

**Item 8.      *Financial Statements and Supplementary Data***

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## **Report of Independent Registered Public Accounting Firm**

The Board of Directors and Shareholders  
Amazon.com, Inc.

### **Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Amazon.com, Inc. (the Company) as of December 31, 2022 and 2021, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 2, 2023 expressed an unqualified opinion thereon.

### **Basis for Opinion**

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

### **Critical Audit Matter**

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

### ***Uncertain Tax Positions***

***Description of  
the Matter***

As discussed in Notes 1 and 9 of the consolidated financial statements, the Company is subject to income taxes in the U.S. and numerous foreign jurisdictions and during the ordinary course of business, there are many tax positions for which the ultimate tax determination is uncertain. As a result, significant judgment is required in evaluating the Company's tax positions and determining its provision for income taxes. The Company uses significant judgment in (1) determining whether a tax position's technical merits are more likely than not to be sustained and (2) measuring the amount of tax benefit that qualifies for recognition. As of December 31, 2022, the Company reported accrued liabilities of \$4.0 billion for various tax contingencies.

Auditing the recognition and measurement of the Company's tax contingencies was challenