies;

- the sufficiency and timing of our proposed remedies in response to the European Commission's ("EC") and others' decisions;
- our expectations regarding the timing, design and implementation of our new global enterprise resource planning ("ERP") system;
- the expected timing and amount of Alphabet Inc.'s share repurchases;
- our long-term sustainability goals;

as well as other statements regarding our future operations, financial condition and prospects, and business strategies. Forward-looking statements may appear throughout this report and other documents we file with the Securities and Exchange Commission ("SEC"), including without limitation, the following sections: Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Quarterly Report on Form 10-Q and Part II, Item 1A, "Risk Factors" in this Quarterly Report on Form 10-Q, as may be updated in our subsequent Quarterly Reports on Form 10-Q. Forward-looking statements generally can be identified by words such as "anticipates," "believes," "estimates," "expects," "intends," "plans," "predicts," "projects," "will be," "will continue," "may," "could," "will likely result," and similar expressions. These forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties, which could cause our actual results to differ materially from those reflected in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this Quarterly Report on Form 10-Q, and in particular, the risks discussed in Part II, Item 1A, "Risk Factors" and those discussed in other documents we file with the SEC. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

As used herein, "Alphabet," "the company," "we," "us," "our," and similar terms include Alphabet Inc. and its subsidiaries, unless the context indicates otherwise.

"Alphabet," "Google," and other trademarks of ours appearing in this report are our property. This report contains additional trade names and trademarks of other companies. We do not intend our use or display of other companies' trade names or trademarks to imply an endorsement or sponsorship of us by such companies, or any relationship with any of these companies.

## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

### Alphabet Inc.
### CONSOLIDATED BALANCE SHEETS

(in millions, except share amounts which are reflected in thousands, and par value per share amounts)

| | As of December 31, 2019 | As of June 30, 2020 |
|---|---|---|
| | | (unaudited) |
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 18,498 | $ 17,742 |
| Marketable securities | 101,177 | 103,338 |
| Total cash, cash equivalents, and marketable securities | 119,675 | 121,080 |
| Accounts receivable, net | 25,326 | 21,201 |
| Income taxes receivable, net | 2,166 | 394 |
| Inventory | 999 | 815 |
| Other current assets | 4,412 | 5,579 |
| Total current assets | 152,578 | 149,069 |
| Non-marketable investments | 13,078 | 12,961 |
| Deferred income taxes | 721 | 895 |
| Property and equipment, net | 73,646 | 78,748 |
| Operating lease assets | 10,941 | 11,567 |
| Intangible assets, net | 1,979 | 1,697 |
| Goodwill | 20,624 | 20,824 |
| Other non-current assets | 2,342 | 2,731 |
| Total assets | $ 275,909 | $ 278,492 |
| **Liabilities and Stockholders' Equity** | | |
| Current liabilities: | | |
| Accounts payable | $ 5,561 | $ 4,064 |
| Accrued compensation and benefits | 8,495 | 7,127 |
| Accrued expenses and other current liabilities | 23,067 | 24,426 |
| Accrued revenue share | 5,916 | 5,005 |
| Deferred revenue | 1,908 | 2,061 |
| Income taxes payable, net | 274 | 975 |
| Total current liabilities | 45,221 | 43,658 |
| Long-term debt | 4,554 | 4,018 |
| Deferred revenue, non-current | 358 | 397 |
| Income taxes payable, non-current | 9,885 | 8,599 |
| Deferred income taxes | 1,701 | 1,797 |
| Operating lease liabilities | 10,214 | 10,709 |
| Other long-term liabilities | 2,534 | 1,992 |
| Total liabilities | 74,467 | 71,170 |
| Contingencies (Note 10) | | |
| Stockholders' equity: | | |
| Convertible preferred stock, $0.001 par value per share, 100,000 shares authorized; no shares issued and outstanding | 0 | 0 |
| Class A and Class B common stock, and Class C capital stock and additional paid-in capital, $0.001 par value per share: 15,000,000 shares authorized (Class A 9,000,000, Class B 3,000,000, Class C 3,000,000); 688,335 (Class A 299,828, Class B 46,441, Class C 342,066) and 681,215 (Class A 300,221, Class B 46,302, Class C 334,692) shares issued and outstanding | 50,552 | 55,937 |
| Accumulated other comprehensive loss | (1,232) | (296) |
| Retained earnings | 152,122 | 151,681 |
| Total stockholders' equity | 201,442 | 207,322 |
| Total liabilities and stockholders' equity | $ 275,909 | $ 278,492 |

See accompanying notes.

**Alphabet Inc.**
**CONSOLIDATED STATEMENTS OF INCOME**
(in millions, except per share amounts; unaudited)

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Revenues | $ 38,944 | $ 38,297 | $ 75,283 | $ 79,456 |
| Costs and expenses: | | | | |
| Cost of revenues | 17,296 | 18,553 | 33,308 | 37,535 |
| Research and development | 6,213 | 6,875 | 12,242 | 13,695 |
| Sales and marketing | 4,212 | 3,901 | 8,117 | 8,401 |
| General and administrative | 2,043 | 2,585 | 4,131 | 5,465 |
| European Commission fines | 0 | 0 | 1,697 | 0 |
| Total costs and expenses | 29,764 | 31,914 | 59,495 | 65,096 |
| Income from operations | 9,180 | 6,383 | 15,788 | 14,360 |
| Other income (expense), net | 2,967 | 1,894 | 4,505 | 1,674 |
| Income before income taxes | 12,147 | 8,277 | 20,293 | 16,034 |
| Provision for income taxes | 2,200 | 1,318 | 3,689 | 2,239 |
| Net income | $ 9,947 | $ 6,959 | $ 16,604 | $ 13,795 |
| Basic net income per share of Class A and B common stock and Class C capital stock | $ 14.33 | $ 10.21 | $ 23.91 | $ 20.16 |
| Diluted net income per share of Class A and B common stock and Class C capital stock | $ 14.21 | $ 10.13 | $ 23.71 | $ 20.00 |

See accompanying notes.

**Alphabet Inc.**
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**
(in millions; unaudited)

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Net income | $ 9,947 | $ 6,959 | $ 16,604 | $ 13,795 |
| Other comprehensive income: | | | | |
| Change in foreign currency translation adjustment | 118 | 284 | 82 | (266) |
| Available-for-sale investments: | | | | |
| Change in net unrealized gains (losses) | 741 | 867 | 1,460 | 1,365 |
| Less: reclassification adjustment for net (gains) losses included in net income | (75) | (149) | (68) | (318) |
| Net change, net of tax benefit (expense) of $(103), $(220), $(191) and $(301) | 666 | 718 | 1,392 | 1,047 |
| Cash flow hedges: | | | | |
| Change in net unrealized gains (losses) | (25) | (86) | (55) | 292 |
| Less: reclassification adjustment for net (gains) losses included in net income | (70) | (115) | (174) | (137) |
| Net change, net of tax benefit (expense) of $22, $35, $23 and $(46) | (95) | (201) | (229) | 155 |
| Other comprehensive income | 689 | 801 | 1,245 | 936 |
| Comprehensive income | $ 10,636 | $ 7,760 | $ 17,849 | $ 14,731 |

See accompanying notes.

**Alphabet Inc.**
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**
(In millions, except share amounts which are reflected in thousands; unaudited)

| | Three Months Ended June 30, 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Class A and Class B Common Stock, Class C Capital Stock and Additional Paid-In Capital | | Accumulated Other Comprehensive Income (Loss) | Retained Earnings | Total Stockholders' Equity |
| | Shares | Amount | | | |
| Balance as of March 31, 2019 | 694,782 | $ 46,532 | $ (1,780) | $ 138,720 | $ 183,472 |
| Common and capital stock issued | 2,403 | 34 | 0 | 0 | 34 |
| Stock-based compensation expense | 0 | 2,782 | 0 | 0 | 2,782 |
| Tax withholding related to vesting of restricted stock units and other | 0 | (1,268) | 0 | 0 | (1,268) |
| Repurchases of capital stock | (3,135) | (256) | 0 | (3,321) | (3,577) |
| Sale of interest in consolidated entities | 0 | 113 | 0 | 0 | 113 |
| Net income | 0 | 0 | 0 | 9,947 | 9,947 |
| Other comprehensive income (loss) | 0 | 0 | 689 | 0 | 689 |
| Balance as of June 30, 2019 | 694,050 | $ 47,937 | $ (1,091) | $ 145,346 | $ 192,192 |

| | Six Months Ended June 30, 2019 | | | | |
|---|---|---|---|---|---|
| | Class A and Class B Common Stock, Class C Capital Stock and Additional Paid-In Capital | | Accumulated Other Comprehensive Income (Loss) | Retained Earnings | Total Stockholders' Equity |
| | Shares | Amount | | | |
| Balance as of December 31, 2018 | 695,556 | $ 45,049 | $ (2,306) | $ 134,885 | $ 177,628 |
| Cumulative effect of accounting change | 0 | 0 | (30) | (4) | (34) |
| Common and capital stock issued | 4,315 | 73 | 0 | 0 | 73 |
| Stock-based compensation expense | 0 | 5,570 | 0 | 0 | 5,570 |
| Tax withholding related to vesting of restricted stock units and other | 0 | (2,452) | 0 | 0 | (2,452) |
| Repurchases of capital stock | (5,821) | (463) | 0 | (6,139) | (6,602) |
| Sale of interest in consolidated entities | 0 | 160 | 0 | 0 | 160 |
| Net income | 0 | 0 | 0 | 16,604 | 16,604 |
| Other comprehensive income (loss) | 0 | 0 | 1,245 | 0 | 1,245 |
| Balance as of June 30, 2019 | 694,050 | $ 47,937 | $ (1,091) | $ 145,346 | $ 192,192 |

| | Three Months Ended June 30, 2020 | | | | |
|---|---|---|---|---|---|
| | Class A and Class B Common Stock, Class C Capital Stock and Additional Paid-In Capital | | Accumulated Other Comprehensive Income (Loss) | Retained Earnings | Total Stockholders' Equity |
| | Shares | Amount | | | |
| Balance as of March 31, 2020 | 683,972 | $ 53,688 | $ (1,097) | $ 151,068 | $ 203,659 |
| Common and capital stock issued | 2,391 | 37 | 0 | 0 | 37 |
| Stock-based compensation expense | 0 | 3,413 | 0 | 0 | 3,413 |
| Tax withholding related to vesting of restricted stock units and other | 0 | (1,558) | 0 | 0 | (1,558) |
| Repurchases of capital stock | (5,148) | (506) | 0 | (6,346) | (6,852) |
| Sale of interest in consolidated entities | 0 | 863 | 0 | 0 | 863 |
| Net income | 0 | 0 | 0 | 6,959 | 6,959 |
| Other comprehensive income (loss) | 0 | 0 | 801 | 0 | 801 |
| Balance as of June 30, 2020 | 681,215 | $ 55,937 | $ (296) | $ 151,681 | $ 207,322 |

| | Six Months Ended June 30, 2020 | | | | |
|---|---|---|---|---|---|
| | Class A and Class B Common Stock, Class C Capital Stock and Additional Paid-In Capital | | Accumulated Other Comprehensive Income (Loss) | Retained Earnings | Total Stockholders' Equity |
| | Shares | Amount | | | |
| Balance as of December 31, 2019 | 688,335 | $ 50,552 | $ (1,232) | $ 152,122 | $ 201,442 |
| Common and capital stock issued | 4,516 | 143 | 0 | 0 | 143 |
| Stock-based compensation expense | 0 | 6,635 | 0 | 0 | 6,635 |
| Tax withholding related to vesting of restricted stock units and other | 0 | (2,737) | 0 | 0 | (2,737) |
| Repurchases of capital stock | (11,636) | (1,112) | 0 | (14,236) | (15,348) |
| Sale of interest in consolidated entities | 0 | 2,456 | 0 | 0 | 2,456 |
| Net income | 0 | 0 | 0 | 13,795 | 13,795 |
| Other comprehensive income (loss) | 0 | 0 | 936 | 0 | 936 |
| Balance as of June 30, 2020 | 681,215 | $ 55,937 | $ (296) | $ 151,681 | $ 207,322 |

See accompanying notes.

**Alphabet Inc.**
**CONSOLIDATED STATEMENTS OF CASH FLOWS**
(in millions; unaudited)

| | Six Months Ended June 30, | |
|---|---|---|
| | 2019 | 2020 |
| **Operating activities** | | |
| Net income | $ 16,604 | $ 13,795 |
| Adjustments: | | |
| Depreciation and impairment of property and equipment | 5,042 | 6,077 |
| Amortization and impairment of intangible assets | 406 | 417 |
| Stock-based compensation expense | 5,525 | 6,573 |
| Deferred income taxes | 620 | (416) |
| Gain on debt and equity securities, net | (3,878) | (1,040) |
| Other | (48) | 669 |
| Changes in assets and liabilities, net of effects of acquisitions: | | |
| Accounts receivable | 26 | 2,522 |
| Income taxes, net | 25 | 538 |
| Other assets | (176) | (359) |
| Accounts payable | (443) | (689) |
| Accrued expenses and other liabilities | 1,074 | (2,099) |
| Accrued revenue share | (60) | (692) |
| Deferred revenue | (90) | 148 |
| Net cash provided by operating activities | 24,627 | 25,444 |
| **Investing activities** | | |
| Purchases of property and equipment | (10,764) | (11,396) |
| Purchases of marketable securities | (44,724) | (64,111) |
| Maturities and sales of marketable securities | 40,692 | 65,874 |
| Purchases of non-marketable investments | (1,095) | (1,311) |
| Maturities and sales of non-marketable investments | 206 | 473 |
| Acquisitions, net of cash acquired, and purchases of intangible assets | (247) | (355) |
| Other investing activities | 89 | 531 |
| Net cash used in investing activities | (15,843) | (10,295) |
| **Financing activities** | | |
| Net payments related to stock-based award activities | (2,435) | (2,716) |
| Repurchases of capital stock | (6,602) | (15,348) |
| Proceeds from issuance of debt, net of costs | 317 | 1,898 |
| Repayments of debt | (393) | (1,982) |
| Proceeds from sale of interest in consolidated entities | 184 | 2,464 |
| Net cash used in financing activities | (8,929) | (15,684) |
| Effect of exchange rate changes on cash and cash equivalents | 31 | (221) |
| **Net decrease in cash and cash equivalents** | (114) | (756) |
| Cash and cash equivalents at beginning of period | 16,701 | 18,498 |
| **Cash and cash equivalents at end of period** | $ 16,587 | $ 17,742 |

See accompanying notes.

**Alphabet Inc.**
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**
**(Unaudited)**

## Note 1. Nature of Operations and Summary of Significant Accounting Policies

### Nature of Operations

Google was incorporated in California in September 1998 and re-incorporated in the State of Delaware in August 2003. In 2015, we implemented a holding company reorganization, and as a result, Alphabet Inc. (Alphabet) became the successor issuer to Google.

We generate revenues primarily by delivering relevant, cost-effective online advertising.

### Basis of Consolidation

The consolidated financial statements of Alphabet include the accounts of Alphabet and entities consolidated under the variable interest and voting models. All intercompany balances and transactions have been eliminated.

### Unaudited Interim Financial Information

The Consolidated Balance Sheet as of June 30, 2020, the Consolidated Statements of Income for the three and six months ended June 30, 2019 and 2020, the Consolidated Statements of Comprehensive Income for the three and six months ended June 30, 2019 and 2020, the Consolidated Statements of Stockholders' Equity for the three and six months ended June 30, 2019 and 2020 and the Consolidated Statements of Cash Flows for the six months ended June 30, 2019 and 2020 are unaudited. These unaudited interim consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP"). In our opinion, the unaudited interim consolidated financial statements include all adjustments of a normal recurring nature necessary for the fair presentation of our financial position as of June 30, 2020, our results of operations for the three and six months ended June 30, 2019 and 2020, and our cash flows for the six months ended June 30, 2019 and 2020. The results of operations for the three and six months ended June 30, 2020 are not necessarily indicative of the results to be expected for the year ending December 31, 2020.

These unaudited interim consolidated financial statements should be read in conjunction with the consolidated financial statements and the related notes included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the SEC.

### Use of Estimates

Preparation of consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported and disclosed in the financial statements and the accompanying notes. Actual results could differ materially from these estimates. On an ongoing basis, we evaluate our estimates, including those related to the allowance for credit losses, fair values of financial instruments, non-marketable equity securities, intangible assets and goodwill, useful lives of intangible assets and property and equipment, income taxes, and contingent liabilities, among others. We base our estimates on assumptions, both historical and forward looking, that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

As of June 30, 2020 the impact of COVID-19 continues to unfold and the extent of the impact will depend on a number of factors, including the duration and severity of the pandemic; the uneven impact to certain industries; advances in testing, treatment and prevention; and the macroeconomic impact of government measures to contain the spread of the virus and related government stimulus measures. As a result, certain of our estimates and assumptions, including the allowance for credit losses for accounts receivable, the credit worthiness of customers entering into revenue arrangements, the valuation of non-marketable equity securities, including our impairment assessment, the fair values of our financial instruments, and income taxes, require increased judgment and carry a higher degree of variability and volatility that could result in material changes to our estimates in future periods.

### Accounts Receivable

Our payment terms for accounts receivable vary by the type and location of our customer and the products or services offered. The term between invoicing and when payment is due is not significant. For certain products or services and customers, we require payment before the products or services are delivered to the customer.

We maintain an allowance for credit losses for accounts receivable, which is recorded as an offset to accounts receivable and changes in such are classified as general and administrative expense in the Consolidated Statements of Income. We assess collectibility by reviewing accounts receivable on a collective basis where similar characteristics exist and on an individual basis when we identify specific customers with known disputes or collectibility issues. In determining the amount of the allowance for credit losses, we consider historical collectibility based on past due status and make judgments about the creditworthiness of customers based on ongoing credit evaluations. We also consider customer-specific information, current market conditions and reasonable and supportable forecasts of future economic conditions to inform adjustments to historical loss data.

For the six months ended June 30, 2020, our assessment considered the impact of COVID-19 and estimates of expected credit and collectibility trends. Volatility in market conditions and evolving credit trends are difficult to predict and may cause variability and volatility that may have a material impact on our allowance for credit losses in future periods. The allowance for credit losses on accounts receivable was $275 million and $788 million as of December 31, 2019 and June 30, 2020, respectively.

**Recently Adopted Accounting Pronouncements**

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-13 ("ASU 2016-13") "Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments", which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model which requires the use of forward-looking information to calculate credit loss estimates. It also eliminates the concept of other-than-temporary impairment and requires credit losses related to certain available-for-sale debt securities to be recorded through an allowance for credit losses rather than as a reduction in the amortized cost basis of the securities. These changes result in earlier recognition of credit losses. We adopted ASU 2016-13 using the modified retrospective approach as of January 1, 2020. The cumulative effect upon adoption was not material to our consolidated financial statements. See "Accounts Receivable" above as well as Note 3 for the effect on our consolidated financial statements.

**Prior Period Reclassifications**

Certain amounts in prior periods have been reclassified to conform with current period presentation. Hedging gains (losses), which were previously included in Google revenues, are now reported separately as a component of total revenues for all periods presented. See Note 2 for further details.

**Note 2. Revenues**

**Disaggregated Revenues**

The following table presents our revenues disaggregated by revenue source (in millions, unaudited). Certain amounts in prior periods have been reclassified to conform with current period presentation.

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Google Search & other | $ 23,642 | $ 21,319 | $ 46,189 | $ 45,821 |
| YouTube ads[(1)] | 3,603 | 3,812 | 6,628 | 7,850 |
| Google properties | 27,245 | 25,131 | 52,817 | 53,671 |
| Google Network Members' properties | 5,249 | 4,736 | 10,264 | 9,959 |
| Google advertising | 32,494 | 29,867 | 63,081 | 63,630 |
| Google Cloud | 2,100 | 3,007 | 3,925 | 5,784 |
| Google other[(1)] | 4,080 | 5,124 | 7,700 | 9,559 |
| Google revenues | 38,674 | 37,998 | 74,706 | 78,973 |
| Other Bets revenues | 162 | 148 | 332 | 283 |
| Hedging gains | 108 | 151 | 245 | 200 |
| Total revenues | $ 38,944 | $ 38,297 | $ 75,283 | $ 79,456 |

(1) YouTube non-advertising revenues are included in Google other revenues.

The following table presents our revenues disaggregated by geography, based on the addresses of our customers (in millions, unaudited):

| | Three Months Ended June 30, | | | | Six Months Ended June 30, | | | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2019 | | 2020 | |
| United States | $ 17,863 | 46 % | $ 17,999 | 47 % | $ 34,395 | 46 % | $ 36,869 | 47 % |
| EMEA[(1)] | 12,313 | 32 | 11,363 | 30 | 23,981 | 32 | 24,208 | 30 |
| APAC[(1)] | 6,536 | 17 | 6,945 | 18 | 12,632 | 17 | 14,183 | 18 |
| Other Americas[(1)] | 2,124 | 5 | 1,839 | 5 | 4,030 | 5 | 3,996 | 5 |
| Hedging gains | 108 | 0 | 151 | 0 | 245 | 0 | 200 | 0 |
| Total revenues | $ 38,944 | 100 % | $ 38,297 | 100 % | $ 75,283 | 100 % | $ 79,456 | 100 % |

(1) Regions represent Europe, the Middle East, and Africa ("EMEA"); Asia-Pacific ("APAC"); and Canada and Latin America ("Other Americas").

### Deferred Revenues

We record deferred revenues when cash payments are received or due in advance of our performance, including amounts which are refundable. The increase in the deferred revenue balance for the six months ended June 30, 2020 was primarily driven by cash payments received or due in advance of satisfying our performance obligations, offset by $1.5 billion of revenues recognized that were included in the deferred revenue balance as of December 31, 2019.

Additionally, we have performance obligations associated with commitments in customer contracts, primarily related to Google Cloud, for future services that have not yet been recognized in revenue. This includes related deferred revenue currently recorded and amounts that will be invoiced in future periods. As of June 30, 2020, the amount not yet recognized in revenue from these commitments is $14.8 billion, which reflects our assessment of relevant contract terms and expectations of our customers' intent and ability to utilize our services. This amount excludes contracts (i) with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed. We expect to recognize approximately half over the next 24 months with the remaining thereafter. However, the amount and timing of revenue recognition is largely driven by customer utilization, which could impact our estimate of the remaining amount of commitments and when we expect to recognize such revenues.

## Note 3. Financial Instruments

### Debt Securities

We classify and account for our marketable debt securities as available-for-sale and carry these securities at fair value.

We report the unrealized gains and losses, net of taxes, as a component of stockholders' equity, except for certain unrealized gains and losses recorded in other income (expense), net, described below.

For debt securities in an unrealized loss position, we determine whether a credit loss exists. The estimate of credit loss is determined by considering available information relevant to the collectibility of the security and information about past events, current conditions, and reasonable and supportable forecasts. The allowance for credit loss is recorded as a charge to other income (expense), net, not to exceed the amount of the unrealized loss. Any excess unrealized loss greater than the credit loss at a security level is recognized in accumulated other comprehensive income ("AOCI"). We assess expected credit losses at the end of each reporting period and adjust the allowance through other income (expense), net.

For certain debt securities we have elected the fair value option for which changes in fair value are recorded in other income (expense), net. The fair value option was elected for these securities to align with the unrealized gains and losses from related derivative contracts. Unrealized net gains related to debt securities still held where we have elected the fair value option were $39 million as of June 30, 2020. As of June 30, 2020 the fair value of these debt securities was $2.3 billion. Balances as of December 31, 2019 were not material.

We classify our marketable debt securities within Level 2 in the fair value hierarchy because we use quoted market prices to the extent available or alternative pricing sources and models utilizing market observable inputs to determine fair value.

The following tables summarize our debt securities, for which we did not elect the fair value option, by significant investment categories as of December 31, 2019 and June 30, 2020 (in millions):

| | As of December 31, 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Adjusted Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value | Cash and Cash Equivalents | Marketable Securities |
| Level 2: | | | | | | |
| Time deposits[1] | $ 2,294 | $ 0 | $ 0 | $ 2,294 | $ 2,294 | $ 0 |
| Government bonds | 55,033 | 434 | (30) | 55,437 | 4,518 | 50,919 |
| Corporate debt securities | 27,164 | 337 | (3) | 27,498 | 44 | 27,454 |
| Mortgage-backed and asset-backed securities | 19,453 | 96 | (41) | 19,508 | 0 | 19,508 |
| Total | $ 103,944 | $ 867 | $ (74) | $ 104,737 | $ 6,856 | $ 97,881 |

| | As of June 30, 2020 | | | | | |
|---|---|---|---|---|---|---|
| | Adjusted Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value | Cash and Cash Equivalents | Marketable Securities |
| | (unaudited) | | | | | |
| Level 2: | | | | | | |
| Time deposits[1] | $ 3,588 | $ 0 | $ 0 | $ 3,588 | $ 3,588 | $ 0 |
| Government bonds | 55,913 | 1,098 | (2) | 57,009 | 1,218 | 55,791 |
| Corporate debt securities | 23,277 | 715 | (5) | 23,987 | 0 | 23,987 |
| Mortgage-backed and asset-backed securities | 16,398 | 373 | (14) | 16,757 | 0 | 16,757 |
| Total | $ 99,176 | $ 2,186 | $ (21) | $ 101,341 | $ 4,806 | $ 96,535 |

(1) The majority of our time deposits are domestic deposits.

We determine realized gains or losses on the sale or extinguishment of debt securities on a specific identification method. We recognized gross realized gains of $119 million and $306 million for the three months ended June 30, 2019 and 2020, respectively, and $165 million and $563 million for the six months ended June 30, 2019 and 2020, respectively. We recognized gross realized losses of $21 million and $88 million for the three months ended June 30, 2019 and 2020, respectively, and $69 million and $127 million for the six months ended June 30, 2019 and 2020, respectively. We reflect these gains and losses as a component of other income (expense), net.

The following table summarizes the estimated fair value of our investments in marketable debt securities with stated contractual maturity dates, accounted for as available-for-sale securities and classified by the contractual maturity date of the securities (in millions, unaudited):

| | As of June 30, 2020 |
|---|---|
| Due in 1 year or less | $ 24,027 |
| Due in 1 year through 5 years | 60,253 |
| Due in 5 years through 10 years | 1,993 |
| Due after 10 years | 12,571 |
| Total | $ 98,844 |

The following tables present fair values and gross unrealized losses recorded to AOCI as of December 31, 2019 and June 30, 2020, aggregated by investment category and the length of time that individual securities have been in a continuous loss position (in millions):

| | As of December 31, 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 Months | | 12 Months or Greater | | Total | |
| | Fair Value | Unrealized Loss | Fair Value | Unrealized Loss | Fair Value | Unrealized Loss |
| Government bonds | $ 6,752 | $ (20) | $ 4,590 | $ (10) | $ 11,342 | $ (30) |
| Corporate debt securities | 1,665 | (2) | 978 | (1) | 2,643 | (3) |
| Mortgage-backed and asset-backed securities | 4,536 | (13) | 2,835 | (28) | 7,371 | (41) |
| Total | $ 12,953 | $ (35) | $ 8,403 | $ (39) | $ 21,356 | $ (74) |

| | As of June 30, 2020 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 Months | | 12 Months or Greater | | Total | |
| | Fair Value | Unrealized Loss | Fair Value | Unrealized Loss | Fair Value | Unrealized Loss |
| | (unaudited) | | | | | |
| Government bonds | $ 3,152 | $ (2) | $ 14 | $ 0 | $ 3,166 | $ (2) |
| Corporate debt securities | 1,043 | (3) | 9 | 0 | 1,052 | (3) |
| Mortgage-backed and asset-backed securities | 824 | (10) | 269 | (4) | 1,093 | (14) |
| Total | $ 5,019 | $ (15) | $ 292 | $ (4) | $ 5,311 | $ (19) |

For marketable debt securities, during the three months ended June 30, 2020, we reduced the allowance for credit losses by $125 million. During the six months ended June 30, 2020 we recognized an allowance for credit losses of $2 million and the ending allowance for credit losses was $2 million. See Note 7 for further details on other income.

**Equity Investments**

The following discusses our marketable equity securities, non-marketable equity securities, gains and losses on marketable and non-marketable equity securities, as well as our equity securities accounted for under the equity method.

Our marketable equity securities are publicly traded stocks or funds measured at fair value and classified within Level 1 and 2 in the fair value hierarchy because we use quoted prices for identical assets in active markets or inputs that are based upon quoted prices for similar instruments in active markets. All gains and losses on marketable equity securities, realized and unrealized, are recognized in other income (expense), net.

Our non-marketable equity securities are investments in privately held companies without readily determinable market values. The carrying value of our non-marketable equity securities is adjusted to fair value for observable transactions for identical or similar investments of the same issuer or impairment (referred to as the measurement alternative). We qualitatively assess whether indicators of impairment exist. Factors considered in our impairment assessment include the companies' financial and liquidity position, access to capital resources, effects of COVID-19, and the time since the last adjustment to fair value, among others. If the assessment indicates that the investment is impaired, we estimate the fair value by using the best information available, which may include cash flow projections or other available market data.

All gains and losses, realized and unrealized, and impairments on non-marketable equity securities are recognized in other income (expense), net. Non-marketable equity securities that have been remeasured during the period based on observable transactions are classified within Level 2 or Level 3 in the fair value hierarchy because we estimate the value based on valuation methods which may include a combination of the observable transaction price at the transaction date and other unobservable inputs including volatility, rights, and obligations of the securities we hold. The fair value of non-marketable equity securities that have been remeasured due to impairment are classified within Level 3.

***Gains and losses on marketable and non-marketable equity securities***

Gains and losses recorded in other income (expense), net, for our marketable and non-marketable equity securities are summarized below (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Net gain on equity securities sold during the period | $ 80 | $ 18 | $ 130 | $ 233 |
| Net unrealized gain on equity securities held as of the end of the period[1] | 2,619 | 1,437 | 3,652 | 408 |
| Total gain recognized in other income (expense), net | $ 2,699 | $ 1,455 | $ 3,782 | $ 641 |

[1] Includes net gain related to non-marketable equity securities of $890 million and $91 million for the three months ended June 30, 2019 and 2020, respectively. Includes a net gain of $1.3 billion and a net loss of $850 million for the six months ended June 30, 2019 and 2020, respectively.

In the table above, net gain (loss) on equity securities sold during the period reflects the difference between the sale proceeds and the carrying value of the equity securities at the beginning of the period or the purchase date, if later.

Cumulative net gains on equity securities sold during the period, which is summarized in the following table (in millions, unaudited), represents the total net gains (losses) recognized after the initial purchase date of the equity security. While these net gains may have been reflected in periods prior to the period of sale, we believe they are important supplemental information as they reflect the economic realized net gains on the securities sold during the period. Cumulative net gains are calculated as the difference between the sale price and the initial purchase price for the equity security sold during the period.

| | Equity Securities Sold | | | |
|---|---|---|---|---|
| | Three Months Ended June 30, | | Six Months Ended June 30, | |
| | 2019 | 2020 | 2019 | 2020 |
| Total sale price | $ 389 | $ 590 | $ 629 | $ 1,499 |
| Total initial cost | 207 | 424 | 327 | 685 |
| Cumulative net gains | $ 182 | $ 166 | $ 302 | $ 814 |

***Carrying value of marketable and non-marketable equity securities***

The carrying value is measured as the total initial cost plus the cumulative net gain (loss). The carrying values for our marketable and non-marketable equity securities are summarized below (in millions):

| | As of December 31, 2019 | | |
|---|---|---|---|
| | Marketable Securities | Non-Marketable Securities | Total |
| Total initial cost | $ 1,935 | $ 8,297 | $ 10,232 |
| Cumulative net gain[1] | 1,361 | 3,056 | 4,417 |
| Carrying value | $ 3,296 | $ 11,353 | $ 14,649 |

[1] Non-marketable securities cumulative net gain is comprised of $3.5 billion unrealized gains and $445 million unrealized losses (including impairment).

| | As of June 30, 2020 | | |
|---|---|---|---|
| | Marketable Securities | Non-Marketable Securities | Total |
| | | (unaudited) | |
| Total initial cost | $ 2,358 | $ 9,173 | $ 11,531 |
| Cumulative net gain[1] | 2,136 | 2,106 | 4,242 |
| Carrying value | $ 4,494 | $ 11,279 | $ 15,773 |

[1] Non-marketable securities cumulative net gain is comprised of $3.9 billion unrealized gains and $1.8 billion unrealized losses (including impairment).

***Marketable equity securities***

The following table summarizes marketable equity securities measured at fair value by significant investment categories as of December 31, 2019 and June 30, 2020 (in millions):

| | As of December 31, 2019 | | As of June 30, 2020 | |
|---|---|---|---|---|
| | Cash and Cash Equivalents | Marketable Securities | Cash and Cash Equivalents | Marketable Securities |
| | | | (unaudited) | |
| Level 1: | | | | |
| Money market funds | $ 4,604 | $ 0 | $ 4,752 | $ 0 |
| Marketable equity securities[1] | 0 | 3,046 | 0 | 3,597 |
| | 4,604 | 3,046 | 4,752 | 3,597 |
| Level 2: | | | | |
| Mutual funds | 0 | 250 | 0 | 897 |
| Total | $ 4,604 | $ 3,296 | $ 4,752 | $ 4,494 |

[1] The balance as of December 31, 2019 includes investments that were reclassified from non-marketable equity securities following the initial public offering of the issuers.

***Non-marketable equity securities***

The following is a summary of unrealized gains and losses recorded in other income (expense), net, and included as adjustments to the carrying value of non-marketable equity securities (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Unrealized gains | $ 962 | $ 189 | $ 1,418 | $ 545 |
| Unrealized losses (including impairment) | (72) | (98) | (138) | (1,395) |
| Total unrealized gain (loss) for non-marketable equity securities | $ 890 | $ 91 | $ 1,280 | $ (850) |

During the three months ended June 30, 2020, included in the $11.3 billion of non-marketable equity securities, $1.4 billion were measured at fair value resulting in a net unrealized gain of $91 million.

***Equity securities accounted for under the Equity Method***

Equity securities accounted for under the equity method had a carrying value of approximately $1.3 billion and $1.2 billion as of December 31, 2019 and June 30, 2020, respectively. Our share of gains and losses including impairment are included as a component of other income (expense), net, in the Consolidated Statements of Income. See Note 7 for further details on other income (expense), net.

**Derivative Financial Instruments**

We enter into derivative instruments to manage risks relating to our ongoing business operations. The primary risk managed with derivative instruments is foreign exchange risk. We use foreign currency contracts to reduce the risk that our cash flows, earnings, and investment in foreign subsidiaries will be adversely affected by foreign currency exchange rate fluctuations. We also enter into derivative instruments to partially offset our business exposure to other risks and enhance investment returns.

We recognize derivative instruments as either assets or liabilities in the Consolidated Balance Sheets at fair value and classify the derivatives primarily within Level 2 in the fair value hierarchy. We present our collar contracts (an option strategy comprised of a combination of purchased and written options) at net fair values where both the purchased and written options are with the same counterparty. For other derivative contracts, we present at gross fair values. We primarily record changes in the fair value in the Consolidated Statements of Income as either other income (expense), net, or revenues, or in the Consolidated Balance Sheets in AOCI, as discussed below.

We enter into master netting arrangements, which reduce credit risk by permitting net settlement of transactions with the same counterparty. Further, we enter into collateral security arrangements that provide for collateral to be received or pledged when the net fair value of certain financial instruments fluctuates from contractually established thresholds. Cash collateral received related to derivative instruments under our collateral security arrangements are included in other current assets with a corresponding liability. Cash and non-cash collateral pledged related to derivative instruments under our collateral security arrangements are included in other current assets.

***Cash Flow Hedges***

We designate foreign currency forward and option contracts (including collars) as cash flow hedges to hedge certain forecasted revenue transactions denominated in currencies other than the U.S. dollar. These contracts have maturities of 24 months or less.

Cash flow hedge amounts included in the assessment of hedge effectiveness are deferred in AOCI and subsequently reclassified to revenue when the hedged item is recognized in earnings. We exclude the change in forward points and time value from our assessment of hedge effectiveness. The initial value of the excluded component is amortized on a straight-line basis over the life of the hedging instrument and recognized in revenues. The difference between fair value changes of the excluded component and the amount amortized to revenues is recorded in AOCI. If the hedged transactions become probable of not occurring, the corresponding amounts in AOCI are immediately reclassified to other income (expense), net.

As of June 30, 2020, the net accumulated gain on our foreign currency cash flow hedges before tax effect was $119 million, of which $119 million is expected to be reclassified from AOCI into earnings within the next 12 months.

***Fair Value Hedges***

We designate foreign currency forward contracts as fair value hedges to hedge foreign currency risks for our investments denominated in currencies other than the U.S. dollar. Fair value hedge amounts included in the assessment of hedge effectiveness are recognized in other income (expense), net, along with the offsetting gains and losses of the related hedged items. We exclude changes in forward points from the assessment of hedge effectiveness and recognize changes in the excluded component in other income (expense), net.

***Net Investment Hedges***

We designate foreign currency forward contracts as net investment hedges to hedge the foreign currency risks related to our investment in foreign subsidiaries. Net investment hedge amounts included in the assessment of hedge effectiveness are recognized in AOCI along with the foreign currency translation adjustment. We exclude changes in forward points from the assessment of hedge effectiveness and recognize changes in the excluded component in other income (expense), net.

***Other Derivatives***

Other derivatives not designated as hedging instruments consist primarily of foreign currency forward contracts that we use to hedge intercompany transactions and other monetary assets or liabilities denominated in currencies other than the local currency of a subsidiary. Gains and losses on these contracts, as well as the related costs, are recognized in other income (expense), net, along with the foreign currency gains and losses on monetary assets and liabilities.

We also use derivatives not designated as hedging instruments to manage risks relating to interest rates, equity and commodity prices, credit exposures and to enhance investment returns.

The gross notional amounts of our outstanding derivative instruments were as follows (in millions):

| | As of December 31, 2019 | As of June 30, 2020 |
|---|---|---|
| | | (unaudited) |
| **Derivatives Designated as Hedging Instruments:** | | |
| Foreign exchange contracts | | |
| Cash flow hedges | $ 13,207 | $ 7,245 |
| Fair value hedges | $ 455 | $ 458 |
| Net investment hedges | $ 9,318 | $ 9,253 |
| **Derivatives Not Designated as Hedging Instruments:** | | |
| Foreign exchange contracts | $ 43,497 | $ 30,918 |
| Other contracts | $ 117 | $ 2,634 |

The fair values of our outstanding derivative instruments were as follows (in millions):

| | | As of December 31, 2019 | | |
|---|---|---|---|---|
| | Balance Sheet Location | Fair Value of Derivatives Designated as Hedging Instruments | Fair Value of Derivatives Not Designated as Hedging Instruments | Total Fair Value |
| Derivative Assets: | | | | |
| Level 2: | | | | |
| Foreign exchange contracts | Other current and non-current assets | $ 91 | $ 253 | $ 344 |
| Other Contracts | Other current and non-current assets | 0 | 1 | 1 |
| Total | | $ 91 | $ 254 | $ 345 |
| Derivative Liabilities: | | | | |
| Level 2: | | | | |
| Foreign exchange contracts | Accrued expenses and other liabilities, current and non-current | $ 173 | $ 196 | $ 369 |
| Other Contracts | Accrued expenses and other liabilities, current and non-current | 0 | 13 | 13 |
| Total | | $ 173 | $ 209 | $ 382 |

| | | As of June 30, 2020 | | |
|---|---|---|---|---|
| | Balance Sheet Location | Fair Value of Derivatives Designated as Hedging Instruments | Fair Value of Derivatives Not Designated as Hedging Instruments | Total Fair Value |
| | | | (unaudited) | |
| Derivative Assets: | | | | |
| Level 2: | | | | |
| Foreign exchange contracts | Other current and non-current assets | $ 148 | $ 197 | $ 345 |
| Other contracts | Other current and non-current assets | 0 | 17 | 17 |
| Total | | $ 148 | $ 214 | $ 362 |
| Derivative Liabilities: | | | | |
| Level 2: | | | | |
| Foreign exchange contracts | Accrued expenses and other liabilities, current and non-current | $ 172 | $ 45 | $ 217 |
| Other contracts | Accrued expenses and other liabilities, current and non-current | 0 | 283 | 283 |
| Total | | $ 172 | $ 328 | $ 500 |

The gains (losses) on derivatives in cash flow hedging and net investment hedging relationships recognized in other comprehensive income ("OCI") are summarized below (in millions, unaudited):

| | Gains (Losses) Recognized in OCI on Derivatives Before Tax Effect | | | |
|---|---|---|---|---|
| | Three Months Ended June 30, | | Six Months Ended June 30, | |
| | 2019 | 2020 | 2019 | 2020 |
| **Derivatives in Cash Flow Hedging Relationship:** | | | | |
| Foreign exchange contracts | | | | |
| Amount included in the assessment of effectiveness | $ (42) | $ (44) | $ (48) | $ 368 |
| Amount excluded from the assessment of effectiveness | 11 | (49) | (19) | 3 |
| **Derivatives in Net Investment Hedging Relationship:** | | | | |
| Foreign exchange contracts | | | | |
| Amount included in the assessment of effectiveness | (83) | (121) | (19) | (41) |
| Total | $ (114) | $ (214) | $ (86) | $ 330 |

The effect of derivative instruments on income is summarized below (in millions, unaudited):

| | Gains (Losses) Recognized in Income | | | |
|---|---|---|---|---|
| | Three Months Ended June 30, | | | |
| | 2019 | | 2020 | |
| | Revenues | Other income (expense), net | Revenues | Other income (expense), net |
| Total amounts presented in the Consolidated Statements of Income in which the effects of cash flow and fair value hedges are recorded | $ 38,944 | $ 2,967 | $ 38,297 | $ 1,894 |
| | | | | |
| Gains (Losses) on Derivatives in Cash Flow Hedging Relationship: | | | | |
| Foreign exchange contracts | | | | |
| Amount of gains (losses) reclassified from AOCI to income | $ 85 | $ 0 | $ 140 | $ 0 |
| Amount excluded from the assessment of effectiveness recognized in earnings based on an amortization approach | 23 | 0 | 11 | 0 |
| Gains (Losses) on Derivatives in Fair Value Hedging Relationship: | | | | |
| Foreign exchange contracts | | | | |
| Hedged items | 0 | (13) | 0 | 9 |
| Derivatives designated as hedging instruments | 0 | 13 | 0 | (9) |
| Amount excluded from the assessment of effectiveness | 0 | 10 | 0 | 1 |
| Gains (Losses) on Derivatives in Net Investment Hedging Relationship: | | | | |
| Foreign exchange contracts | | | | |
| Amount excluded from the assessment of effectiveness | 0 | 57 | 0 | 33 |
| Gains (Losses) on Derivatives Not Designated as Hedging Instruments: | | | | |
| Foreign exchange contracts | 0 | 95 | 0 | (69) |
| Other Contracts | 0 | 0 | 0 | (211) |
| Total gains (losses) | $ 108 | $ 162 | $ 151 | $ (246) |

| | Gains (Losses) Recognized in Income | | | |
|---|---|---|---|---|
| | Six Months Ended June 30, | | | |
| | 2019 | | 2020 | |
| | Revenues | Other income (expense), net | Revenues | Other income (expense), net |
| Total amounts presented in the Consolidated Statements of Income in which the effects of cash flow and fair value hedges are recorded | $ 75,283 | $ 4,505 | $ 79,456 | $ 1,674 |
| Gains (Losses) on Derivatives in Cash Flow Hedging Relationship: | | | | |
| Foreign exchange contracts | | | | |
| Amount of gains (losses) reclassified from AOCI to income | $ 213 | $ 0 | $ 166 | $ 0 |
| Amount excluded from the assessment of effectiveness recognized in earnings based on an amortization approach | 32 | 0 | 34 | 0 |
| Gains (Losses) on Derivatives in Fair Value Hedging Relationship: | | | | |
| Foreign exchange contracts | | | | |
| Hedged items | 0 | 9 | 0 | (8) |
| Derivatives designated as hedging instruments | 0 | (9) | 0 | 8 |
| Amount excluded from the assessment of effectiveness | 0 | 20 | 0 | 2 |
| Gains (Losses) on Derivatives in Net Investment Hedging Relationship: | | | | |
| Foreign exchange contracts | | | | |
| Amount excluded from the assessment of effectiveness | 0 | 111 | 0 | 111 |
| Gains (Losses) on Derivatives Not Designated as Hedging Instruments: | | | | |
| Foreign exchange contracts | 0 | (154) | 0 | 160 |
| Other Contracts | 0 | 0 | 0 | (239) |
| Total gains (losses) | $ 245 | $ (23) | $ 200 | $ 34 |

## Offsetting of Derivatives

The gross amounts of our derivative instruments subject to master netting arrangements with various counterparties, and cash and non-cash collateral received and pledged under such agreements were as follows (in millions):

### *Offsetting of Assets*

| | As of December 31, 2019 | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | Gross Amounts Not Offset in the Consolidated Balance Sheets, but Have Legal Rights to Offset | | | |
| | Gross Amounts of Recognized Assets | Gross Amounts Offset in the Consolidated Balance Sheets | Net Presented in the Consolidated Balance Sheets | Financial Instruments | Cash Collateral Received | Non-Cash Collateral Received | Net Assets Exposed |
| Derivatives | $ 365 | $ (21) | $ 344 | $ (88) (1) | $ (234) | $ 0 | $ 22 |

| | As of June 30, 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | Gross Amounts Not Offset in the Consolidated Balance Sheets, but Have Legal Rights to Offset | | | |
| | Gross Amounts of Recognized Assets | Gross Amounts Offset in the Consolidated Balance Sheets | Net Presented in the Consolidated Balance Sheets | Financial Instruments | Cash Collateral Received | Non-Cash Collateral Received | Net Assets Exposed |
| | | | | (unaudited) | | | |
| Derivatives | $ 397 | $ (35) | $ 362 | $ (203) (1) | $ (101) | $ (22) | $ 36 |

(1) The balances as of December 31, 2019 and June 30, 2020 were related to derivative liabilities which are allowed to be net settled against derivative assets in accordance with our master netting agreements.

### *Offsetting of Liabilities*

| | As of December 31, 2019 | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | Gross Amounts Not Offset in the Consolidated Balance Sheets, but Have Legal Rights to Offset | | | |
| | Gross Amounts of Recognized Liabilities | Gross Amounts Offset in the Consolidated Balance Sheets | Net Presented in the Consolidated Balance Sheets | Financial Instruments | Cash Collateral Pledged | Non-Cash Collateral Pledged | Net Liabilities |
| Derivatives | $ 390 | $ (21) | $ 369 | $ (88) (2) | $ 0 | $ 0 | $ 281 |

| | As of June 30, 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | Gross Amounts Not Offset in the Consolidated Balance Sheets, but Have Legal Rights to Offset | | | |
| | Gross Amounts of Recognized Liabilities | Gross Amounts Offset in the Consolidated Balance Sheets | Net Presented in the Consolidated Balance Sheets | Financial Instruments | Cash Collateral Pledged | Non-Cash Collateral Pledged | Net Liabilities |
| | | | | (unaudited) | | | |
| Derivatives | $ 535 | $ (35) | $ 500 | $ (203) (2) | $ (2) | $ (263) | $ 32 |

(2) The balances as of December 31, 2019 and June 30, 2020 were related to derivative assets which are allowed to be net settled against derivative liabilities in accordance with our master netting agreements.

## Note 4. Leases

We have entered into operating and finance lease agreements primarily for data centers, land and offices throughout the world with lease periods expiring between 2020 and 2063.

Components of operating lease expense were as follows (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Operating lease cost | $ 427 | $ 544 | $ 825 | $ 1,067 |
| Variable lease cost | 130 | 155 | 258 | 295 |
| Total operating lease cost | $ 557 | $ 699 | $ 1,083 | $ 1,362 |

Supplemental information related to operating leases is as follows (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Cash payments for operating leases | $ 396 | $ 493 | $ 770 | $ 923 |
| New operating lease assets obtained in exchange for operating lease liabilities | $ 1,322 | $ 671 | $ 2,453 | $ 1,441 |

As of June 30, 2020, our operating leases had a weighted average remaining lease term of 9 years and a weighted average discount rate of 2.7%. Future lease payments under operating leases that have commenced as of June 30, 2020 were as follows (in millions, unaudited):

| | Operating Leases |
|---|---|
| Remainder of 2020 | $ 937 |
| 2021 | 2,048 |
| 2022 | 1,907 |
| 2023 | 1,726 |
| 2024 | 1,493 |
| Thereafter | 6,330 |
| Total future lease payments | 14,441 |
| Less imputed interest | (2,316) |
| Total lease liability balance | $ 12,125 |

As of June 30, 2020, we have entered into leases that have not yet commenced with future lease payments of $7.3 billion, excluding purchase options, that are not yet recorded on our Consolidated Balance Sheets. These leases will commence between 2020 and 2026 with non-cancelable lease terms of 1 to 25 years.

**Note 5. Variable Interest Entities (VIEs)**

**Consolidated VIEs**

We consolidate VIEs in which we hold a variable interest and are the primary beneficiary. We are the primary beneficiary because we have the power to direct activities that most significantly affect their economic performance and have the obligation to absorb the majority of their losses or benefits. The results of operations and financial position of these VIEs are included in our consolidated financial statements.

For certain consolidated VIEs, their assets are not available to us and their creditors do not have recourse to us. As of December 31, 2019 and June 30, 2020, assets that can only be used to settle obligations of these VIEs were $3.1 billion and $5.8 billion, respectively, and the liabilities for which creditors only have recourse to the VIEs were $1.2 billion and $2.4 billion, respectively.

Total noncontrolling interests, including redeemable noncontrolling interests, in our consolidated subsidiaries increased from $1.2 billion to $3.7 billion from December 31, 2019 to June 30, 2020, primarily due to external investments in Waymo. Net loss attributable to noncontrolling interests was not material for any period presented.

***Waymo***

Waymo is a self-driving technology development company with a mission to make it safe and easy for people and things to get where they're going. During the six months ended June 30, 2020, Waymo completed its externally led investment round, bringing the total funding to $3.2 billion, which includes investment from Alphabet. No gain or loss was recognized. The investments related to external parties were accounted for as equity transactions and resulted in recognition of noncontrolling interests.

**Unconsolidated VIEs**

Certain of our non-marketable investments, including certain renewable energy investments accounted for under the equity method and certain other investments in private companies, are VIEs. The renewable energy entities' activities involve power generation using renewable sources. Private companies that we invest in are primarily early stage companies.

We have determined that the governance structures of these entities do not allow us to direct the activities that would significantly affect their economic performance. Therefore, we do not consolidate these VIEs in our consolidated financial statements.

Our maximum exposure to these unconsolidated VIEs is generally based on the current carrying value of the investments and any future funding commitments. The carrying value and maximum exposure of these unconsolidated VIEs were not material as of December 31, 2019 and June 30, 2020.

**Note 6. Debt**

**Short-Term Debt**

We have a debt financing program of up to $5.0 billion through the issuance of commercial paper. Net proceeds from this program are used for general corporate purposes. We had no commercial paper outstanding as of December 31, 2019 and June 30, 2020.

Our short-term debt balance also includes the short-term portion of certain long-term debt.

**Long-Term Debt**

Google issued $3.0 billion of senior unsecured notes in three tranches (collectively, "2011 Notes") in May 2011, due in 2014, 2016, and 2021, as well as $1.0 billion of senior unsecured notes ("2014 Notes") in February 2014 due in 2024.

In April 2016, we completed an exchange offer with eligible holders of Google's 2011 Notes due 2021 and 2014 Notes due 2024 (collectively, the "Google Notes"). An aggregate principal amount of approximately $1.7 billion of the Google Notes was exchanged for approximately $1.7 billion of Alphabet notes with identical interest rate and maturity. Because the exchange was between a parent and the subsidiary company and for substantially identical notes, the change was treated as a debt modification for accounting purposes with no gain or loss recognized.

In August 2016, Alphabet issued $2.0 billion of senior unsecured notes ("2016 Notes") due 2026. The net proceeds from the issuance of the 2016 Notes were used for general corporate purposes, including the repayment of outstanding commercial paper. The Alphabet notes due in 2021, 2024, and 2026 rank equally with each other and are structurally subordinate to the outstanding Google Notes.

The total outstanding debt is summarized below (in millions):

| | As of December 31, 2019 | As of June 30, 2020 |
|---|---|---|
| | | (unaudited) |
| Short-term portion of long-term debt | | |
| 3.625% Notes due on May 19, 2021 | $ 0 | $ 999 |
| Total future finance lease payments | 117 | 139 |
| Less: imputed interest for finance leases | (2) | (2) |
| Total short-term portion of long-term debt[1] | $ 115 | $ 1,136 |
| | | |
| Long-term debt | | |
| 3.625% Notes due on May 19, 2021 | $ 1,000 | $ 0 |
| 3.375% Notes due on February 25, 2024 | 1,000 | 1,000 |
| 1.998% Notes due on August 15, 2026 | 2,000 | 2,000 |
| Unamortized discount for the Notes above | (42) | (37) |
| Subtotal | 3,958 | 2,963 |
| Total future finance lease payments | 685 | 1,171 |
| Less: imputed interest for finance leases | (89) | (116) |
| Total long-term debt | $ 4,554 | $ 4,018 |

(1) Total short-term portion of long-term debt is included within other accrued expenses and current liabilities. See Note 7.

The effective interest yields based on proceeds received from the outstanding notes due in 2021, 2024, and 2026 were 3.734%, 3.377%, and 2.231%, respectively, with interest payable semi-annually. We may redeem these notes at any time in whole or in part at specified redemption prices. The total estimated fair value of all outstanding notes was approximately $4.1 billion and $4.3 billion as of December 31, 2019 and June 30, 2020, respectively. The fair value was determined based on observable market prices of identical instruments in less active markets and is categorized accordingly as Level 2 in the fair value hierarchy.

**Credit Facility**

As of June 30, 2020, we have $4.0 billion of revolving credit facilities which expire in July 2023. The interest rate for the credit facilities is determined based on a formula using certain market rates. No amounts were outstanding under the credit facilities as of December 31, 2019 and June 30, 2020.

## Note 7. Supplemental Financial Statement Information

### Property and Equipment, Net

Property and equipment, net, consisted of the following (in millions):

| | As of December 31, 2019 | As of June 30, 2020 |
|---|---|---|
| | | (unaudited) |
| Land and buildings | $ 39,865 | $ 44,494 |
| Information technology assets | 36,840 | 40,731 |
| Construction in progress | 21,036 | 21,948 |
| Leasehold improvements | 6,310 | 6,922 |
| Furniture and fixtures | 156 | 197 |
| Property and equipment, gross | 104,207 | 114,292 |
| Less: accumulated depreciation | (30,561) | (35,544) |
| Property and equipment, net | $ 73,646 | $ 78,748 |

### Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following (in millions):

| | As of December 31, 2019 | As of June 30, 2020 |
|---|---|---|
| | | (unaudited) |
| European Commission fines[1] | $ 9,405 | $ 9,510 |
| Accrued customer liabilities | 2,245 | 2,407 |
| Accrued purchases of property and equipment | 2,411 | 1,976 |
| Current operating lease liabilities | 1,199 | 1,416 |
| Other accrued expenses and current liabilities | 7,807 | 9,117 |
| Accrued expenses and other current liabilities | $ 23,067 | $ 24,426 |

[1] Includes the effects of foreign exchange and interest. See Note 10 for further details.

### Accumulated Other Comprehensive Income (Loss)

The components of AOCI, net of tax, were as follows (in millions, unaudited):

| | Foreign Currency Translation Adjustments | Unrealized Gains (Losses) on Available-for-Sale Investments | Unrealized Gains (Losses) on Cash Flow Hedges | Total |
|---|---|---|---|---|
| Balance as of December 31, 2018 | $ (1,884) | $ (688) | $ 266 | $ (2,306) |
| Cumulative effect of accounting change | 0 | 0 | (30) | (30) |
| Other comprehensive income (loss) before reclassifications | 82 | 1,460 | (36) | 1,506 |
| Amounts excluded from the assessment of hedge effectiveness recorded in AOCI | 0 | 0 | (19) | (19) |
| Amounts reclassified from AOCI | 0 | (68) | (174) | (242) |
| Other comprehensive income (loss) | 82 | 1,392 | (229) | 1,245 |
| Balance as of June 30, 2019 | $ (1,802) | $ 704 | $ 7 | $ (1,091) |

| | Foreign Currency Translation Adjustments | Unrealized Gains (Losses) on Available-for-Sale Investments | Unrealized Gains (Losses) on Cash Flow Hedges | Total |
|---|---|---|---|---|
| Balance as of December 31, 2019 | $ (2,003) | $ 812 | $ (41) | $ (1,232) |
| Other comprehensive income (loss) before reclassifications | (266) | 1,365 | 289 | 1,388 |
| Amounts excluded from the assessment of hedge effectiveness recorded in AOCI | 0 | 0 | 3 | 3 |
| Amounts reclassified from AOCI | 0 | (318) | (137) | (455) |
| Other comprehensive income (loss) | (266) | 1,047 | 155 | 936 |
| Balance as of June 30, 2020 | $ (2,269) | $ 1,859 | $ 114 | $ (296) |

The effects on net income of amounts reclassified from AOCI were as follows (in millions, unaudited):

| | | Gains (Losses) Reclassified from AOCI to the Consolidated Statements of Income | | | |
|---|---|---|---|---|---|
| | | Three Months Ended June 30, | | Six Months Ended June 30, | |
| AOCI Components | Location | 2019 | 2020 | 2019 | 2020 |
| Unrealized gains (losses) on available-for-sale investments | | | | | |
| | Other income (expense), net | $ 98 | $ 189 | $ 96 | $ 403 |
| | Benefit (provision) for income taxes | (23) | (40) | (28) | (85) |
| | Net of tax | 75 | 149 | 68 | 318 |
| Unrealized gains (losses) on cash flow hedges | | | | | |
| Foreign exchange contracts | Revenue | 85 | 140 | 213 | 166 |
| Interest rate contracts | Other income (expense), net | 2 | 2 | 3 | 3 |
| | Benefit (provision) for income taxes | (17) | (27) | (42) | (32) |
| | Net of tax | 70 | 115 | 174 | 137 |
| Total amount reclassified, net of tax | | $ 145 | $ 264 | $ 242 | $ 455 |

**Other Income (Expense), Net**

The components of other income (expense), net, were as follows (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Interest income | $ 653 | $ 433 | $ 1,175 | $ 1,019 |
| Interest expense[(1)] | (25) | (13) | (60) | (34) |
| Foreign currency exchange gain (loss), net | (52) | (92) | 22 | (173) |
| Gain on debt securities, net | 98 | 387 | 96 | 399 |
| Gain on equity securities, net | 2,699 | 1,455 | 3,782 | 641 |
| Performance fees | (443) | (75) | (560) | (69) |
| Income (loss) and impairment from equity method investments, net | (16) | (54) | (56) | 20 |
| Other | 53 | (147) | 106 | (129) |
| Other income (expense), net | $ 2,967 | $ 1,894 | $ 4,505 | $ 1,674 |

(1) Interest expense is net of interest capitalized of $36 million and $57 million for the three months ended June 30, 2019 and 2020, respectively, and $67 million and $109 million for the six months ended June 30, 2019 and 2020, respectively.

**Note 8. Acquisitions**

During the six months ended June 30, 2020, we completed acquisitions and purchases of intangible assets for total consideration of approximately $378 million, net of cash acquired. In aggregate, $129 million was attributed to intangible assets, $201 million to goodwill, and $48 million to net assets acquired. These acquisitions generally enhance the breadth and depth of our offerings and expand our expertise in engineering and other functional areas.

Pro forma results of operations for these acquisitions have not been presented because they are not material to the consolidated results of operations, either individually or in the aggregate.

For all intangible assets acquired and purchased during the six months ended June 30, 2020, patents and developed technology have a weighted-average useful life of 3.8 years, customer relationships have a weighted-average useful life of 5.0 years, and trade names and other have a weighted-average useful life of 5.0 years.

***Pending Acquisition of Fitbit***

In November 2019, we entered into an agreement to acquire Fitbit, a leading wearables brand, for $7.35 per share, representing a total purchase price of approximately $2.1 billion as of the date of the agreement. The acquisition of Fitbit is expected to be completed later this year, subject to customary closing conditions, including the receipt of regulatory approvals. Upon the close of the acquisition, Fitbit will be part of the Google segment.

## Note 9. Goodwill and Other Intangible Assets

### Goodwill

Changes in the carrying amount of goodwill for the six months ended June 30, 2020 were as follows (in millions, unaudited):

| | Google | Other Bets | Total Consolidated |
|---|---|---|---|
| Balance as of December 31, 2019 | $ 19,921 | $ 703 | $ 20,624 |
| Acquisitions | 201 | 0 | 201 |
| Foreign currency translation and other adjustments | 5 | (6) | (1) |
| Balance as of June 30, 2020 | $ 20,127 | $ 697 | $ 20,824 |

### Other Intangible Assets

Information regarding purchased intangible assets were as follows (in millions):

| | As of December 31, 2019 | | |
|---|---|---|---|
| | Gross Carrying Amount | Accumulated Amortization | Net Carrying Amount |
| Patents and developed technology | $ 4,972 | $ 3,570 | $ 1,402 |
| Customer relationships | 254 | 30 | 224 |
| Trade names and other | 703 | 350 | 353 |
| Total | $ 5,929 | $ 3,950 | $ 1,979 |

| | As of June 30, 2020 | | |
|---|---|---|---|
| | Gross Carrying Amount | Accumulated Amortization | Net Carrying Amount |
| | | (unaudited) | |
| Patents and developed technology | $ 4,724 | $ 3,523 | $ 1,201 |
| Customer relationships | 245 | 38 | 207 |
| Trade names and other | 700 | 411 | 289 |
| Total | $ 5,669 | $ 3,972 | $ 1,697 |

Amortization expense relating to purchased intangible assets was $209 million and $194 million for the three months ended June 30, 2019 and 2020, respectively, and $406 million and $398 million for the six months ended June 30, 2019 and 2020, respectively.

As of June 30, 2020, expected amortization expense relating to purchased intangible assets for each of the next five years and thereafter was as follows (in millions, unaudited):

| | |
|---|---|
| Remainder of 2020 | $ 368 |
| 2021 | 690 |
| 2022 | 350 |
| 2023 | 79 |
| 2024 | 57 |
| Thereafter | 153 |
| Total | $ 1,697 |

## Note 10. Contingencies

### Indemnifications

In the normal course of business, to facilitate transactions in our services and products, we indemnify certain parties, including advertisers, Google Network Members, customers of Google Cloud offerings, and lessors with respect to certain matters. We have agreed to hold certain parties harmless against losses arising from a breach of representations or covenants, or out of intellectual property infringement or other claims made against certain parties. Several of these agreements limit the time within which an indemnification claim can be made and the amount of the claim. In addition, we have entered into indemnification agreements with our officers and directors, and our bylaws contain similar indemnification obligations to our agents.

It is not possible to make a reasonable estimate of the maximum potential amount under these indemnification agreements due to the unique facts and circumstances involved in each particular agreement. Additionally, we have a limited history of prior indemnification claims and the payments we have made under such agreements have not had a material adverse effect on our results of operations, cash flows, or financial position. However, to the extent that valid indemnification claims arise in the future, future payments by us could be significant and could have a material adverse effect on our results of operations or cash flows in a particular period.

As of June 30, 2020, we did not have any material indemnification claims that were probable or reasonably possible.

**Legal Matters**

***Antitrust Investigations***

On November 30, 2010, the EC's Directorate General for Competition opened an investigation into various antitrust-related complaints against us.

On June 27, 2017, the EC announced its decision that certain actions taken by Google regarding its display and ranking of shopping search results and ads infringed European competition law. The EC decision imposed a €2.4 billion ($2.7 billion as of June 27, 2017) fine. On September 11, 2017, we appealed the EC decision and on September 27, 2017, we implemented product changes to bring shopping ads into compliance with the EC's decision. We recognized a charge of $2.7 billion for the fine in the second quarter of 2017.

On July 18, 2018, the EC announced its decision that certain provisions in Google’s Android-related distribution agreements infringed European competition law. The EC decision imposed a €4.3 billion ($5.1 billion as of June 30, 2018) fine and directed the termination of the conduct at issue. On October 9, 2018, we appealed the EC decision. On October 29, 2018, we implemented changes to certain of our Android distribution practices. We recognized a charge of $5.1 billion for the fine in the second quarter of 2018.

On March 20, 2019, the EC announced its decision that certain contractual provisions in agreements that Google had with AdSense for Search partners infringed European competition law. The EC decision imposed a fine of €1.5 billion ($1.7 billion as of March 20, 2019) and directed actions related to AdSense for Search partners' agreements, which we implemented prior to the decision. On June 4, 2019, we appealed the EC decision. We recognized a charge of $1.7 billion for the fine in the first quarter of 2019.

While each EC decision is under appeal, we included the fines in accrued expenses and other current liabilities on our Consolidated Balance Sheets as we provided bank guarantees (in lieu of a cash payment) for the fines.

From time to time we are subject to formal and informal inquiries and investigations by competition authorities in the United States, Europe, and other jurisdictions. For example, in August 2019, we began receiving civil investigative demands from the U.S. Department of Justice requesting information and documents relating to our prior antitrust investigations and certain of our business practices. State attorneys general have also opened antitrust investigations into certain of our business practices. We continue to cooperate with federal and state regulators in the United States, and other regulators around the world.

***Patent and Intellectual Property Claims***

We have had patent, copyright, trade secret, and trademark infringement lawsuits filed against us claiming that certain of our products, services, and technologies infringe others' intellectual property rights. Adverse results in these lawsuits may include awards of substantial monetary damages, costly royalty or licensing agreements, or orders preventing us from offering certain features, functionalities, products, or services. As a result, we may have to change our business practices, and develop non-infringing products or technologies, which could result in a loss of revenues for us and otherwise harm our business. In addition, the U.S. International Trade Commission ("ITC") has increasingly become an important forum to litigate intellectual property disputes because an ultimate loss in an ITC action can result in a prohibition on importing infringing products into the U.S. Because the U.S. is an important market, a prohibition on importation could have an adverse effect on us, including preventing us from importing many important products into the U.S. or necessitating workarounds that may limit certain features of our products.

Furthermore, many of our agreements with our customers and partners require us to indemnify them against certain intellectual property infringement claims, which would increase our costs as a result of defending such claims, and may require that we pay significant damages if there were an adverse ruling in any such claims. In addition, our customers and partners may discontinue the use of our products, services, and technologies, as a result of injunctions or otherwise, which could result in loss of revenues and adversely affect our business.

In 2010, Oracle America, Inc. ("Oracle") brought a copyright lawsuit against Google in the Northern District of California, alleging that Google's Android operating system infringes Oracle's copyrights related to certain Java application programming interfaces. After trial, final judgment was entered by the district court in favor of Google on June 8, 2016, and the court decided post-trial motions in favor of Google. Oracle appealed and on March 27, 2018, the appeals court reversed and remanded the case for a trial on damages. On May 29, 2018, we filed a petition for a rehearing at the Federal Circuit, and on August 28, 2018, the Federal Circuit denied the petition. On January 24, 2019, we filed a petition to the Supreme Court of the United States to review this case. On April 29, 2019, the Supreme Court requested the views of the Solicitor General regarding our petition. On September 27, 2019, the Solicitor General recommended denying our petition, and we provided our response on October 16, 2019. On November 15, 2019, the Supreme Court granted our petition and made a decision to review the case. If the Supreme Court does not rule in our favor, the case will be remanded to the district court for further determination of the remaining issues in the case, including damages, if any. We believe this lawsuit is without merit and are defending ourselves vigorously. Given the nature of this case, we are unable to estimate the reasonably possible loss or range of loss, if any, arising from this matter.

***Other***

We are also regularly subject to claims, suits, regulatory and government investigations, and other proceedings involving competition, intellectual property, privacy, tax and related compliance, labor and employment, commercial disputes, content generated by our users, goods and services offered by advertisers or publishers using our platforms, personal injury, consumer protection, and other matters. Such claims, suits, regulatory and government investigations, and other proceedings could result in fines, civil or criminal penalties, or other adverse consequences.

Certain of these outstanding matters include speculative, substantial or indeterminate monetary amounts. We record a liability when we believe that it is probable that a loss has been incurred and the amount can be reasonably estimated. If we determine that a loss is reasonably possible and the loss or range of loss can be estimated, we disclose the reasonably possible loss. We evaluate developments in our legal matters that could affect the amount of liability that has been previously accrued, and the matters and related reasonably possible losses disclosed, and make adjustments as appropriate. Significant judgment is required to determine both likelihood of there being and the estimated amount of a loss related to such matters.

With respect to our outstanding matters, based on our current knowledge, we believe that the amount or range of reasonably possible loss will not, either individually or in aggregate, have a material adverse effect on our business, consolidated financial position, results of operations, or cash flows. However, the outcome of such matters is inherently unpredictable and subject to significant uncertainties.

We expense legal fees in the period in which they are incurred.

**Non-Income Taxes**

We are under audit by various domestic and foreign tax authorities with regards to non-income tax matters. The subject matter of non-income tax audits primarily arises from disputes on the tax treatment and tax rate applied to the sale of our products and services in these jurisdictions and the tax treatment of certain employee benefits. We accrue non-income taxes that may result from examinations by, or any negotiated agreements with, these tax authorities when a loss is probable and reasonably estimable. If we determine that a loss is reasonably possible and the loss or range of loss can be estimated, we disclose the reasonably possible loss. We believe these matters are without merit and we are defending ourselves vigorously. Due to the inherent complexity and uncertainty of these matters and judicial process in certain jurisdictions, the final outcome may be materially different from our expectations.

For information regarding income tax contingencies, see Note 14.

**Note 11. Stockholders' Equity**

**Share Repurchases**

In July 2019 the Board of Directors of Alphabet authorized the company to repurchase up to $25.0 billion of its Class C capital stock. As of June 30, 2020, $5.4 billion remains available for repurchase. In July 2020, the Board of Directors of Alphabet authorized the company to repurchase up to an additional $28.0 billion of its Class C capital stock. The repurchases are being executed from time to time, subject to general business and market conditions and other investment opportunities, through open market purchases or privately negotiated transactions, including through Rule 10b5-1 plans. The repurchase program does not have an expiration date.

During the six months ended June 30, 2020, we repurchased and subsequently retired 11.6 million shares of Alphabet Class C capital stock for an aggregate amount of $15.3 billion.

### Note 12. Net Income Per Share

The following table sets forth the computation of basic and diluted net income per share of Class A and Class B common stock and Class C capital stock (in millions, except share amounts which are reflected in thousands, and per share amounts, unaudited):

| | Three Months Ended June 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | |
| | Class A | Class B | Class C | Class A | Class B | Class C |
| Basic net income per share: | | | | | | |
| Numerator | | | | | | |
| Allocation of undistributed earnings | $ 4,286 | $ 667 | $ 4,994 | $ 3,055 | $ 473 | $ 3,431 |
| Denominator | | | | | | |
| Number of shares used in per share computation | 299,035 | 46,525 | 348,409 | 299,308 | 46,355 | 336,105 |
| Basic net income per share | $ 14.33 | $ 14.33 | $ 14.33 | $ 10.21 | $ 10.21 | $ 10.21 |
| Diluted net income per share: | | | | | | |
| Numerator | | | | | | |
| Allocation of undistributed earnings for basic computation | $ 4,286 | $ 667 | $ 4,994 | $ 3,055 | $ 473 | $ 3,431 |
| Reallocation of undistributed earnings as a result of conversion of Class B to Class A shares | 667 | 0 | 0 | 473 | 0 | 0 |
| Reallocation of undistributed earnings | (36) | (6) | 36 | (26) | (3) | 26 |
| Allocation of undistributed earnings | $ 4,917 | $ 661 | $ 5,030 | $ 3,502 | $ 470 | $ 3,457 |
| Denominator | | | | | | |
| Number of shares used in basic computation | 299,035 | 46,525 | 348,409 | 299,308 | 46,355 | 336,105 |
| Weighted-average effect of dilutive securities | | | | | | |
| Add: | | | | | | |
| Conversion of Class B to Class A common shares outstanding | 46,525 | 0 | 0 | 46,355 | 0 | 0 |
| Restricted stock units and other contingently issuable shares | 453 | 0 | 5,532 | 92 | 0 | 5,164 |
| Number of shares used in per share computation | 346,013 | 46,525 | 353,941 | 345,755 | 46,355 | 341,269 |
| Diluted net income per share | $ 14.21 | $ 14.21 | $ 14.21 | $ 10.13 | $ 10.13 | $ 10.13 |

| | Six Months Ended June 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | | 2020 | | |
| | Class A | Class B | Class C | Class A | Class B | Class C |
| Basic net income per share: | | | | | | |
| Numerator | | | | | | |
| Allocation of undistributed earnings | $ 7,150 | $ 1,113 | $ 8,341 | $ 6,042 | $ 935 | $ 6,818 |
| Denominator | | | | | | |
| Number of shares used in per share computation | 299,025 | 46,562 | 348,832 | 299,642 | 46,383 | 338,092 |
| Basic net income per share | $ 23.91 | $ 23.91 | $ 23.91 | $ 20.16 | $ 20.16 | $ 20.16 |
| Diluted net income per share: | | | | | | |
| Numerator | | | | | | |
| Allocation of undistributed earnings for basic computation | $ 7,150 | $ 1,113 | $ 8,341 | $ 6,042 | $ 935 | $ 6,818 |
| Reallocation of undistributed earnings as a result of conversion of Class B to Class A shares | 1,113 | 0 | 0 | 935 | 0 | 0 |
| Reallocation of undistributed earnings | (59) | (9) | 59 | (53) | (7) | 53 |
| Allocation of undistributed earnings | $ 8,204 | $ 1,104 | $ 8,400 | $ 6,924 | $ 928 | $ 6,871 |
| Denominator | | | | | | |
| Number of shares used in basic computation | 299,025 | 46,562 | 348,832 | 299,642 | 46,383 | 338,092 |
| Weighted-average effect of dilutive securities | | | | | | |
| Add: | | | | | | |
| Conversion of Class B to Class A common shares outstanding | 46,562 | 0 | 0 | 46,383 | 0 | 0 |
| Restricted stock units and other contingently issuable shares | 482 | 0 | 5,516 | 135 | 0 | 5,394 |
| Number of shares used in per share computation | 346,069 | 46,562 | 354,348 | 346,160 | 46,383 | 343,486 |
| Diluted net income per share | $ 23.71 | $ 23.71 | $ 23.71 | $ 20.00 | $ 20.00 | $ 20.00 |

For the periods presented above, the net income per share amounts are the same for Class A and Class B common stock and Class C capital stock because the holders of each class are entitled to equal per share dividends or distributions in liquidation in accordance with the Amended and Restated Certificate of Incorporation of Alphabet Inc.

## Note 13. Compensation Plans

### Stock-Based Compensation

For the three months ended June 30, 2019 and 2020, total stock-based compensation ("SBC") expense was $2.9 billion and $3.5 billion, respectively, including amounts associated with awards we expect to settle in Alphabet stock of $2.8 billion and $3.3 billion, respectively. For the six months ended June 30, 2019 and 2020, total SBC expense was $5.8 billion and $6.8 billion, respectively, including amounts associated with awards we expect to settle in Alphabet stock of $5.5 billion and $6.5 billion, respectively.

### Stock-Based Award Activities

The following table summarizes the activities for our unvested restricted stock units ("RSUs") in Alphabet stock for the six months ended June 30, 2020 (unaudited):

| | Unvested Restricted Stock Units | |
|---|---|---|
| | Number of Shares | Weighted-Average Grant-Date Fair Value |
| Unvested as of December 31, 2019 | 19,394,236 | $ 1,055.22 |
| Granted | 10,575,423 | $ 1,387.34 |
| Vested | (6,009,373) | $ 1,051.05 |
| Forfeited/canceled | (715,592) | $ 1,138.07 |
| Unvested as of June 30, 2020 | 23,244,694 | $ 1,204.92 |

As of June 30, 2020, there was $26.4 billion of unrecognized compensation cost related to unvested employee RSUs. This amount is expected to be recognized over a weighted-average period of 2.7 years.

**Note 14. Income Taxes**

Our effective tax rate for the three months ended June 30, 2020 was lower than the U.S. federal statutory rate, primarily due to the U.S. Research and Development Tax Credit, the Foreign-Derived Intangible Income tax benefit, and stock-based compensation related tax benefits, partially offset by an increase in valuation allowance for net deferred tax assets that are not likely to be realized relating to certain of our Other Bets. Our effective tax rate is based on forecasted annual results which may fluctuate through the rest of the year, in particular due to COVID-19.

Our effective tax rate for the three months ended June 30, 2019 was lower than the U.S. federal statutory rate primarily due to foreign earnings taxed at lower rates and the U.S. Research and Development Tax Credit, partially offset by the reversal of the cumulative net tax benefit as a result of the U.S. Court of Appeals decision in the Altera case.

We are subject to income taxes in the U.S. and foreign jurisdictions. Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. Our total gross unrecognized tax benefits were $3.4 billion and $3.9 billion as of December 31, 2019 and June 30, 2020. Our total unrecognized tax benefits that, if recognized, would affect our effective tax rate were $2.3 billion and $2.7 billion as of December 31, 2019 and June 30, 2020. Although the timing of the resolution, settlement, and closure of audits is not certain, we do not believe it is reasonably possible that our unrecognized tax benefits will materially change in the next 12 months.

For information regarding non-income taxes, see Note 10.

**Note 15. Information about Segments and Geographic Areas**

We operate our business in multiple operating segments. Google is our only reportable segment. None of our other segments meet the quantitative thresholds to qualify as reportable segments; therefore, the other operating segments are combined and disclosed as Other Bets.

Our reported segments are:

- Google – Google includes our main products such as ads, Android, Chrome, hardware, Google Cloud, Google Maps, Google Play, Search, and YouTube. Our technical infrastructure is also included in Google. Google generates revenues primarily from advertising; sales of apps, in-app purchases, digital content products, and hardware; and licensing and service fees, including fees received for Google Cloud offerings and subscription-based products.
- Other Bets – Other Bets is a combination of multiple operating segments that are not individually material. Other Bets includes Access, Calico, CapitalG, GV, Verily, Waymo, and X, among others. Revenues from the Other Bets are derived primarily through the sale of internet services through Access as well as licensing and R&D services through Verily.

Revenues, cost of revenues, and operating expenses are generally directly attributed to our segments. Inter-segment revenues are not presented separately, as these amounts are immaterial. Our Chief Operating Decision Maker does not evaluate operating segments using asset information.

Information about segments during the periods presented were as follows (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Revenues: | | | | |
| Google | $ 38,674 | $ 37,998 | $ 74,706 | $ 78,973 |
| Other Bets | 162 | 148 | 332 | 283 |
| Hedging gains (losses) | 108 | 151 | 245 | 200 |
| Total revenues | $ 38,944 | $ 38,297 | $ 75,283 | $ 79,456 |

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Operating income (loss): | | | | |
| Google | $ 10,280 | $ 7,572 | $ 19,468 | $ 16,842 |
| Other Bets | (989) | (1,116) | (1,857) | (2,237) |
| Reconciling items[(1)] | (111) | (73) | (1,823) | (245) |
| Total income from operations | $ 9,180 | $ 6,383 | $ 15,788 | $ 14,360 |

(1) Reconciling items are generally comprised of corporate administrative costs, hedging gains (losses) and other miscellaneous items that are not allocated to individual segments. Reconciling items include the EC fine for the six months ended June 30, 2019.

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Capital expenditures: | | | | |
| Google | $ 6,896 | $ 4,836 | $ 11,430 | $ 10,499 |
| Other Bets | 65 | 96 | 124 | 200 |
| Reconciling items[(2)] | (835) | 459 | (790) | 697 |
| Total capital expenditures as presented on the Consolidated Statements of Cash Flows | $ 6,126 | $ 5,391 | $ 10,764 | $ 11,396 |

(2) Reconciling items are related to timing differences of payments as segment capital expenditures are on accrual basis while total capital expenditures shown on the Consolidated Statements of Cash Flow are on cash basis and other miscellaneous differences.

Stock-based compensation and depreciation, amortization, and impairment are included in segment operating income (loss) as shown below (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Stock-based compensation: | | | | |
| Google | $ 2,600 | $ 3,126 | $ 5,212 | $ 6,114 |
| Other Bets | 125 | 136 | 248 | 271 |
| Reconciling items[(3)] | 35 | 67 | 69 | 134 |
| Total stock-based compensation[(4)] | $ 2,760 | $ 3,329 | $ 5,529 | $ 6,519 |
| | | | | |
| Depreciation, amortization, and impairment: | | | | |
| Google | $ 2,756 | $ 3,292 | $ 5,285 | $ 6,305 |
| Other Bets | 79 | 94 | 163 | 186 |
| Reconciling items[(3)] | 0 | 0 | 0 | 3 |
| Total depreciation, amortization, and impairment | $ 2,835 | $ 3,386 | $ 5,448 | $ 6,494 |

(3) Reconciling items relate to corporate administrative and other costs that are not allocated to individual segments.
(4) For purposes of segment reporting, SBC represents awards that we expect to settle in Alphabet stock.

The following table presents our long-lived assets by geographic area (in millions):

| | As of December 31, 2019 | As of June 30, 2020 |
|---|---|---|
| | | (unaudited) |
| Long-lived assets: | | |
| United States | $ 94,907 | $ 98,209 |
| International | 28,424 | 31,214 |
| Total long-lived assets | $ 123,331 | $ 129,423 |

For revenues by geography, see Note 2.

**Note 16. Subsequent Event**

In July 2020, we announced the Google for India Digitization Fund to help accelerate India's digital economy. In addition, we announced our first transaction of the fund in which we entered into an agreement to invest approximately INR 33,737 crore ($4.5 billion as of July 15, 2020) in Jio Platforms Ltd. for a 7.7% stake in the company. The agreement is subject to regulatory review in India and is expected to be completed later this year.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Please read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes included under Part I, Item 1 of this Quarterly Report on Form 10-Q.

### Executive Overview of Results

Below are our key financial results for the three months ended June 30, 2020 (consolidated unless otherwise noted):

- Revenues were $38.3 billion, a decrease of 2% year over year, constant currency revenues were flat year over year.
- Google segment revenues were $38.0 billion, a decrease of 2% year over year, and Other Bets revenues were $148 million, a decrease of 9% year over year.
- Revenues from the United States, EMEA, APAC, and Other Americas were $18.0 billion, $11.4 billion, $6.9 billion, and $1.8 billion, respectively.
- Cost of revenues was $18.6 billion, consisting of TAC of $6.7 billion and other cost of revenues of $11.9 billion. TAC as a percentage of advertising revenues ("TAC rate") was 22.4%.
- Operating expenses (excluding cost of revenues) were $13.4 billion.
- Income from operations was $6.4 billion.
- Other income (expense), net, was a gain of $1.9 billion.
- Effective tax rate was 15.9%.
- Net income was $7.0 billion with diluted net income per share of $10.13.
- Operating cash flow was $14.0 billion.
- Capital expenditures were $5.4 billion.
- Number of employees was 127,498 as of June 30, 2020. The majority of new hires during the quarter were engineers and product managers. By product area, the largest headcount additions were in Google Cloud and Search.

### The Impact of COVID-19 on our Results and Operations

In late 2019, an outbreak of COVID-19 emerged and by March 11, 2020 was declared a global pandemic by The World Health Organization. Across the United States and the world, governments and municipalities instituted measures in an effort to control the spread of COVID-19, including quarantines, shelter-in-place orders, school closings, travel restrictions and the closure of non-essential businesses. The macroeconomic impacts of COVID-19 are significant and continue to evolve, as exhibited by, among other things, a rise in unemployment, changes in consumer behavior, and market volatility.

We began to observe the impact of COVID-19 on our financial results late in the quarter ended March 31, 2020.

For the quarter ended June 30, 2020, our advertising revenues declined compared to the prior year due to the continued impacts of COVID-19 and the related reductions in global economic activity. During the course of the quarter, we observed a gradual return in user search activity to more commercial topics, followed by increased spending by our advertisers. The decline in advertising revenues was partially offset by continued growth in Google Cloud and other non-advertising revenues.

We continue to assess the realized and potential credit deterioration of our customers due to changes in the macroeconomic environment, which has been reflected in an increase in our allowance for credit losses for accounts receivable. We experienced pressure on our margins as many of our expenses are less variable in nature and/or may not correlate to changes in revenues, including costs associated with our data centers and facilities as well as employee compensation. In addition, market volatility has contributed to fluctuations in the valuation of our equity investments, and for the quarter ended June 30, 2020 we recognized net gains on our equity investments as compared to net losses in the quarter ended March 30, 2020.

While we continued to make investments in land and buildings for data centers, offices and information technology infrastructure, we have slowed the pace of our investments, primarily as it relates to office facilities.

Looking ahead, the impact of COVID-19 on our business continues to evolve and be unpredictable. For example, to the extent the pandemic continues to disrupt economic activity globally we, like other businesses, are not immune to continued adverse impacts to our business, operations and financial results from prolonged decreases in advertising spend, changes in user behavior and preferences, credit deterioration and liquidity of our customers, depressed economic activity, or volatility in capital markets. The extent of the impact will depend on a number of factors, including the duration and severity of the pandemic; the uneven impact to certain industries; advances in testing, treatment and prevention; the macroeconomic impact of government measures to contain the spread of the virus and related government stimulus measures. To address the potential impact to our business, over the near-term, we continue to evaluate the pace of our investment plans, including, but not limited to, our hiring, investments in data centers, servers, network equipment, real estate and facilities, marketing and travel spending, as well as taking certain measures to support our customers, employees, and communities we operate in. The impact of COVID-19 and the extent of these measures we may implement could have a material impact on our financial results. Our past results may not be indicative of our future performance, and historical trends in our financial results may differ materially.

**Information about Segments**

We operate our business in multiple operating segments. Google is our only reportable segment. None of our other segments meet the quantitative thresholds to qualify as reportable segments; therefore, the other operating segments are combined and disclosed as Other Bets.

Our reported segments are:

- Google – Google includes our main products such as ads, Android, Chrome, hardware, Google Cloud, Google Maps, Google Play, Search, and YouTube. Our technical infrastructure is also included in Google. Google generates revenues primarily from advertising; sales of apps, in-app purchases, digital content products, and hardware; and licensing and service fees, including fees received for Google Cloud offerings and subscription-based products.
- Other Bets – Other Bets is a combination of multiple operating segments that are not individually material. Other Bets includes Access, Calico, CapitalG, GV, Verily, Waymo, and X, among others. Revenues from the Other Bets are derived primarily through the sale of internet services through Access as well as licensing and R&D services through Verily.

**Revenues**

The following table presents our revenues, by segment and revenue source (in millions, unaudited). Certain amounts in prior periods have been reclassified to conform with current period presentation:

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Google Search & other | $ 23,642 | $ 21,319 | $ 46,189 | $ 45,821 |
| YouTube ads[1] | 3,603 | 3,812 | 6,628 | 7,850 |
| Google properties | 27,245 | 25,131 | 52,817 | 53,671 |
| Google Network Members' properties | 5,249 | 4,736 | 10,264 | 9,959 |
| Google advertising | 32,494 | 29,867 | 63,081 | 63,630 |
| Google Cloud | 2,100 | 3,007 | 3,925 | 5,784 |
| Google other[1] | 4,080 | 5,124 | 7,700 | 9,559 |
| Google revenues | 38,674 | 37,998 | 74,706 | 78,973 |
| Other Bets revenues | 162 | 148 | 332 | 283 |
| Hedging gains (losses) | 108 | 151 | 245 | 200 |
| Total revenues | $ 38,944 | $ 38,297 | $ 75,283 | $ 79,456 |

[1] YouTube non-advertising revenues are included in Google other revenues.

***Google advertising revenues***

In addition to the impact of COVID-19, our advertising revenue growth, as well as the change in paid clicks and cost-per-click on Google properties and the change in impressions and cost-per-impression on Google Network Members' properties and the correlation between these items, have been affected and may continue to be affected by various factors, including:

- advertiser competition for keywords;
- changes in advertising quality, formats, delivery or policy;
- changes in device mix;
- changes in foreign currency exchange rates;
- fees advertisers are willing to pay based on how they manage their advertising costs;
- general economic conditions;
- seasonality; and
- traffic growth in emerging markets compared to more mature markets and across various advertising verticals and channels.

Our advertising revenue growth rate has been affected over time as a result of a number of factors, including challenges in maintaining our growth rate as revenues increase to higher levels; changes in our product mix; changes in advertising quality or formats and delivery; the evolution of the online advertising market; increasing competition; our investments in new business strategies; query growth rates; and shifts in the geographic mix of our revenues. We also expect that our revenue growth rate will continue to be affected by evolving user preferences, the acceptance by users of our products and services as they are delivered on diverse devices and modalities, our ability to create a seamless experience for both users and advertisers, and movements in foreign currency exchange rates.

The following table presents our Google advertising revenues (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Google Search & other | $ 23,642 | $ 21,319 | $ 46,189 | $ 45,821 |
| YouTube ads[(1)] | 3,603 | 3,812 | 6,628 | 7,850 |
| Google Network Members' properties | 5,249 | 4,736 | 10,264 | 9,959 |
| Google advertising | $ 32,494 | $ 29,867 | $ 63,081 | $ 63,630 |
| Google advertising revenues as a percentage of Google segment revenues | 84.0 % | 78.6 % | 84.4 % | 80.6 % |

[(1)] YouTube non-advertising revenues are included in Google other revenues.

Google advertising revenues are generated on our Google properties (including Google Search & other properties and YouTube) and Google Network Members' properties. Google advertising revenues consist primarily of the following:

- Google Search & other consists of revenues generated on Google search properties (including revenues from traffic generated by search distribution partners who use Google.com as their default search in browsers, toolbars, etc.) and other Google owned and operated properties like Gmail, Google Maps, and Google Play;
- YouTube ads consists of revenues generated primarily on YouTube properties; and
- Google Network Members' properties consist of revenues generated primarily on Google Network Members' properties participating in AdMob, AdSense, and Google Ad Manager.

*Google Search & other*

Our Google Search & other revenues decreased $2,323 million and $368 million from the three and six months ended June 30, 2019 to the three and six months ended June 30, 2020, respectively, primarily driven by the impact of COVID-19. Beginning in March of 2020, the effects of COVID-19 on both desktop and mobile search led to a decline in revenues when, despite an increase in user search activity, our revenues were adversely affected by a shift to less commercial topics and reduced advertiser spending. During the quarter ended June 30, 2020, we observed a gradual return in user search activity to more commercial topics, followed by increased spending by our advertisers. The decrease in revenues from the six months ended June 30, 2019 to the six months ended June 30, 2020 was partially offset by the revenue growth we experienced prior to the impact of COVID-19.

*YouTube ads*

YouTube ads revenues increased $209 million and $1,222 million from the three and six months ended June 30, 2019 to the three and six months ended June 30, 2020, respectively. The increase was driven by our direct response advertising products, which benefited from improvements to ad formats and delivery and increased advertiser spending. This increase was partially offset by a decline in revenues for our brand advertising products driven by reduced advertiser spending due to the impact of COVID-19.

*Google Network Members' properties*

Our Google Network Members' properties revenues decreased $513 million from the three months ended June 30, 2019 to the three months ended June 30, 2020. The decrease was primarily driven by a decline in revenues for Google Ad Manager and AdSense due to reduced advertiser spending driven by the impact of COVID-19.

Our Google Network Members' properties revenues decreased $305 million from the six months ended June 30, 2019 to the six months ended June 30, 2020 primarily driven by a decline in revenues for Google Ad Manager and AdSense due to reduced advertiser spending driven by the impact of COVID-19. This decrease was partially offset by an increase in revenues for AdMob.

*Use of Monetization Metrics*

Paid clicks for our Google properties represent engagement by users and include clicks on advertisements by end-users related to searches on Google.com and other owned and operated properties including Gmail, Google Maps, and Google Play; and viewed YouTube engagement ads (certain YouTube ad formats are not included in our click or impression based metrics). Impressions for our Google Network Members' properties include impressions displayed to users served on Google Network Members' properties participating primarily in AdMob, AdSense and Google Ad Manager.

Cost-per-click is defined as click-driven revenues divided by our total number of paid clicks and represents the average amount we charge advertisers for each engagement by users.

Cost-per-impression is defined as impression-based and click-based revenues divided by our total number of impressions and represents the average amount we charge advertisers for each impression displayed to users.

As our business evolves, we periodically review, refine and update our methodologies for monitoring, gathering, and counting the number of paid clicks on our Google properties and the number of impressions on Google Network Members’ properties and for identifying the revenues generated by click activity on our Google properties and the revenues generated by impression activity on Google Network Members’ properties.

*Google properties*

The following table presents changes in our paid clicks and cost-per-click (expressed as a percentage):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Paid clicks change | 28 % | 8 % | 33 % | 10 % |
| Cost-per-click change | (11)% | (15)% | (15)% | (10)% |

The number of paid clicks through our advertising programs on Google properties increased from the three and six months ended June 30, 2019 to the three and six months ended June 30, 2020 due to an increase in paid clicks driven by growth in views of YouTube engagement ads; an increase in clicks due to interrelated factors, including an increase in search queries resulting from ongoing growth in user adoption and usage, primarily on mobile devices; and improvements we have made in ad formats and delivery. This growth was partially offset by the impact of COVID-19, which led to a shift to less commercial search activity and a reduction in advertiser spending. During the three months ended June 30, 2020 we began to observe a recovery in paid clicks as user search activity gradually returned to more commercial topics, followed by increased spending by our advertisers. The overall positive effect on our revenues from an increase in paid clicks was offset by a decrease in the cost-per-click paid by our advertisers. The decrease in cost-per-click was primarily driven by a mix shift to less commercial topics and reduced advertiser spending in response to COVID-19. In addition, the decrease in cost-per-click was also driven by continued growth in YouTube engagement ads where cost-per-click remains lower than on our other advertising platforms.

*Google Network Members' properties*

The following table presents changes in our impressions and cost-per-impression (expressed as a percentage):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Impressions change | 11 % | 16 % | 8 % | 14 % |
| Cost-per-impression change | (1)% | (23)% | — % | (15)% |

Impressions increased from the three and six months ended June 30, 2019 to the three and six months ended June 30, 2020 primarily due to growth in AdManager. The positive effect on our revenues from an increase in impressions was offset by a decrease in the cost-per-impression paid by our advertisers largely due to a reduction in advertiser spending in response to COVID-19.

***Google Cloud***

The following table presents our Google Cloud revenues (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Google Cloud | $ 2,100 | $ 3,007 | $ 3,925 | $ 5,784 |
| Google Cloud revenues as a percentage of Google segment revenues | 5.4 % | 7.9 % | 5.3 % | 7.3 % |

Google Cloud revenues consist primarily of revenues from Cloud offerings, including:

- Google Cloud Platform ("GCP"), which includes infrastructure, data and analytics, and other services;
- G Suite productivity tools; and
- other enterprise cloud services.

Our Google Cloud revenues increased $907 million and $1,859 million from the three and six months ended June 30, 2019 to the three and six months ended June 30, 2020, respectively. The growth was primarily driven by our GCP and G Suite offerings. Our infrastructure and our data and analytics platform products have been the largest drivers of growth in GCP.

***Google other revenues***

The following table presents our Google other revenues (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Google other | $ 4,080 | $ 5,124 | $ 7,700 | $ 9,559 |
| Google other revenues as a percentage of Google segment revenues | 10.5 % | 13.5 % | 10.3 % | 12.1 % |

Google other revenues consist primarily of revenues from:

- Google Play, which includes revenues from sales of apps and in-app purchases (which we recognize net of payout to developers) and digital content sold in the Google Play store;
- hardware, including Google Nest home products, Pixelbooks, Pixel phones and other devices;
- YouTube non-advertising, including YouTube Premium and YouTube TV subscriptions and other services; and
- other products and services.

Our Google other revenues increased $1,044 million and $1,859 million from the three and six months ended June 30, 2019 to the three and six months ended June 30, 2020, respectively. The growth was primarily driven by Google Play and YouTube subscriptions. Growth for Google Play was primarily driven by sales of apps and in-app purchases, and growth for YouTube subscriptions was primarily driven by an increase in paid subscribers. The increase was partially offset by a decline in hardware revenues.

Over time, our growth rate for Google Cloud and Google other revenues may be affected by the seasonality associated with new product and service launches, as well as market dynamics.

***Other Bets***

The following table presents our Other Bets revenues (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Other Bets revenues | $ 162 | $ 148 | $ 332 | $ 283 |
| Other Bets revenues as a percentage of total revenues | 0.4 % | 0.4 % | 0.4 % | 0.4 % |

Other Bets revenues consist primarily of revenues from the sale of Access internet services and Verily licensing and R&D services.

**Revenues by Geography**

The following table presents our revenues by geography as a percentage of revenues, determined based on the addresses of our customers (unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| United States | 46 % | 47 % | 46 % | 47 % |
| EMEA | 32 % | 30 % | 32 % | 30 % |
| APAC | 17 % | 18 % | 17 % | 18 % |
| Other Americas | 5 % | 5 % | 5 % | 5 % |

For further details on revenues by geography, see Note 2 of the Notes to Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

***Use of Constant Currency Revenues and Constant Currency Revenue Percentage Change***

The effect of currency exchange rates on our business is an important factor in understanding period to period comparisons. Our international revenues are favorably affected as the U.S. dollar weakens relative to other foreign currencies, and unfavorably affected as the U.S. dollar strengthens relative to other foreign currencies. Our revenues are also favorably affected by net hedging gains and unfavorably affected by net hedging losses.

We use non-GAAP constant currency revenues and non-GAAP percentage change in constant currency revenues for financial and operational decision-making and as a means to evaluate period-to-period comparisons. We believe the presentation of results on a constant currency basis in addition to GAAP results helps improve the ability to understand our performance because they exclude the effects of foreign currency volatility that are not indicative of our core operating results.

Constant currency information compares results between periods as if exchange rates had remained constant period over period. We define constant currency revenues as total revenues excluding the effect of foreign exchange rate movements and hedging activities, and use it to determine the constant currency revenue percentage change on a year-on-year basis. Constant currency revenues are calculated by translating current period revenues using prior period exchange rates, as well as excluding any hedging effects realized in the current period.

Constant currency revenue percentage change is calculated by determining the change in period revenues over prior period revenues where current period foreign currency revenues are translated using prior period exchange rates and hedging effects are excluded from revenues of both periods.

These results should be considered in addition to, not as a substitute for, results reported in accordance with GAAP. Results on a constant currency basis, as we present them, may not be comparable to similarly titled measures used by other companies and are not a measure of performance presented in accordance with GAAP.

The following table presents the foreign exchange effect on our international revenues and total revenues (in millions, except percentages, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| EMEA revenues | $ 12,313 | $ 11,363 | $ 23,981 | $ 24,208 |
| Exclude foreign exchange effect on current period revenues using prior year rates | 816 | 361 | 1,578 | 596 |
| EMEA constant currency revenues | $ 13,129 | $ 11,724 | $ 25,559 | $ 24,804 |
| Prior period EMEA revenues | $ 10,888 | $ 12,313 | $ 21,579 | $ 23,981 |
| EMEA revenue percentage change | 13 % | (8)% | 11 % | 1 % |
| EMEA constant currency revenue percentage change | 21 % | (5)% | 18 % | 3 % |
| | | | | |
| APAC revenues | $ 6,536 | $ 6,945 | $ 12,632 | $ 14,183 |
| Exclude foreign exchange effect on current period revenues using prior year rates | 217 | 105 | 416 | 166 |
| APAC constant currency revenues | $ 6,753 | $ 7,050 | $ 13,048 | $ 14,349 |
| Prior period APAC revenues | $ 5,090 | $ 6,536 | $ 9,909 | $ 12,632 |
| APAC revenue percentage change | 28 % | 6 % | 27 % | 12 % |
| APAC constant currency revenue percentage change | 33 % | 8 % | 32 % | 14 % |
| | | | | |
| Other Americas revenues | $ 2,124 | $ 1,839 | $ 4,030 | $ 3,996 |
| Exclude foreign exchange effect on current period revenues using prior year rates | 184 | 240 | 376 | 336 |
| Other Americas constant currency revenues | $ 2,308 | $ 2,079 | $ 4,406 | $ 4,332 |
| Prior period Other Americas revenues | $ 1,849 | $ 2,124 | $ 3,580 | $ 4,030 |
| Other Americas revenue percentage change | 15 % | (13)% | 13 % | (1)% |
| Other Americas constant currency revenue percentage change | 25 % | (2)% | 23 % | 7 % |
| | | | | |
| United States revenues | $ 17,863 | $ 17,999 | $ 34,395 | $ 36,869 |
| United States revenue percentage change | 20 % | 1 % | 18 % | 7 % |
| | | | | |
| Hedging gains | $ 108 | $ 151 | $ 245 | $ 200 |
| Total revenues | $ 38,944 | $ 38,297 | $ 75,283 | $ 79,456 |
| Total constant currency revenues | $ 40,053 | $ 38,852 | $ 77,408 | $ 80,354 |
| Prior period revenues, excluding hedging effect[(1)] | $ 32,760 | $ 38,836 | $ 64,145 | $ 75,038 |
| Total revenue percentage change | 19 % | (2)% | 18 % | 6 % |
| Total constant currency revenue percentage change | 22 % | 0 % | 21 % | 7 % |

[(1)] Total revenues and hedging (losses) were $32,657 million and $(103) million for the three months ended June 30, 2018, respectively, and $63,803 million and $(342) million for the six months ended June 30, 2018, respectively.

Our EMEA revenue percentage change from the three and six months ended June 30, 2019 to the three and six months ended June 30, 2020 was unfavorably affected by foreign currency exchange rates primarily due to the U.S. dollar strengthening relative to the Euro and British pound.

Our APAC revenue percentage change from the three and six months ended June 30, 2019 to the three and six months ended June 30, 2020 was unfavorably affected by foreign currency exchange rates primarily due to the U.S. dollar strengthening relative to Australian dollar and South Korean won, partially offset by the U.S. dollar weakening relative to the Japanese yen.

Our Other Americas revenue percentage change from the three months ended June 30, 2019 to the three months ended June 30, 2020 was unfavorably affected by changes in foreign currency exchange rates, primarily due to the U.S. dollar strengthening relative to the Brazilian real. Our Other Americas revenue percentage change from the six months ended June 30, 2019 to the six months ended June 30, 2020 was unfavorably affected by changes in foreign currency exchange rates, primarily due to the U.S. dollar strengthening relative to the Brazilian real and Argentine peso.

## Costs and Expenses

### *Cost of Revenues*

Cost of revenues consists of TAC which are paid to Google Network Members primarily for ads displayed on their properties and amounts paid to our distribution partners who make available our search access points and services. Our distribution partners include browser providers, mobile carriers, original equipment manufacturers, and software developers.

The cost of revenues as a percentage of revenues generated from ads placed on Google Network Members' properties are significantly higher than the cost of revenues as a percentage of revenues generated from ads placed on Google properties because most of the advertiser revenues from ads served on Google Network Members' properties are paid as TAC to our Google Network Members.

Additionally, other cost of revenues (which is the cost of revenues excluding TAC) includes the following:

- Content acquisition costs primarily related to payments to content providers from whom we license video and other content for distribution on YouTube advertising and subscription services and Google Play (we pay fees to these content providers based on revenues generated or a flat fee);
- Expenses associated with our data centers (including bandwidth, compensation expenses (including SBC), depreciation, energy, and other equipment costs) as well as other operations costs (such as content review and customer support costs). These costs are generally less variable in nature and may not correlate with related changes in revenues; and
- Inventory related costs for hardware we sell.

The following tables present our cost of revenues, including TAC (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| TAC | $ 7,238 | $ 6,694 | $ 14,098 | $ 14,146 |
| Other cost of revenues | 10,058 | 11,859 | 19,210 | 23,389 |
| Total cost of revenues | $ 17,296 | $ 18,553 | $ 33,308 | $ 37,535 |
| Total cost of revenues as a percentage of revenues | 44.4 % | 48.4 % | 44.2 % | 47.2 % |

Cost of revenues increased $1,257 million from the three months ended June 30, 2019 to the three months ended June 30, 2020. The increase was due to an increase in other cost of revenues $1,801 million which was partially offset by a decrease in TAC of $544 million. Cost of revenues increased $4,227 million from the six months ended June 30, 2019 to the six months ended June 30, 2020. The increase was due to increases in other cost of revenues of $4,179 million and TAC of $48 million, respectively.

The increase in other cost of revenues from the three and six months ended June 30, 2019 to the three and six months ended June 30, 2020 was due to an increase in data center and other operations costs and an increase in content acquisition costs primarily for YouTube consistent with the growth in YouTube revenues. This increase was partially offset by a decline in hardware costs.

TAC decreased from the three months ended June 30, 2019 to the three months ended June 30, 2020 due to decreases in TAC paid to Google Network Members and to distribution partners, primarily driven by a decrease in revenues subject to TAC.

The TAC rate increased from 22.3% to 22.4% from the three months ended June 30, 2019 to the three months ended June 30, 2020 primarily due to an increase in the TAC rate on Google properties revenues due to the ongoing shift to mobile, which carries higher TAC because more mobile searches are channeled through paid access points. This increase was partially offset by the favorable revenue mix shift from Google Network Members' properties to Google properties. The TAC rate on Google Network revenues was substantially consistent from the three months ended June 30, 2019 to the three months ended June 30, 2020.

TAC increased from the six months ended June 30, 2019 to the six months ended June 30, 2020 due to an increase in TAC paid to distribution partners which was partially offset by a decrease in TAC paid to Google Network Members. The increase in TAC paid to distribution partners was due to both an increase in revenues subject to TAC and the ongoing shift to mobile, which carries higher TAC because more mobile searches are channeled through paid access points. The decrease in TAC paid to Google Network Members was primarily due to a decrease in revenues subject to TAC.

The TAC rate decreased from 22.3% to 22.2% from the six months ended June 30, 2019 to the six months ended June 30, 2020 primarily due to the favorable revenue mix shift from Google Network Members' properties to Google properties. The TAC rate on Google properties revenues and the TAC rate on Google Network revenues were both substantially consistent from the six months ended June 30, 2019 to the six months ended June 30, 2020.

Over time, cost of revenues as a percentage of total revenues may be affected by a number of factors, including the following:

- The amount of TAC paid to Google Network Members, which is affected by a combination of factors such as geographic mix, product mix, revenue share terms, and fluctuations of the U.S. dollar compared to certain foreign currencies;
- The amount of TAC paid to distribution partners, which is affected by changes in device mix, geographic mix, partner mix, partner agreement terms such as revenue share arrangements, and the percentage of queries channeled through paid access points;
- Relative revenue growth rates of Google properties and Google Network Members' properties;
- Certain costs that are less variable in nature and may not correlate with the related revenues;
- Costs associated with our data centers and other operations to support ads, Google Cloud, Search and YouTube and other products;
- Content acquisition costs, which are primarily affected by the relative growth rates in our YouTube advertising and subscription revenues;
- Costs related to hardware sales; and
- Increased proportion of non-advertising revenues, which generally have higher costs of revenues, relative to our advertising revenues.

***Research and Development***

The following table presents our R&D expenses (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Research and development expenses | $ 6,213 | $ 6,875 | $ 12,242 | $ 13,695 |
| Research and development expenses as a percentage of revenues | 16.0 % | 18.0 % | 16.3 % | 17.2 % |

R&D expenses consist primarily of:

- Compensation expenses (including SBC) and facilities-related costs for engineering and technical employees responsible for R&D of our existing and new products and services;
- Depreciation expenses;
- Equipment-related expenses; and
- Professional services fees primarily related to consulting and outsourcing services.

R&D expenses increased $662 million from the three months ended June 30, 2019 to the three months ended June 30, 2020. The increase was primarily due to an increase in compensation expenses (including SBC) and facilities-related costs of $689 million, largely resulting from a 12% increase in headcount.

R&D expenses increased $1,453 million from the six months ended June 30, 2019 to the six months ended June 30, 2020. The increase was primarily due to an increase in compensation expenses (including SBC) and facilities-related costs of $1,376 million, largely resulting from a 15% increase in headcount.

Over time, R&D expenses as a percentage of revenues may fluctuate due to certain expenses that are generally less variable in nature and may not correlate to the changes in revenues. In addition, R&D expenses may be affected by a number of factors including continued investment in ads, Android, Chrome, Google Cloud, Google Play, hardware, machine learning, Other Bets, Search and YouTube.

***Sales and Marketing***

The following table presents our sales and marketing expenses (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Sales and marketing expenses | $ 4,212 | $ 3,901 | $ 8,117 | $ 8,401 |
| Sales and marketing expenses as a percentage of revenues | 10.8 % | 10.2 % | 10.8 % | 10.6 % |

Sales and marketing expenses consist primarily of:

- Advertising and promotional expenditures related to our products and services; and
- Compensation expenses (including SBC) and facilities-related costs for employees engaged in sales and marketing, sales support, and certain customer service functions.

Sales and marketing expenses decreased $311 million from the three months ended June 30, 2019 to the three months ended June 30, 2020. The decrease was primarily due to a decrease in advertising and promotional expenses of $536 million as we paused or rescheduled campaigns and changed some events to digital-only formats as a result of COVID-19. This decrease was partially offset by an increase in compensation expenses (including SBC) and facilities-related costs of $349 million, largely resulting from a 7% increase in headcount.

Sales and marketing expenses increased $284 million from the six months ended June 30, 2019 to the six months ended June 30, 2020. The increase was primarily due to an increase in compensation expenses (including SBC) and facilities-related costs of $733 million, largely resulting from a 8% increase in headcount. The increase was partially offset by a decrease in advertising and promotional expenses of $419 million as we paused or rescheduled campaigns and changed some events to digital-only formats as a result of COVID-19.

Over time, sales and marketing expenses as a percentage of revenues may fluctuate due to certain expenses that are generally less variable in nature and may not correlate to the changes in revenues. In addition, sales and marketing expenses may be affected by a number of factors including the seasonality associated with new product and service launches and strategic decisions regarding the timing and extent of our spending.

***General and Administrative***

The following table presents our general and administrative expenses (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| General and administrative expenses | $ 2,043 | $ 2,585 | $ 4,131 | $ 5,465 |
| General and administrative expenses as a percentage of revenues | 5.2 % | 6.7 % | 5.5 % | 6.9 % |

General and administrative expenses consist primarily of:

- Compensation expenses (including SBC) and facilities-related costs for employees in our finance, human resources, information technology, and legal organizations;
- Depreciation;
- Equipment-related expenses;
- Legal-related expenses; and
- Professional services fees primarily related to audit, information technology consulting, outside legal, and outsourcing services.

General and administrative expenses increased $542 million from the three months ended June 30, 2019 to the three months ended June 30, 2020. The increase was primarily due to an increase in compensation expenses (including SBC) and facilities-related costs of $197 million, largely resulting from a 17% increase in headcount. In addition, there was an increase of $124 million in charitable contributions primarily related to our response to COVID-19 and an increase of $91 million related to allowance for credit losses for accounts receivable.

General and administrative expenses increased $1,334 million from the six months ended June 30, 2019 to the six months ended June 30, 2020. $538 million of the increase was due to an increase in compensation expenses (including SBC) and facilities-related costs, largely resulting from a 17% increase in headcount. In addition, $504 million of the increase related to allowance for credit losses for accounts receivable primarily due to the impact of COVID-19.

Over time, general and administrative expenses as a percentage of revenues may fluctuate due to certain expenses that are generally less variable in nature and may not correlate to the changes in revenues, the effect of discrete items such as legal settlements, or further allowances for credit losses for accounts receivable associated with the impact of COVID-19.

***European Commission Fines***

In March 2019, the EC announced its decision that certain contractual provisions in agreements that Google had with AdSense for Search partners infringed European competition law. The EC decision imposed a €1.5 billion ($1.7 billion as of March 20, 2019) fine, which was accrued in the first quarter of 2019.

Please refer to Note 10 of the Notes to Consolidated Financial Statements included in Part 1, Item 1 of this Quarterly Report on Form 10-Q for further information.

**Other Income (Expense), Net**

The following table presents other income (expense), net (in millions, unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Other income (expense), net | $ 2,967 | $ 1,894 | $ 4,505 | $ 1,674 |

Other income (expense), net, decreased $1,073 million from the three months ended June 30, 2019 to the three months ended June 30, 2020. The change was primarily driven by decreases in unrealized gains on equity securities, partially offset by a decrease in accrued performance fees.

Other income (expense), net, decreased $2,831 million from the six months ended June 30, 2019 to the six months ended June 30, 2020. The change was primarily driven by decreases in unrealized gains, including impairments, on equity securities, partially offset by a decrease in accrued performance fees.

Over time, other income (expense), net, may be affected by market dynamics and other factors. Equity values generally change daily for marketable equity securities and upon the occurrence of observable price changes or upon impairment of non-marketable equity securities. In addition, volatility in the global economic climate and financial markets, including the effects of COVID-19, could result in a significant change in the value of our investments. Fluctuations in the value of these investments has, and we expect will continue to, contribute to volatility of OI&E in future periods. For additional information about our investments, see Note 3 of the Notes to Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

**Provision for Income Taxes**

The following table presents our provision for income taxes (in millions, except for effective tax rate; unaudited):

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2019 | 2020 | 2019 | 2020 |
| Provision for income taxes | $ 2,200 | $ 1,318 | $ 3,689 | $ 2,239 |
| Effective tax rate | 18.1 % | 15.9 % | 18.2 % | 14.0 % |

Our effective tax rate decreased 2.2% from the three months ended June 30, 2019 to the three months ended June 30, 2020. The decrease in effective tax rate is primarily due to an increase in stock-based compensation related tax benefits including the reversal of the Altera tax benefit as a result of the U.S. Court of Appeals decision in 2019 that did not recur in 2020, and an increase in the U.S. federal Foreign-Derived Intangible Income tax benefit, partially offset by an increase in valuation allowance for our net deferred tax assets that are not likely to be realized relating to certain of our Other Bets.

Our effective tax rate decreased 4.2% from the six months ended June 30, 2019 to the six months ended June 30, 2020. The decrease in effective tax rate is primarily due to an increase in the U.S. federal Foreign-Derived Intangible Income tax benefit and stock-based compensation related tax benefits including the reversal of the Altera tax benefit as a result of the U.S. Court of Appeals decision in 2019 that did not recur in 2020, partially offset by an increase in valuation allowance for our net deferred tax assets that are not likely to be realized relating to certain of our Other Bets.

Our effective tax rate is based on forecasted annual results which may fluctuate through the rest of the year, in particular due to COVID-19. As such, evolving facts and circumstances surrounding these forecasts could result in the application of different provisions of tax laws and cause our estimated annual effective tax rate to change significantly through the remainder of the year.

In addition, our future effective tax rate may be affected by changes in the geographic mix of earnings in countries with different statutory rates, the valuation of our deferred tax assets or liabilities, or changes in tax laws, regulations, or accounting principles, as well as certain discrete items.

**Capital Resources and Liquidity**

As of June 30, 2020, we had $121.1 billion in cash, cash equivalents, and marketable securities. Cash equivalents and marketable securities are comprised of time deposits, money market funds, highly liquid government bonds, corporate debt securities, mortgage-backed and asset-backed securities and marketable equity securities.

As of June 30, 2020, we had long-term taxes payable of $6.5 billion related to a one-time transition tax payable incurred as a result of the U.S. Tax Cuts and Jobs Act ("Tax Act"). As permitted by the Tax Act, we will pay the transition tax in annual interest-free installments through 2025.

In 2017, 2018 and 2019, the EC announced decisions that certain actions taken by Google infringed European competition law and imposed fines of €2.4 billion ($2.7 billion as of June 27, 2017), €4.3 billion ($5.1 billion as of June 30, 2018), and €1.5 billion ($1.7 billion as of March 20, 2019), respectively. While each EC decision is under appeal, we included the fines in accrued expenses and other current liabilities on our Consolidated Balance Sheets as we provided bank guarantees (in lieu of a cash payment) for the fines.

In November 2019, we entered into an agreement to acquire Fitbit, a leading wearables brand, for $7.35 per share, representing a total purchase price of approximately $2.1 billion as of the date of the agreement. The acquisition of Fitbit is expected to be completed later this year, subject to customary closing conditions, including the receipt of regulatory approvals.

In July 2020, we announced the Google for India Digitization Fund to help accelerate India's digital economy. In addition, we announced our first transaction of the fund in which we entered into an agreement to invest approximately INR 33,737 crore ($4.5 billion as of July 15, 2020) in Jio Platforms Ltd. for a 7.7% stake in the company. This agreement is subject to regulatory review in India and is expected to be completed later this year.

Our principal sources of liquidity are our cash, cash equivalents, and marketable securities, as well as the cash flow that we generate from our operations. The primary use of capital continues to be to invest for the long term growth of the business. We regularly evaluate our cash and capital structure, including the size, pace and form of capital return to stockholders.

We have a short-term debt financing program of up to $5.0 billion through the issuance of commercial paper. Net proceeds from this program are used for general corporate purposes. As of June 30, 2020, we had no commercial paper outstanding. As of June 30, 2020, we have $4.0 billion of revolving credit facilities expiring in July 2023 with no amounts outstanding. The interest rate for the credit facilities is determined based on a formula using certain market rates. We believe that our sources of funding will be sufficient to satisfy our currently anticipated cash requirements including capital expenditures, working capital requirements, potential acquisitions, and other liquidity requirements through at least the next 12 months.

As of June 30, 2020, we have senior unsecured notes outstanding due in 2021, 2024, and 2026 with a total carrying value of $4.0 billion.

In July 2019 the Board of Directors of Alphabet authorized the company to repurchase up to $25.0 billion of its Class C capital stock. As of June 30, 2020, $5.4 billion remains available for repurchase. In July 2020, the Board of Directors of Alphabet authorized the company to repurchase up to an additional $28.0 billion of its Class C capital stock. The repurchases are being executed from time to time, subject to general business and market conditions and other investment opportunities, through open market purchases or privately negotiated transactions, including through Rule 10b5-1 plans. The repurchase program does not have an expiration date. Refer to Note 11 of the Notes to Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

During the six months ended June 30, 2020 we spent $11.4 billion on capital expenditures and recognized total operating lease assets of $1.4 billion. As of June 30, 2020, the amount of total future lease payments under operating leases, which had a weighted average remaining lease term of 9 years, was $14.4 billion. Finance leases were not material for the six months ended June 30, 2020. Refer to Note 4 of the Notes to Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q for further information on the leases.

The following table presents our cash flows (in millions, unaudited):

| | Six Months Ended June 30, | |
|---|---|---|
| | 2019 | 2020 |
| Net cash provided by operating activities | $ 24,627 | $ 25,444 |
| Net cash used in investing activities | $ (15,843) | $ (10,295) |
| Net cash used in financing activities | $ (8,929) | $ (15,684) |

*Cash Provided by Operating Activities*

Our largest source of cash provided by our operations are advertising revenues generated by Google properties and Google Network Members' properties. Additionally, we generate cash through sales of apps, in-app purchases, digital content products, and hardware; and licensing and service fees including fees received for Google Cloud offerings and subscription-based products.

Our primary uses of cash from our operating activities include payments to our Google Network Members and distribution partners, and payments for content acquisition costs. In addition, uses of cash from operating activities include compensation and related costs, hardware inventory costs, other general corporate expenditures, and income taxes.

Net cash provided by operating activities increased from the six months ended June 30, 2019 to the six months ended June 30, 2020 primarily due to the net impact of increases in cash received from revenues and cash paid for cost of revenues and operating expenses and the timing of income tax payments, partially offset by an increase in cash paid for compensation expenses accrued as of December 31, 2019.

*Cash Used in Investing Activities*

Cash provided by investing activities consists primarily of maturities and sales of our investments in marketable and non-marketable securities. Cash used in investing activities consists primarily of purchases of property and equipment, which primarily includes our investments in land and buildings for data centers, offices and information technology infrastructure to provide capacity for the growth of our businesses; purchases of marketable and non-marketable securities; and payments for acquisitions.

Net cash used in investing activities decreased from the six months ended June 30, 2019 to the six months ended June 30, 2020 primarily due to a net increase in maturities and sales of marketable securities, partially offset by an increase in purchases of marketable securities.

*Cash Used in Financing Activities*

Cash provided by financing activities consists primarily of proceeds from issuance of debt and proceeds from the sale of interest in consolidated entities. Cash used in financing activities consists primarily of net payments related to stock-based award activities, repurchases of capital stock, and repayments of debt.

Net cash used in financing activities increased from the six months ended June 30, 2019 to the six months ended June 30, 2020 primarily due to an increase in cash payments for repurchases of capital stock, partially offset by an increase in proceeds from the sale of interest in consolidated entities.

**Critical Accounting Policies and Estimates**

See Part II, Item 7, "Critical Accounting Policies and Estimates" in our Annual Report on Form 10-K for the year ended December 31, 2019. There have been no material changes to our critical accounting policies and estimates since our Annual Report on Form 10-K for the year ended December 31, 2019, certain of which are further described below.

As of June 30, 2020 the impact of COVID-19 continues to unfold and as a result, certain of our estimates and assumptions require increased judgment and carry a higher degree of variability and volatility that could result in material changes to our estimates in future periods.

### Income Taxes

We are subject to income taxes in the U.S. and foreign jurisdictions. Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. Our interim tax accruals are based on an estimated annual effective tax rate applied to year-to-date income along with certain discrete items recorded in the period. Estimates of the annual effective tax rate at the end of an interim period are based on our best estimate of future events and transactions which, as a result of COVID-19, may be impacted by a higher degree of variability and volatility. As such, evolving facts and circumstances surrounding these forecasts could result in the application of different provisions of tax laws and cause our estimated annual effective tax rate to change significantly through the remainder of the year.

Although we believe we have adequately reserved for our uncertain tax positions, no assurance can be given that the final tax outcome of these matters will not be different. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes and the effective tax rate in the period in which such determination is made.

The provision for income taxes includes the effect of reserve provisions and changes to reserves that are considered appropriate as well as the related net interest and penalties. In addition, we are subject to the continuous examination of our income tax returns by the Internal Revenue Service ("IRS") and other tax authorities which may assert assessments against us. We regularly assess the likelihood of adverse outcomes resulting from these examinations and assessments to determine the adequacy of our provision for income taxes.

### Available Information

Our website is located at www.abc.xyz, and our investor relations website is located at www.abc.xyz/investor. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and our Proxy Statements, and any amendments to these reports, are available through our investor relations website, free of charge, after we file them with the SEC. We also provide a link to the section of the SEC's website at www.sec.gov that has all of the reports that we file or furnish with the SEC.

We webcast via our investor relations website our earnings calls and certain events we participate in or host with members of the investment community. Our investor relations website also provides notifications of news or announcements regarding our financial performance and other items of interest to our investors, including SEC filings, investor events, press and earnings releases, and blogs. We also share Google news and product updates on Google's Keyword blog at https://www.blog.google/, which may be of interest or material to our investors. Further, corporate governance information, including our certificate of incorporation, bylaws, governance guidelines, board committee charters, and code of conduct, is also available on our investor relations website under the heading "Other." The content of our websites are not incorporated by reference into this Quarterly Report on Form 10-Q or in any other report or document we file with the SEC, and any references to our websites are intended to be inactive textual references only.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to financial market risks, including changes in foreign currency exchange rates, interest rates and equity investment risks. Due to financial market movements in fiscal year 2020 and changes to our expectations of near-term possible movements caused by the impact of COVID-19, we are providing an update to the disclosures made in our Annual Report on Form 10-K for the year ended December 31, 2019 regarding quantitative and qualitative disclosures about market risk as of June 30, 2020.

### Foreign Currency Exchange Risk

We transact business globally in multiple currencies. Our international revenues, as well as costs and expenses denominated in foreign currencies, expose us to the risk of fluctuations in foreign currency exchange rates against the U.S. dollar. Principal currencies hedged included the Australian dollar, British pound, Canadian dollar, Euro and Japanese yen. For the purpose of analyzing foreign currency exchange risk, we considered the historical trends in foreign currency exchange rates and determined that it was reasonably possible that adverse changes in exchange rates of 10% could be experienced in the near term.

We use foreign exchange forward contracts to offset the foreign exchange risk on our assets and liabilities denominated in currencies other than the local currency of the subsidiary. These forward contracts reduce, but do not entirely eliminate, the effect of foreign currency exchange rate movements on our assets and liabilities. The foreign currency gains and losses on the assets and liabilities are recorded in other income (expense), net, which are offset by the gains and losses on the forward contracts.

If an adverse 10% foreign currency exchange rate change was applied to total monetary assets and liabilities denominated in currencies other than the local currencies at the balance sheet dates, it would have resulted in an adverse effect on income before income taxes of approximately $61 million as of June 30, 2020. The adverse effect as of June 30, 2020 is after consideration of the offsetting effect of approximately $808 million from foreign exchange contracts in place for the three months ended June 30, 2020.

We use foreign currency forwards and option contracts, including collars (an option strategy comprised of a combination of purchased and written options) to protect our forecasted U.S. dollar-equivalent earnings from changes in foreign currency exchange rates. When the U.S. dollar strengthens, gains from foreign currency options and forwards reduce the foreign currency losses related to our earnings. When the U.S. dollar weakens, losses from foreign currency collars and forwards offset the foreign currency gains related to our earnings. These hedging contracts reduce, but do not entirely eliminate, the effect of foreign currency exchange rate movements. We designate these contracts as cash flow hedges for accounting purposes. We reflect the gains or losses of foreign currency spot rate changes as a component of AOCI and subsequently reclassify them into revenues to offset the hedged exposures as they occur.

If the U.S. dollar weakened by 10% as of June 30, 2020, the amount recorded in AOCI related to our foreign exchange contracts before tax effect would have been approximately $536 million lower as of June 30, 2020. The change in the value recorded in AOCI would be expected to offset a corresponding foreign currency change in forecasted hedged revenues when recognized.

We use foreign exchange forward contracts designated as net investment hedges to hedge the foreign currency risks related to our investment in foreign subsidiaries. These forward contracts serve to offset the foreign currency translation risk from our foreign operations.

If the U.S. dollar weakened by 10%, the amount recorded in cumulative translation adjustment ("CTA") within AOCI related to our net investment hedge would have been approximately $940 million lower as of June 30, 2020. The change in value recorded in CTA would be expected to offset a corresponding foreign currency translation gain or loss from our investment in foreign subsidiaries.

**Interest Rate Risk**

Our Corporate Treasury investment strategy is to achieve a return that will allow us to preserve capital and maintain liquidity. We invest primarily in debt securities including those of the U.S. government and its agencies, corporate debt securities, mortgage-backed securities, money market and other funds, municipal securities, time deposits, asset backed securities, and debt instruments issued by foreign governments. By policy, we limit the amount of credit exposure to any one issuer. Our investments in both fixed rate and floating rate interest earning securities carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely affected due to a rise in interest rates, while floating rate securities may produce less income than predicted if interest rates fall. Unrealized gains or losses on our marketable debt securities are primarily due to interest rate fluctuations as compared to interest rates at the time of purchase. We account for both fixed and variable rate securities at fair value with gains and losses recorded in AOCI until the securities are sold, less any expected credit losses.

We use value-at-risk ("VaR") analysis to determine the potential effect of fluctuations in interest rates on the value of our marketable debt security portfolio. The VaR is the expected loss in fair value, for a given confidence interval, for our investment portfolio due to adverse movements in interest rates. We use a variance/covariance VaR model with 95% confidence interval. The estimated one-day loss in fair value of our marketable debt securities as of June 30, 2020 are shown below (in millions):

| | As of June 30, 2020 | 12-Month Average as of June 30, 2020 |
|---|---|---|
| Risk Category - Interest Rate | $ 140 | $ 109 |

Actual future gains and losses associated with our marketable debt security portfolio may differ materially from the sensitivity analyses performed as of June 30, 2020 due to the inherent limitations associated with predicting the timing and amount of changes in interest rates and our actual exposures and positions. VaR analysis is not intended to represent actual losses but is used as a risk estimation.

**Equity Investment Risk**

Our marketable and non-marketable equity securities are subject to a wide variety of market-related risks that could substantially reduce or increase the fair value of our holdings.

Our marketable equity securities are publicly traded stocks or funds and our non-marketable equity securities are investments in privately held companies, some of which are in the startup or development stages.

We record our marketable equity securities not accounted for under the equity method at fair value based on readily determinable market values, of which publicly traded stocks and mutual funds are subject to market price volatility, and represent $4.5 billion of our investments as of June 30, 2020. A hypothetical adverse price change of 30%, which could be experienced in the near term, would decrease the fair value of our marketable equity securities by $1.3 billion.

Our non-marketable equity securities not accounted for under the equity method are adjusted to fair value for observable transactions for identical or similar investments of the same issuer or impairment (referred to as the measurement alternative). The fair value measured at the time of the observable transaction is not necessarily an indication of the current fair value as of the balance sheet date. These investments, especially those that are in the early stages, are inherently risky because the technologies or products these companies have under development are typically in the early phases and may never materialize and they may experience a decline in financial condition, which could result in a loss of a substantial part of our investment in these companies. The success of our investment in any private company is also typically dependent on the likelihood of our ability to realize appreciation in the value of our investments through liquidity events such as public offerings, acquisitions, private sales or other market events. As of June 30, 2020, the carrying value of our non-marketable equity securities, which were accounted for under the measurement alternative, was $11.3 billion. Valuations of our equity investments in private companies are inherently more complex due to the lack of readily available market data. Volatility in the global economic climate and financial markets could result in a significant impairment charge relating to our non-marketable equity securities. Changes in valuation of non-marketable equity securities may not directly correlate with changes in valuation of marketable equity securities. Additionally, observable transactions at lower valuations could result in significant losses on our non-marketable equity securities. The effect of COVID-19 on our impairment assessment requires significant judgment due to the uncertainty around the duration and severity of the impact.

The carrying values of our equity method investments, which totaled approximately $1.2 billion as of June 30, 2020, generally do not fluctuate based on market price changes, however these investments could be impaired if the carrying value exceeds the fair value and is not expected to recover.

For further information about our equity investments, please refer to Note 3 of the Notes to Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

## ITEM 4. CONTROLS AND PROCEDURES

### Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Exchange Act, as of the end of the period covered by this Quarterly Report on Form 10-Q.

Based on this evaluation, our chief executive officer and chief financial officer concluded that, as of June 30, 2020, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

### Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended June 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

As a result of COVID-19, our global workforce continued to operate primarily in a work from home environment for the quarter ended June 30, 2020. While pre-existing controls were not specifically designed to operate in our current work from home operating environment, we believe that our internal controls over financial reporting continue to be effective. We have continued to re-evaluate and refine our financial reporting process to provide reasonable assurance that we could report our financial results accurately and timely.

We rely extensively on information systems to manage our business and summarize and report operating results. In 2019, we began a multi-year implementation of a new global enterprise resource planning (“ERP”) system, which will replace much of our existing core financial systems. The ERP system is designed to accurately maintain our financial records, enhance the flow of financial information, improve data management and provide timely information to our management team. The implementation is expected to occur in phases over the next several years, with initial changes to our general ledger and consolidated financial reporting to take place in 2020. As the phased implementation of the new ERP system continues, we will change our processes and procedures which, in turn, could result in changes to our internal control over financial reporting. As such changes occur, we will evaluate quarterly whether such changes materially affect our internal control over financial reporting.

**Limitations on Effectiveness of Controls and Procedures**

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

## PART II. OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

For a description of our material pending legal proceedings, see Note 10 “Contingencies - Legal Matters” of the Notes to Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q, which is incorporated herein by reference.

### ITEM 1A. RISK FACTORS

Our operations and financial results are subject to various risks and uncertainties, including but not limited to those described below, which could harm our business, reputation, financial condition, and operating results.

**Risks Specific to our Company**

***We generate a significant portion of our revenues from advertising, and reduced spending by advertisers, a loss of partners, or new and existing technologies that block ads online and/or affect our ability to customize ads could harm our business.***

We generated over 83% of total revenues from the display of ads online in 2019 and 80% in the six months ended June 30, 2020. Many of our advertisers, companies that distribute our products and services, digital publishers, and content providers can terminate their contracts with us at any time. These partners may not continue to do business with us if we do not create more value (such as increased numbers of users or customers, new sales leads, increased brand awareness, or more effective monetization) than their available alternatives. Changes to our advertising policies and data privacy practices, as well as changes to other companies’ advertising policies or practices may affect the advertising that we are able to provide, which could harm our business. In addition, technologies have been developed that make customized ads more difficult or that block the display of ads altogether and some providers of online services have integrated technologies that could potentially impair the availability and functionality of third-party digital advertising. Failing to provide superior value or deliver advertisements effectively and competitively could harm our reputation, financial condition, and operating results.

In addition, expenditures by advertisers tend to be cyclical, reflecting overall economic conditions and budgeting and buying patterns. Adverse macroeconomic conditions, including COVID-19 and its effects on the global economy (as discussed in greater detail in our COVID-19 risk factor under ‘General Risks’ below), have impacted the demand for advertising and caused our advertisers to reduce the amounts they spent on advertising, and could continue to have an adverse impact on such demand and spend, which could harm our financial condition and operating results.

***We face intense competition. If we do not continue to innovate and provide products and services that are useful to users, we may not remain competitive, which could harm our business and operating results.***

Our business environment is rapidly evolving and intensely competitive. Our businesses face changing technologies, shifting user needs, and frequent introductions of rival products and services. To compete successfully, we must accurately anticipate technology developments and deliver innovative, relevant and useful products, services, and technologies in a timely manner. As our businesses evolve, the competitive pressure to innovate will encompass a wider range of products and services. We must continue to invest significant resources in research and development, including through acquisitions, in order to enhance our technology and new and existing products and services.

We have many competitors in different industries. Our current and potential domestic and international competitors range from large and established companies to emerging start-ups. Some competitors have longer operating histories in various sectors. They can use their experience and resources in ways that could affect our competitive position, including by making acquisitions, continuing to invest heavily in research and development and in talent, aggressively initiating intellectual property claims (whether or not meritorious), and continuing to compete aggressively for users, advertisers, customers, and content providers. Our competitors may be able to innovate and provide products and services faster than we can or may foresee the need for products and services before us. For example, we are investing significantly in subscription-based products and services such as YouTube, which face intense competition from large experienced companies with well established relationships with users.

Our operating results may also suffer if our products and services are not responsive to the needs of our users, advertisers, publishers, customers, and content providers. As technologies continue to develop, our competitors may be able to offer experiences that are, or that are seen to be, substantially similar to or better than ours. This may force us to compete in different ways and expend significant resources in order to remain competitive. If our competitors are more successful than we are in developing compelling products or in attracting and retaining users, advertisers, publishers, customers, and content providers, our operating results could be harmed.

***Our ongoing investment in new businesses, products, services, and technologies is inherently risky, and could disrupt our current operations and harm our financial condition and operating results.***

We have invested and expect to continue to invest in new businesses, products, services, and technologies. The investments that we are making across Google and Other Bets reflect our ongoing efforts to innovate and provide products and services that are useful to users, advertisers, publishers, customers, and content providers. Our investments in Google and Other Bets span a wide range of industries beyond online advertising. Such investments ultimately may not be commercially viable or may not result in an adequate return of capital and, in pursuing new strategies, we may incur unanticipated liabilities. These endeavors may involve significant risks and uncertainties, including diversion of management resources and, with respect to Other Bets, the use of alternative investment, governance, or compensation structures that may fail to adequately align incentives across the company or otherwise accomplish their objectives.

Within Google, we continue to invest heavily in hardware, including our smartphones and home devices, which is a highly competitive market with frequent introduction of new products and services, rapid adoption of technological advancements by competitors, short product life cycles, evolving industry standards, continual improvement in product price and performance characteristics, and price and feature sensitivity on the part of consumers and businesses. There can be no assurance we will be able to provide hardware that competes effectively.

We are also devoting significant resources to develop and deploy our enterprise-ready cloud services, including Google Cloud Platform and G Suite. We are incurring costs to build and maintain infrastructure to support cloud computing services and hire talent, particularly to support and scale the Cloud salesforce. At the same time, our competitors are rapidly developing and deploying cloud-based services. Pricing and delivery models are competitive and evolving, and we may not attain sufficient scale and profitability to achieve our business objectives.

Within Other Bets, we are investing significantly in the areas of health, life sciences, and transportation, among others. These investment areas face intense competition from large experienced and well-funded competitors and our offerings may not be able to compete effectively or to operate at sufficient levels of profitability.

In addition, new and evolving products and services, including those that use artificial intelligence and machine learning, raise ethical, technological, legal, regulatory, and other challenges, which may negatively affect our brands and demand for our products and services. Because all of these new ventures are inherently risky, no assurance can be given that such strategies and offerings will be successful and will not harm our reputation, financial condition, and operating results.

***Our revenue growth rate could decline over time, and we anticipate downward pressure on our operating margin in the future.***

Our revenue growth rate could decline over time as a result of a number of factors, including increasing competition and the continued expansion of our business into a variety of new fields. Changes in device mix, geographic mix, ongoing product and policy changes, product mix, and property mix and an increasing competition for advertising may also affect our advertising revenue growth rate. We may also experience a decline in our revenue growth rate as our revenues increase to higher levels, if there is a decrease in the rate of adoption of our products, services, and technologies, or due to deceleration or decline in demand for devices used to access our services, among other factors. In addition, COVID-19 and its effects on the global economy has impacted and may continue to adversely impact our revenue growth rate (as discussed in greater detail in our COVID-19 risk factor under ‘General Risks’ below).

In addition to a decline in our revenue growth rate, we may also experience downward pressure on our operating margin resulting from a variety of factors, such as the continued expansion of our business into new fields, including products and services such as hardware, Google Cloud, Google Play, gaming, and subscription products, as well as significant investments in Other Bets, all of which may have margins lower than those we generate from advertising. We may also experience downward pressure on our operating margins from increasing competition and increased costs for many aspects of our business, including within advertising where changes such as device mix, property mix, and partner agreements can affect margin. The margin we earn on revenues generated from our Google Network Members could also decrease in the future if we pay a larger percentage of advertising fees to them. We may also pay increased TAC to our distribution partners as well as increased content acquisition costs to content providers. We may also face an increase in infrastructure costs, supporting businesses such as Search, Google Cloud, and YouTube. Many of our expenses are less variable in nature and may not correlate to changes in revenues.

Due to these factors and the evolving nature of our business, our historical revenue growth rate and historical operating margin may not be indicative of our future performance.

***Our intellectual property rights are valuable, and any inability to protect them could reduce the value of our products, services and brands as well as affect our ability to compete.***

Our patents, trademarks, trade secrets, copyrights, and other intellectual property rights are important assets for us. Various events outside of our control pose a threat to our intellectual property rights, as well as to our products, services, and technologies. For example, effective intellectual property protection may not be available in every country in which our products and services are distributed or made available through the Internet. Also, the efforts we have taken to protect our proprietary rights may not be sufficient or effective. Although we seek to obtain patent protection for our innovations, it is possible we may not be able to protect some of these innovations. Moreover, we may not have adequate patent or copyright protection for certain innovations that later turn out to be important. Furthermore, there is always the possibility, despite our efforts, that the scope of the protection gained will be insufficient or that an issued patent may be deemed invalid or unenforceable.

We also seek to maintain certain intellectual property as trade secrets. The secrecy of such trade secrets and other sensitive information could be compromised, which could cause us to lose the competitive advantage resulting from these trade secrets. We also face risks associated with our trademarks. For example, there is a risk that the word “Google” could become so commonly used that it becomes synonymous with the word “search.” Some courts have ruled that "Google" is a protectable trademark, but it is possible that other courts, particularly those outside of the United States, may reach a different determination. If this happens, we could lose protection for this trademark, which could result in other people using the word “Google” to refer to their own products, thus diminishing our brand.

Any significant impairment of our intellectual property rights could harm our business and our ability to compete. Also, protecting our intellectual property rights is costly and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to do business and harm our operating results.

***Our business depends on strong brands, and failing to maintain and enhance our brands would hurt our ability to expand our base of users, advertisers, customers, content providers, and other partners.***

Our strong brands have significantly contributed to the success of our business. Maintaining and enhancing the brands within Google and Other Bets increases our ability to enter new categories and launch new and innovative products that better serve the needs of our users, advertisers, customers, content providers, and other partners. Our brands may be negatively affected by a number of factors, including, among others, reputational issues, third-party content shared on our platforms, data privacy and security issues and developments, and product or technical performance failures. For example, if we fail to appropriately respond to the sharing of misinformation or objectionable content on our services or objectionable practices by advertisers, or to otherwise adequately address user concerns, our users may lose confidence in our brands. Our brands may also be negatively affected by the use of our products or services to disseminate information that is deemed to be false or misleading.

Furthermore, failure to maintain and enhance equity in our brands may harm our business, financial condition, and operating results. Our success will depend largely on our ability to remain a technology leader and continue to provide high-quality, innovative products and services that are truly useful and play a valuable role in a range of settings.

***We face a number of manufacturing and supply chain risks that, if not properly managed, could harm our financial condition, operating results, and prospects.***

We face a number of risks related to manufacturing and supply chain management, which could affect our ability to supply both our products and our internet-based services.

We rely on other companies to manufacture many of our assemblies and finished products, to design certain of our components and parts, and to participate in the distribution of our products and services. Our business could be negatively affected if we are not able to engage these companies with the necessary capabilities or capacity on reasonable terms, or if those we engage fail to meet their obligations (whether due to financial difficulties or other reasons), or make adverse changes in the pricing or other material terms of our arrangements with them.

We may experience supply shortages and price increases driven by raw material, component or part availability, manufacturing capacity, labor shortages, industry allocations, tariffs, trade disputes and barriers, natural disasters or pandemics (including COVID-19), the effects of climate change (such as sea level rise, drought, flooding, wildfires, and increased storm severity), and significant changes in the financial or business condition of our suppliers. We may experience shortages or other supply chain disruptions that could negatively affect our operations. In addition, some of the components we use in our technical infrastructure and products are available from only one or limited sources, and we may not be able to find replacement vendors on favorable terms in the event of a supply chain disruption. In addition, a significant supply interruption could delay critical data center upgrades or expansions and delay product availability.

We may enter into long term contracts for materials and products that commit us to significant terms and conditions. We may be liable for materials and products that are not consumed due to market acceptance, technological change, obsolescences, quality, product recalls, and warranty issues. For instance, because certain of our hardware supply contracts have volume-based pricing or minimum purchase requirements, if the volume of our hardware sales decreases or does not reach projected targets, we could face increased materials and manufacturing costs or other financial liabilities that could make our products more costly per unit to manufacture and negatively affect our financial results. Furthermore, certain of our competitors may negotiate more favorable contractual terms based on volume and other commitments that may provide them with competitive advantages and may affect our supply.

Our products and services may have quality issues resulting from design, manufacturing, or operations. Sometimes, these issues may be caused by components we purchase from other manufacturers or suppliers. If the quality of our products and services does not meet expectations or our products or services are defective, it could harm our reputation, financial condition, and operating results.

We require our suppliers and business partners to comply with laws and, where applicable, our company policies, such as the Google Supplier Code of Conduct, regarding workplace and employment practices, data security, environmental compliance and intellectual property licensing, but we do not control them or their practices. Violations of law or unethical business practices could result in supply chain disruptions, canceled orders, harm to key relationships, and damage to our reputation. Their failure to procure necessary license rights to intellectual property, could affect our ability to sell our products or services and expose us to litigation or financial claims.

***Interruption, interference with, or failure of our information technology and communications systems could hurt our ability to effectively provide our products and services, which could harm our reputation, financial condition, and operating results. In addition, complications with the design or implementation of our new global enterprise resource planning system could harm our business and operations.***

The availability of our products and services and fulfillment of our customer contracts depend on the continuing operation of our information technology and communications systems. Our systems are vulnerable to damage, interference, or interruption from terrorist attacks, natural disasters or pandemics (including COVID-19), the effects of climate change (such as sea level rise, drought, flooding, wildfires, and increased storm severity), power loss, telecommunications failures, computer viruses, ransomware attacks, computer denial of service attacks, phishing schemes, or other attempts to harm or access our systems. Some of our data centers are located in areas with a high risk of major earthquakes or other natural disasters. Our data centers are also subject to break-ins, sabotage, and intentional acts of vandalism, and, in some cases, to potential disruptions resulting from problems experienced by facility operators. Some of our systems are not fully redundant, and disaster recovery planning cannot account for all eventualities.

The occurrence of a natural disaster or pandemic (including COVID-19), closure of a facility, or other unanticipated problems at, or impacting, our data centers could result in lengthy interruptions in our service. In addition, our products and services are highly technical and complex and may contain errors or vulnerabilities, which could result in interruptions in or failure of our services or systems.

In addition, we rely extensively on information systems and technology to manage our business and summarize operating results. We are in the process of a multi-year implementation of a new ERP system, which will replace much of our existing core financial systems. The ERP system is designed to accurately maintain our financial records, enhance the flow of financial information, improve data management, and provide timely information to our management team. We may not be able to successfully implement the ERP system without experiencing delays, increased costs, and other difficulties. Failure to successfully design and implement the new ERP system as planned could harm our business, financial condition, and operating results. Additionally, if we do not effectively implement the ERP system as planned or the ERP system does not operate as intended, the effectiveness of our internal control over financial reporting could be negatively affected.

***Our international operations expose us to additional risks that could harm our business, our financial condition, and operating results.***

Our international operations are significant to our revenues and net income, and we plan to continue to grow internationally. International revenues accounted for approximately 53% of our consolidated revenues in the six months ended June 30, 2020. In addition to risks described elsewhere in this section, our international operations expose us to other risks, including the following:

- Restrictions on foreign ownership and investments, and stringent foreign exchange controls that might prevent us from repatriating cash earned in countries outside the U.S.
- Import and export requirements, tariffs, trade disputes and barriers, and customs classifications that may prevent us from offering products or providing services to a particular market, or that could limit our ability to source assemblies and finished products from a particular market, and may increase our operating costs.
- Longer payment cycles in some countries, increased credit risk, and higher levels of payment fraud.
- Evolving foreign events, including Brexit, the United Kingdom's withdrawal from the European Union (EU). Brexit may adversely affect our revenues and could subject us to new regulatory costs and challenges (including the transfer of personal data between the EU and the United Kingdom), in addition to other adverse effects that we are unable to effectively anticipate.
- Anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act, and other local laws prohibiting certain payments to government officials, violations of which could result in civil and criminal penalties.
- Uncertainty regarding liability for services and content, including uncertainty as a result of local laws and lack of legal precedent.
- Different employee/employer relationships, existence of works councils and labor unions, and other challenges caused by distance, language, and cultural differences, making it harder to do business in certain jurisdictions.

Because we conduct business in currencies other than U.S. dollars but report our financial results in U.S. dollars, we face exposure to fluctuations in foreign currency exchange rates. Although we hedge a portion of our international currency exposure, significant fluctuations in exchange rates between the U.S. dollar and foreign currencies may adversely affect our revenues and earnings. Hedging programs are also inherently risky and could expose us to additional risks that could harm our financial condition and operating results.

**Risks Related to our Industry**

***People access the Internet through a variety of platforms and devices that continue to evolve with the advancement of technology and user preferences. If manufacturers and users do not widely adopt versions of our products and services developed for these new interfaces, our business could be harmed.***

People access the Internet through a growing variety of devices such as desktop computers, mobile phones, smartphones, laptops and tablets, video game consoles, voice-activated speakers, wearables, automobiles, and television-streaming devices. Our products and services may be less popular on these new interfaces. Each manufacturer or distributor may establish unique technical standards for its devices, and our products and services may not be available on these devices as a result. Some manufacturers may also elect not to include our products on their devices. In addition, search queries are increasingly being undertaken via voice-activated speakers, apps, social media or other platforms, which could harm our business. It is hard to predict the challenges we may encounter in adapting our products and services and developing competitive new products and services. We expect to continue to devote significant resources to creating and supporting products and services across multiple platforms and devices. Failing to attract and retain a substantial number of new device manufacturers, suppliers, distributors, developers, and users, or failing to develop products and technologies that work well on new devices and platforms, could harm our business, financial condition, and operating results and ability to capture future business opportunities.

***Data privacy and security concerns relating to our technology and our practices could damage our reputation, cause us to incur significant liability, and deter current and potential users or customers from using our products and services. Software bugs or defects, security breaches, and attacks on our systems could result in the improper disclosure and use of user data and interference with our users and customers' ability to use our products and services, harming our business operations and reputation.***

Concerns about our practices with regard to the collection, use, disclosure, or security of personal information or other data-privacy-related matters, even if unfounded, could harm our reputation, financial condition, and operating results. Our policies and practices may change over time as expectations regarding privacy and data change.

Our products and services involve the storage and transmission of proprietary information, and bugs, theft, misuse, defects, vulnerabilities in our products and services, and security breaches expose us to a risk of loss of this information, improper use and disclosure of such information, litigation, and other potential liability. Systems and control failures, security breaches, failure to comply with our privacy policies, and/or inadvertent disclosure of user data could result in government and legal exposure, seriously harm our reputation and brand and, therefore, our business, and impair our ability to attract and retain users or customers. We expect to continue to expend significant resources to maintain security protections that shield against bugs, theft, misuse, or security vulnerabilities or breaches.

We experience cyber attacks and other attempts to gain unauthorized access to our systems on a regular basis. We may experience future security issues, whether due to employee error or malfeasance or system errors or vulnerabilities in our or other parties' systems, which could result in significant legal and financial exposure. Government inquiries and enforcement actions, litigation, and adverse press coverage could harm our business. We may be unable to anticipate or detect attacks or vulnerabilities or implement adequate preventative measures. Attacks and security issues could also compromise trade secrets and other sensitive information, harming our business.

While we have dedicated significant resources to privacy and security incident response capabilities, including dedicated worldwide incident response teams, our response process, particularly during times of a natural disaster or pandemic (including COVID-19), may not be adequate, may fail to accurately assess the severity of an incident, may not respond quickly enough, or may fail to sufficiently remediate an incident. As a result, we may suffer significant legal, reputational, or financial exposure, which could harm our business, financial condition, and operating results.

***Our ongoing investments in safety, security, and content review will likely continue to identify abuse of our platforms and misuse of user data.***

In addition to our efforts to mitigate cyber attacks, we are making significant investments in safety, security, and content review efforts to combat misuse of our services and unauthorized access to user data by third parties, including investigations and review of platform applications that could access the information of users of our services. As a result of these efforts, we could discover incidents of unnecessary access to or misuse of user data or other undesirable activity by third parties. We may not discover all such incidents or activity, whether as a result of our data limitations, including our lack of visibility over our encrypted services, the scale of activity on our platform, or other factors, including factors outside of our control such as a natural disaster or pandemic (including COVID-19), and we may be notified of such incidents or activity via third parties. Such incidents and activities may include the use of user data or our systems in a manner inconsistent with our terms, contracts or policies, the existence of false or undesirable user accounts, election interference, improper ad purchases, activities that threaten people's safety on- or offline, or instances of spamming, scraping, or spreading disinformation. We may also be unsuccessful in our efforts to enforce our policies or otherwise remediate any such incidents. Any of the foregoing developments may negatively affect user trust and engagement, harm our reputation and brands, require us to change our business practices in a manner adverse to our business, and adversely affect our business and financial results. Any such developments may also subject us to additional litigation and regulatory inquiries, which could result in monetary penalties and damages, divert management's time and attention, and lead to enhanced regulatory oversight.

***Problematic content, including low-quality user-generated content, web spam, content farms, and other violations of our guidelines could affect the quality of our services, which could damage our reputation and deter our current and potential users from using our products and services.***

We, like others in the industry, face violations of our content guidelines, including sophisticated attempts by bad actors to manipulate our hosting and advertising systems to fraudulently generate revenues, or to otherwise generate traffic that does not represent genuine user interest or intent. While we invest significantly in efforts to promote high-quality and relevant results and to detect and prevent low-quality content and invalid traffic, we may be unable to adequately detect and prevent such abuses or promote high-quality content, particularly during times of a natural disaster or pandemic (including COVID-19).

Many websites violate or attempt to violate our guidelines, including by seeking to inappropriately rank higher in search results than our search engine's assessment of their relevance and utility would rank them. Such efforts (known as "web spam") may affect the quality of content on our platforms and lead them to display false, misleading or undesirable content.

Although English-language web spam in our search results has been reduced, and web spam in most other languages is limited, we expect web spammers will continue to seek inappropriate ways to improve their rankings.

We continuously combat web spam in our search results, including through indexing technology that makes it harder for spam-like, less useful web content to rank highly. We also continue to invest in and deploy proprietary technology to detect and prevent web spam from abusing our platforms.

We also face other challenges from low-quality and irrelevant content websites, including content farms, which are websites that generate large quantities of low-quality content to help them improve their search rankings. We are continually launching algorithmic changes focused on low-quality websites.

If we fail to either detect and prevent an increase in problematic content or effectively promote high-quality content, it could hurt our reputation for delivering relevant information or reduce use of our platforms, harming our financial condition or operating results. It may also subject us to litigation and regulatory inquiries, which could result in monetary penalties and damages, divert management's time and attention, and lead to enhanced regulatory oversight.

***Our business depends on continued and unimpeded access to the Internet by us and our users. Internet access providers may be able to restrict, block, degrade, or charge for access to certain of our products and services, which could lead to additional expenses and the loss of users and advertisers.***

Our products and services depend on the ability of our users to access the Internet, and certain of our products require significant bandwidth to work effectively. Currently, this access is provided by companies that have significant market power in the broadband and internet access marketplace, including incumbent telephone companies, cable companies, mobile communications companies, and government-owned service providers. Some of these providers have taken, or have stated that they may take measures that could degrade, disrupt, or increase the cost of user access to certain of our products by restricting or prohibiting the use of their infrastructure to support or facilitate our offerings, or by charging increased fees to us or our users to provide our offerings. Some jurisdictions have adopted regulations prohibiting certain forms of discrimination by internet access providers; however, substantial uncertainty exists in the United States and elsewhere regarding such protections. For example, in 2018 the United States Federal Communications Commission repealed net neutrality rules, which could lead internet access providers to restrict, block, degrade, or charge for access to certain of our products and services. In addition, in some jurisdictions, our products and services have been subject to government-initiated restrictions or blockages. COVID-19 has also resulted in quarantines, shelter in place orders, and work from home directives, all of which have increased demands for internet access and may create access challenges. These could result in a loss of existing users, customers and advertisers, goodwill, and increased costs, and could impair our ability to attract new users, customers and advertisers, thereby harming our business.

**Risks Related to Laws and Regulations**

***We are subject to increasing regulatory scrutiny as well as changes in public policies governing a wide range of topics that may negatively affect our business.***

We and other companies in the technology industry are experiencing increased regulatory scrutiny. For instance, various regulatory agencies, including competition, consumer protection, and privacy authorities, are reviewing aspects of our products and services. We continue to cooperate with these investigations. Prior, existing, and new investigations have in the past and may in the future result in substantial fines and penalties, changes to our products and services, alterations to our business operations, and civil litigation, all of which could harm our business, reputation, financial condition, and operating results.

Changes in international and local social, political, economic, tax, and regulatory conditions or in laws and policies governing a wide range of topics may increase our cost of doing business, limit our ability to pursue certain business models or offer certain products or services, and cause us to change our business practices. Further, our investment in a variety of new fields, including the health industry and payment services, also raises a number of new regulatory issues. These factors could harm our business and operating results in material ways.

***A variety of new and existing laws and/or interpretations could harm our business.***

We are subject to numerous U.S. and foreign laws and regulations covering a wide variety of subject matters. New laws and regulations (or new interpretations or applications of existing laws and regulations in a manner inconsistent with our practices) may make our products and services less useful, limit our ability to pursue certain business models or offer certain products and services, require us to incur substantial costs, expose us to unanticipated civil or criminal liability, or cause us to change our business practices. These laws and regulations are evolving and involve matters central to our business, including, among others:

- Competition laws and regulations around the world.

- Privacy laws, such as the California Consumer Privacy Act of 2018 that came into effect in January of 2020, which gives new data privacy rights to California residents, and SB-327 in California, which regulates the security of data in connection with internet connected devices.
- Data protection laws passed by many states within the U.S. and by certain countries regarding notification to data subjects and/or regulators when there is a security breach of personal data.
- Copyright laws, such as the EU Directive on Copyright in the Digital Single Market (EUCD) of April 17, 2019, which EU Member States must implement by June 17, 2021. The text introduces new constraining licensing regimes that could affect our ability to operate with respect to copyright protected works. It could increase the liability of some content-sharing services with respect to content uploaded by their users. It has also created a new property right in news publications that limits the ability of some online services to interact with or present such content.
- Data localization laws, which generally mandate that certain types of data collected in a particular country be stored and/or processed within that country.
- Various U.S. and international laws that govern the distribution of certain materials to children and regulate the ability of online services to collect information from minors.
- Various laws with regard to content removal and disclosure obligations, such as the Network Enforcement Act in Germany, which may affect our businesses and operations and may subject us to significant fines if such laws are interpreted and applied in a manner inconsistent with our practices or when we may not proactively discover such content due to the scale of third-party content and the limitations of existing technologies. Other countries, including Singapore, Australia, and the United Kingdom, have implemented or are considering similar legislation imposing penalties for failure to remove certain types of content.

In addition, the applicability and scope of these laws, as interpreted by the courts, remain uncertain and could harm our business. For example:

- We rely on statutory safe harbors, as set forth in the Digital Millennium Copyright Act and Section 230 of the Communications Decency Act in the United States and the E-Commerce Directive in Europe, against copyright liability for various linking, caching, and hosting activities. Any legislation or court rulings affecting these safe harbors may adversely affect us. There are legislative proposals in both the US and EU that could reduce our safe harbor protection.
- Court decisions such as the judgment of the Court of Justice of the European Union (CJEU) on May 13, 2014 on the 'right to be forgotten,' which allows individuals to demand that Google remove search results about them in certain instances, may limit the content we can show to our users and impose significant operational burdens.

The introduction of new businesses, products, services, and technologies, our activities in certain jurisdictions, or other actions we take may subject us to additional laws and regulations. The costs of compliance with these laws and regulations are high and are likely to increase in the future. Any failure on our part to comply with laws and regulations can result in negative publicity and diversion of management time and effort and may subject us to significant liabilities and other penalties.

***We are subject to claims, suits, government investigations, and other proceedings that may harm our business, financial condition, and operating results.***

We are subject to claims, suits, and government investigations involving competition, intellectual property, data privacy and security, consumer protection, tax, labor and employment, commercial disputes, content generated by our users, goods and services offered by advertisers or publishers using our platforms, and other matters. Due to our manufacturing and sale of an expanded suite of products, including hardware as well as Google Cloud offerings, we also are subject to a variety of claims including product warranty, product liability, and consumer protection claims related to product defects, among other litigation. We may also be subject to claims involving health and safety, hazardous materials usage, other environmental impacts, or service disruptions or failures.

Any of these types of legal proceedings can have an adverse effect on us because of legal costs, diversion of management resources, negative publicity and other factors. Determining reserves for our pending litigation is a complex, fact-intensive process that requires significant judgment. The resolution of one or more such proceedings has resulted in, and may in the future result in, additional substantial fines, penalties, injunctions, and other sanctions that could harm our business, financial condition, and operating results.

***We may be subject to legal liability associated with providing online services or content.***

Our products and services let users exchange information, advertise products and services, conduct business, and engage in various online activities. We also place advertisements displayed on other companies' websites, and we offer third-party products, services, and/or content. The law relating to the liability of online service providers for others' activities on their services is still somewhat unsettled both within the U.S. and internationally. Claims have been brought against us for defamation, negligence, breaches of contract, copyright and trademark infringement, unfair competition, unlawful activity, torts, fraud, or other legal theories based on the nature and content of information available on or via our services.

We may be subject to claims by virtue of our involvement in hosting, transmitting, marketing, branding, or providing access to content created by third parties. Defense of any such actions could be costly and involve significant time and attention of our management and other resources, may result in monetary liabilities or penalties, and may require us to change our business in an adverse manner.

***Privacy and data protection regulations are complex and rapidly evolving areas. Adverse interpretations of these laws could harm our business, reputation, financial condition, and operating results.***

Authorities around the world have adopted and are considering a number of legislative and regulatory proposals concerning data protection and limits on encryption of user data. Adverse legal rulings, legislation, or regulation could result in fines and orders requiring that we change our data practices, which could have an adverse effect on our ability to provide services, harming our business operations. Complying with these evolving laws could result in substantial costs and harm the quality of our products and services, negatively affecting our business, and may be particularly challenging during certain times, such as a natural disaster or pandemic (including COVID-19).

Recent legal developments in Europe have created compliance uncertainty regarding transfers of personal data from Europe to the United States. For example, the General Data Protection Regulation (GDPR) applies to all of our activities conducted from an establishment in the EU or related to products and services that we offer to EU users or customers, or the monitoring of their behavior in the EU. The GDPR creates a range of new compliance obligations.

Ensuring compliance with the GDPR is an ongoing commitment that involves substantial costs, and despite our efforts, governmental authorities or others have asserted and may continue to assert that our business practices fail to comply with its requirements. If our operations are found to violate GDPR requirements, we may incur substantial fines, have to change our business practices, and face reputational harm, any of which could have a material adverse effect on our business. In particular, serious breaches of the GDPR can result in administrative fines of up to 4% of annual worldwide revenues. Fines of up to 2% of annual worldwide revenues can be levied for other specified violations.

The EU-U.S. and the Swiss-U.S. Privacy Shield frameworks allow U.S. companies that self-certify to the U.S. Department of Commerce and publicly commit to comply with specified requirements to import personal data from the EU and Switzerland. Recently, the Court of Justice of the European Union ruled that the EU-U.S. Privacy Shield is an invalid transfer mechanism, but upheld Standard Contractual Clauses as a valid transfer mechanism. The validity of data transfer mechanisms remains subject to legal, regulatory, and political developments in both Europe and the U.S. The invalidation of the EU-U.S. Privacy Shield and potential invalidation of other data transfer mechanisms could have a significant adverse impact on our ability to process and transfer personal data outside of the EEA.

These developments create some uncertainty, and compliance obligations could cause us to incur costs or harm the operations of our products and services in ways that harm our business.

***We face, and may continue to face intellectual property and other claims that could be costly to defend, result in significant damage awards or other costs (including indemnification awards), and limit our ability to use certain technologies in the future.***

We, like other internet, technology and media companies, are frequently subject to litigation based on allegations of infringement or other violations of intellectual property rights. In addition, patent-holding companies may frequently seek to generate income from patents they have obtained by bringing claims against us. As we have grown, the number of intellectual property claims against us has increased and may continue to increase as we develop new products, services, and technologies.

We have had patent, copyright, trade secret, and trademark infringement lawsuits filed against us claiming that certain of our products, services, and technologies infringe the intellectual property rights of others. Other parties have also sought broad injunctive relief against us by filing claims in U.S. and international courts and the U.S. International Trade Commission (ITC) for exclusion and cease-and-desist orders, which could limit our ability to sell our products or services in the U.S. or elsewhere if our products or services or those of our customers or suppliers are found to infringe the intellectual property subject to the claims. Adverse results in any of these lawsuits may include awards of monetary damages, costly royalty or licensing agreements (if licenses are available at all), or orders preventing us from offering certain features, functionalities, products, or services. They may also cause us to change our business practices and require development of non-infringing products, services, or technologies, which could result in a loss of revenues for us and otherwise harm our business.

Many of our agreements with our customers and partners, including certain suppliers, require us to defend against certain intellectual property infringement claims and in some cases indemnify them for certain intellectual property infringement claims against them, which could result in increased costs for defending such claims or significant damages if there were an adverse ruling in any such claims. Such customers and partners may also discontinue the use of our products, services, and technologies, as a result of injunctions or otherwise, which could result in loss of revenues and adversely affect our business. Moreover, intellectual property indemnities provided to us by our suppliers, when obtainable, may not cover all damages and losses suffered by us and our customers arising from intellectual property infringement claims. Furthermore, in connection with our divestitures, we have agreed, and may in the future agree, to provide indemnification for certain potential liabilities, including those associated with intellectual property claims.

Regardless of their merits, intellectual property claims are often time consuming and expensive to litigate or settle. To the extent such claims are successful, they may harm our business, including our product and service offerings, financial condition, or operating results.

**Risks Related to Ownership of our Stock**

***We cannot guarantee that any share repurchase program will be fully consummated or that any share repurchase program will enhance long-term stockholder value, and share repurchases could increase the volatility of the price of our stock and could diminish our cash reserves.***

We engage in share repurchases from time to time. In July 2019 the Board of Directors of Alphabet authorized the company to repurchase up to $25.0 billion of its Class C capital stock. As of June 30, 2020, $5.4 billion remains available for repurchase. In July 2020, the Board of Directors of Alphabet authorized the company to repurchase up to an additional $28.0 billion of its Class C capital stock. Our repurchase program does not have an expiration date and does not obligate Alphabet to repurchase any specific dollar amount or to acquire any specific number of shares. Our share repurchase program could affect the price of our stock and increase volatility and may be suspended or terminated at any time, which may result in a decrease in the trading price of our stock.

***The concentration of our stock ownership limits our stockholders' ability to influence corporate matters.***

Our Class B common stock has 10 votes per share, our Class A common stock has one vote per share, and our Class C capital stock has no voting rights. As of June 30, 2020, Larry Page and Sergey Brin beneficially owned approximately 84.5% of our outstanding Class B common stock, which represented approximately 51.3% of the voting power of our outstanding common stock. Through their stock ownership, Larry and Sergey have significant influence over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or our assets, for the foreseeable future. In addition, because our Class C capital stock carries no voting rights (except as required by applicable law), the issuance of the Class C capital stock, including in future stock-based acquisition transactions and to fund employee equity incentive programs, could continue Larry and Sergey's current relative voting power and their ability to elect all of our directors and to determine the outcome of most matters submitted to a vote of our stockholders. This concentrated control limits or severely restricts other stockholders' ability to influence corporate matters and we may take actions that some of our stockholders do not view as beneficial, which could reduce the market price of our Class A common stock and our Class C capital stock.

***Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable.***

Provisions in Alphabet's certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. These provisions include the following:

- Our certificate of incorporation provides for a tri-class capital stock structure. As a result of this structure, Larry and Sergey have significant influence over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or our assets. This concentrated control could discourage others from initiating any potential merger, takeover, or other change of control transaction that other stockholders may view as beneficial. As noted above, the issuance of the Class C capital stock could have the effect of continuing the influence of Larry and Sergey.

- Our Board of Directors has the right to elect directors to fill a vacancy created by the expansion of the Board of Directors or the resignation, death, or removal of a director, which prevents stockholders from being able to fill vacancies on our Board of Directors.
- Our stockholders may not act by written consent. As a result, a holder, or holders, controlling a majority of our capital stock would not be able to take certain actions without holding a stockholders' meeting.
- Our certificate of incorporation prohibits cumulative voting in the election of directors. This limits the ability of minority stockholders to elect director candidates.
- Stockholders must provide advance notice to nominate individuals for election to the Board of Directors or to propose matters that can be acted upon at a stockholders' meeting. These provisions may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.
- Our Board of Directors may issue, without stockholder approval, shares of undesignated preferred stock. The ability to issue undesignated preferred stock makes it possible for our Board of Directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us.

As a Delaware corporation, we are also subject to certain Delaware anti-takeover provisions. Under Delaware law, a corporation may not engage in a business combination with any holder of 15% or more of its outstanding voting stock unless the holder has held the stock for three years or, among other things, the Board of Directors has approved the transaction. Our Board of Directors could rely on Delaware law to prevent or delay an acquisition of us.

**General Risks**

***The continuing impacts of COVID-19 are highly unpredictable and could be significant, and may have an adverse effect on our business, operations and our future financial performance.***

In late 2019, COVID-19 emerged and by March 11, 2020 was declared a global pandemic by The World Health Organization. Governments and municipalities around the world instituted measures in an effort to control the spread of COVID-19, including quarantines, shelter-in-place orders, school closings, travel restrictions, and closure of non-essential businesses. Since the end of March, the macroeconomic impacts continue to be significant, evolving and unpredictable, exhibited by, among other things, a rise in unemployment, changes in consumer behavior, and market volatility.

The global health and economic implications of this pandemic have adversely impacted our business, operations and financial performance and could impact them significantly in the future. As a result of the scale of the ongoing pandemic and the speed at which the global community has been impacted, our quarterly revenue growth rate and expense as a percentage of our revenues differed from our historical rate, may differ significantly in future periods, and our future operating results may fall below expectations.

The future impact of the ongoing pandemic on our business, operations and future financial performance could include, but are not limited to:

- Significant decline in advertising revenues as advertiser spending slows due to an economic downturn. This decline in advertising revenues could persist through and beyond a recessionary period. In addition, we may experience a significant and prolonged shift in user behavior such as a shift in interests to less commercial topics.
- Significant decline in other revenues due to a decline in customer demand. For example, if consumer demand for electronics continues to decline, our hardware revenues could be significantly impacted.
- Adverse impacts to our operating income, operating margin, net income, EPS and respective growth rates - particularly if expenses do not decrease across Alphabet at the same pace as revenue declines. Many of our expenses are less variable in nature and/or may not correlate to changes in revenues, including costs associated with our data centers and facilities as well as employee compensation. As such, we may not be able to decrease them significantly in the short-term, or we may choose not to significantly reduce them in an effort to remain focused on long-term outlook and investment opportunities.
- Significant decrease in our operating cash flows as a result of decreased advertiser spending and deterioration in the credit quality and liquidity of our customers, which could adversely affect our accounts

receivable. Investing cash flows could decrease due to slowing spend on data center and facilities construction projects due to a slowing or stopping of construction or significant restrictions placed on construction.

- Significant supply chain constraints such that we cannot procure the servers and other technology infrastructure needed to deliver our services to our users and customers. Supply chain constraints could also affect our ability to procure the components needed to manufacture our hardware products, thereby affecting supply availability and timing of hardware launches. Increased pricing of these components could also affect infrastructure costs to deliver our services or costs of hardware products that we sell.
- Increased demand globally for bandwidth to support users who are at work and school remotely could result in reduction of quality or curtailment of services, such as bandwidth capping on YouTube.
- The rapid and broad-based shift to a remote working environment creates inherent productivity, connectivity, and oversight challenges. For example, governmental lockdowns, restrictions or new regulations could significantly impact the ability of our employees and vendors to work productively. Governmental restrictions have been globally inconsistent and it is not clear when a return to worksite locations or travel will be permitted or what restrictions will be in place in those environments. The extent and/or duration of ongoing workforce restrictions and limitations could impact our ability to enhance, develop and support existing products and services, detect and prevent spam and problematic content, hold product sales and marketing events, and generate new sales leads, among others. In addition, the changed environment under which we are operating could have an impact on our internal controls over financial reporting as well as our ability to meet a number of our compliance requirements in a timely or quality manner.
- Ongoing significant foreign exchange volatility could materially impact our revenues that are denominated in foreign currencies, our ability or strategy to hedge our foreign exchange exposure. Additionally, volatility in debt and equity markets could affect the values of our debt and equity holdings and the realized gains or losses on the disposition of those holdings.

***Our operating results may fluctuate, which makes our results difficult to predict and could cause our results to fall short of expectations.***

Our operating results may fluctuate as a result of a number of factors, many outside of our control.

As a result, comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. Our quarterly, year-to-date, and annual expenses as a percentage of our revenues may differ significantly from our historical rates. Our operating results in future quarters may fall below expectations. Any of these events could cause our stock price to fall. Each of the risk factors listed in this section in addition to the following factors may affect our operating results:

- Our ability to continue to attract and retain users and customers to our products and services.
- Our ability to attract user and/or customer adoption of, and generate significant revenues from, new products, services, and technologies in which we have invested considerable time and resources.
- Our ability to monetize traffic on Google properties and our Google Network Members' properties across various devices.
- Revenue fluctuations caused by changes in device mix, geographic mix, ongoing product and policy changes, product mix, and property mix.
- The amount of revenues and expenses generated and incurred in currencies other than U.S. dollars, and our ability to manage the resulting risk through our foreign exchange risk management program.
- The amount and timing of operating costs and expenses and capital expenditures related to the maintenance and expansion of our businesses, operations, and infrastructure.
- Our focus on long-term goals over short-term results.
- The results of our acquisitions, divestitures, and our investments in risky projects, including new businesses, products, services, and technologies.
- Our ability to keep our products and services operational at a reasonable cost and without service interruptions.
- The seasonal fluctuations in internet usage, advertising spending, and underlying business trends such as traditional retail seasonality. Our rapid growth has tended to mask the cyclicality and seasonality of our

business. As our growth rate has slowed, the cyclicality and seasonality in our business has become more pronounced and caused our operating results to fluctuate.

- Geopolitical events, including trade disputes.
- Changes in global business or macroeconomic conditions.

Because our businesses are changing and evolving, our historical operating results may not be useful to you in predicting our future operating results.

***Acquisitions, joint ventures, investments, and divestitures could result in operating difficulties, dilution, and other consequences that may harm our business, financial condition, and operating results.***

Acquisitions, joint ventures, investments and divestitures are important elements of our overall corporate strategy and use of capital, and these transactions could be material to our financial condition and operating results. We expect to continue to evaluate and enter into discussions regarding a wide array of potential strategic transactions, which could create unforeseen operating difficulties and expenditures. Some of the areas where we face risks include:

- Diversion of management time and focus from operating our business to challenges related to acquisitions and other strategic transactions.
- Failure to successfully integrate and further develop the acquired business or technology.
- Implementation or remediation of controls, procedures, and policies at the acquired company.
- Integration of the acquired company's accounting, human resource, and other administrative systems, and coordination of product, engineering, and sales and marketing functions.
- Transition of operations, users, and customers onto our existing platforms.
- Failure to obtain required approvals on a timely basis, if at all, from governmental authorities, or conditions placed upon approval that could, among other things, delay or prevent us from completing a transaction, or otherwise restrict our ability to realize the expected financial or strategic goals of a transaction.
- In the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political, and regulatory risks associated with specific countries.
- Cultural challenges associated with integrating employees from the acquired company into our organization, and retention of employees from the businesses we acquire.
- Liability for activities of the acquired company before the acquisition, including patent and trademark infringement claims, data privacy and security issues, violations of laws, commercial disputes, tax liabilities, and other known and unknown liabilities.
- Litigation or other claims in connection with the acquired company, including claims from terminated employees, customers, former stockholders, or other third parties.

Our failure to address these risks or other problems encountered in connection with our past or future acquisitions and other strategic transactions could cause us to fail to realize their anticipated benefits, incur unanticipated liabilities, and harm our business generally.

Our acquisitions and other strategic transactions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, or amortization expenses, or impairment of goodwill and/or purchased long-lived assets, and restructuring charges, any of which could harm our financial condition or operating results. Also, the anticipated benefits or value of our acquisitions and other strategic transactions may not materialize. In connection with our divestitures, we have agreed, and may in the future agree, to provide indemnification for certain potential liabilities, which may harm our financial condition or operating results.

***If we were to lose the services of key personnel, we may not be able to execute our business strategy.***

Our future success depends in large part upon the continued service of key members of our senior management team. For instance, Sundar Pichai is critical to the overall management of Alphabet and its subsidiaries and plays an important role in the development of our technology. He also plays a key role in maintaining our culture and setting our strategic direction. All of our executive officers and key employees are at-will employees, and we do not maintain any key-person life insurance policies. The loss of key personnel could seriously harm our business.

***We rely on highly skilled personnel and, if we are unable to retain or motivate key personnel, hire qualified personnel, or maintain our corporate culture, we may not be able to grow effectively.***

Our performance largely depends on the talents and efforts of highly skilled individuals. Our future success depends on our continuing ability to identify, hire, develop, motivate, and retain highly skilled personnel for all areas of our organization. Competition in our industry for qualified employees is intense, and certain of our competitors have directly targeted our employees. In addition, our compensation arrangements, such as our equity award programs, may not always be successful in attracting new employees and retaining and motivating our existing employees. Our continued ability to compete effectively depends on our ability to attract new employees and to retain and motivate our existing employees. New executive orders and/or court decisions pertaining to immigration may also impact our ability to hire or retain some of our talent from overseas.

In addition, we believe that our corporate culture fosters innovation, creativity, and teamwork. As our organization grows and evolves, we may need to implement more complex organizational management structures or adapt our corporate culture and work environments to ever-changing circumstances, such as during times of a natural disaster or pandemic (including COVID-19), and these changes could impact our ability to compete effectively or have an adverse impact on our corporate culture.

***In preparing our financial statements, we incorporate valuation methodologies that are subjective in nature and valuations may fluctuate over time.***

We measure certain of our non-marketable equity and debt investments, certain other instruments including stock-based compensation awards settled in the stock of certain Other Bets, and certain assets and liabilities acquired in a business combination, at fair value on a nonrecurring basis. The determination of fair value involves use of appropriate valuation methods and certain unobservable inputs, require management judgment and estimation, and may change over time.

As it relates to our non-marketable investments, the market values can be negatively affected by liquidity, credit deterioration or losses, performance and financial results of the underlying companies, foreign exchange rates, changes in interest rates, including changes that may result from the implementation of new benchmark rates that replace LIBOR, the effect of new or changing regulations, the stock market in general, or other factors. The effect of COVID-19 on our impairment assessment for non-marketable investments requires significant judgment due to the uncertainty around the duration and severity of the impact.

We adjust the carrying value of our non-marketable equity investments to fair value for observable transactions of identical or similar investments of the same issuer or for impairments. All gains and losses on non-marketable equity securities, realized and unrealized, are recognized in other income (expense), which increases the volatility of our other income (expense).

As a result of these factors, the value or liquidity of our cash equivalents, as well as our marketable and non-marketable securities could decline and result in a material impairment, which could materially adversely affect our financial condition and operating results.

***We could be subject to changes in tax rates, the adoption of new U.S. or international tax legislation, or exposure to additional tax liabilities.***

Our future income taxes could be negatively affected by earnings being lower than anticipated in jurisdictions that have lower statutory tax rates and higher than anticipated in jurisdictions that have higher statutory tax rates, the net gains and losses recognized by legal entities on certain hedges and related hedged intercompany and other transactions under our foreign exchange risk management program, changes in the valuation of our deferred tax assets or liabilities, the application of different provisions of tax laws or changes in tax laws, regulations, or accounting principles (including changes in the interpretation of existing laws), as well as certain discrete items.

In addition, we are subject to regular review and audit by both domestic and foreign tax authorities. As a result, we have received, and may in the future receive, assessments in multiple jurisdictions, including in Europe, on various tax-related assertions, such as transfer-pricing adjustments or permanent-establishment claims. Any adverse outcome of such a review or audit could have a negative effect on our operating results and financial condition and could require us to change our business practices in a manner adverse to our business. It may also subject us to additional litigation and regulatory inquiries, resulting in the diversion of management’s time and attention. In addition, the determination of our worldwide provision for income taxes and other tax liabilities requires significant judgment, and there are many transactions and calculations for which the ultimate tax determination is uncertain. Although we believe our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded in our financial statements and may materially affect our financial results in the period or periods for which such determination is made.

Furthermore, due to shifting economic and political conditions, tax policies, laws, or rates in various jurisdictions may be subject to significant changes in ways that impair our financial results. In particular, France, the United Kingdom, Italy, and other countries have enacted or are considering digital services taxes, which could lead to inconsistent and potentially overlapping international tax regimes. The Organization for Economic Cooperation and Development recently released a proposal relating to its initiative for modernizing international tax rules, with the goal of having different countries implement a modernized and aligned international tax framework, but there can be no guarantee that this will occur.

In addition, in response to significant market volatility and disruptions to business operations resulting from the global spread of COVID-19, legislatures and taxing authorities in many jurisdictions in which we operate may propose changes to their tax rules. These changes could include modifications that have temporary effect, and more permanent changes. The impact of these potential new rules on us, our long-term tax planning, and our tax effective tax rate could be material.

***The trading price for our Class A common stock and non-voting Class C capital stock may continue to be volatile.***

The trading price of our stock has at times experienced substantial price volatility and may continue to be volatile. For example, from April 1, 2020 through June 30, 2020, the closing price of our Class A common stock ranged from $1,079.81 per share to $1,456.27 per share, and the closing price of our Class C capital stock ranged from $1,092.70 per share to $1,464.70 per share.

In addition to the factors discussed in this report, the trading price of our Class A common stock and Class C capital stock may fluctuate widely in response to various factors, many of which are beyond our control, including, among others:

- Quarterly variations in our operating results or those of our competitors.
- Announcements by us or our competitors of acquisitions, divestitures, investments, new products, significant contracts, commercial relationships, or capital commitments.
- Recommendations by securities analysts or changes in earnings estimates.
- Announcements about our earnings that are not in line with analyst expectations, the risk of which is enhanced because it is our policy not to give guidance on earnings.
- Announcements by our competitors of their earnings that are not in line with analyst expectations.
- Commentary by industry and market professionals about our products, strategies, and other matters affecting our business and results, regardless of its accuracy.
- The volume of shares of Class A common stock and Class C capital stock available for public sale.
- Sales of Class A common stock and Class C capital stock by us or by our stockholders (including sales by our directors, executive officers, and other employees).
- Short sales, hedging, and other derivative transactions on shares of our Class A common stock and Class C capital stock.
- The perceived values of Class A common stock and Class C capital stock relative to one another.
- Any share repurchase program.

In addition, the stock market in general, which can be affected by various factors, including overall economic and political conditions, and the market for technology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies.

These broad market and industry factors may harm the market price of our Class A common stock and our Class C capital stock, regardless of our actual operating performance.

## ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

### Issuer Purchases of Equity Securities

The following table presents information with respect to Alphabet's repurchases of Class C capital stock during the quarter ended June 30, 2020.

| Period | Total Number of Shares Purchased (in thousands) [(1)] | Average Price Paid per Share [(2)] | Total Number of Shares Purchased as Part of Publicly Announced Programs (in thousands) [(1)] | Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program (in millions) |
|---|---|---|---|---|
| April 1 - 30 | 2,110 | $ 1,221.24 | 2,110 | $ 9,720 |
| May 1 - 31 | 1,526 | $ 1,380.25 | 1,526 | $ 7,613 |
| June 1 - 30 | 1,512 | $ 1,434.66 | 1,512 | $ 5,444 |
| Total | 5,148 | | 5,148 | |

(1) In July 2019, the Board of Directors of Alphabet authorized the company to repurchase up to $25.0 billion of its Class C capital stock. The repurchases are being executed from time to time, subject to general business and market conditions and other investment opportunities, through open market purchases or privately negotiated transactions, including through Rule 10b5-1 plans. The repurchase program does not have an expiration date. See Note 11 in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional information related to share repurchases.

(2) Average price paid per share includes costs associated with the repurchases.

## ITEM 6. EXHIBITS

| Exhibit Number | | Description | Incorporated by reference herein | |
|---|---|---|---|---|
| | | | Form | Date |
| 10.01 | u | Alphabet Inc. Amended and Restated 2012 Stock Plan | Current Report on Form 8-K (File No. 001-37580) | June 5, 2020 |
| 31.01 | * | Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 | | |
| 31.02 | * | Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 | | |
| 32.01 | ‡ | Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | | |
| 101.INS | * | Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document. | | |
| 101.SCH | * | Inline XBRL Taxonomy Extension Schema Document | | |
| 101.CAL | * | Inline XBRL Taxonomy Extension Calculation Linkbase Document | | |
| 101.DEF | * | Inline XBRL Taxonomy Extension Definition Linkbase Document | | |
| 101.LAB | * | Inline XBRL Taxonomy Extension Label Linkbase Document | | |
| 101.PRE | * | Inline XBRL Taxonomy Extension Presentation Linkbase Document | | |
| 104 | | Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101) | | |

---

u Indicates management compensatory plan, contract, or arrangement.

* Filed herewith.

‡ Furnished herewith.

## SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

| | |
|---|---|
| | **ALPHABET INC.** |
| July 30, 2020 | By: /s/ RUTH M. PORAT |
| | **Ruth M. Porat** |
| | **Senior Vice President and Chief Financial Officer** |

| | |
|---|---|
| | **ALPHABET INC.** |
| July 30, 2020 | By: /s/ AMIE THUENER O'TOOLE |
| | **Amie Thuener O'Toole** |
| | **Vice President and Chief Accounting Officer** |

**Exhibit 31.01**

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER**
**PURSUANT TO**
**EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),**
**AS ADOPTED PURSUANT TO**
**SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Sundar Pichai, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Alphabet Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: July 30, 2020

/S/ SUNDAR PICHAI

Sundar Pichai
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.02

**CERTIFICATION OF CHIEF FINANCIAL OFFICER**
**PURSUANT TO**
**EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),**
**AS ADOPTED PURSUANT TO**
**SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Ruth Porat, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Alphabet Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 30, 2020

/S/ RUTH PORAT

Ruth Porat
Senior Vice President and
Chief Financial Officer
(Principal Financial Officer)

**Exhibit 32.01**

**CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Sundar Pichai, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report on Form 10-Q of Alphabet Inc. for the quarterly period ended June 30, 2020, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Alphabet Inc.

Date: July 30, 2020

| | |
|---|---|
| By: | /S/ SUNDAR PICHAI |
| Name: | Sundar Pichai |
| Title: | Chief Executive Officer<br>(Principal Executive Officer) |

I, Ruth Porat, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report on Form 10-Q of Alphabet Inc. for the quarterly period ended June 30, 2020, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Alphabet Inc.

Date: July 30, 2020

| | |
|---|---|
| By: | /S/ RUTH PORAT |
| Name: | Ruth Porat |
| Title: | Senior Vice President and Chief Financial Officer<br>(Principal Financial Officer) |

*The foregoing certifications are not deemed filed with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (Exchange Act), and are not to be incorporated by reference into any filing of Alphabet Inc. under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing.*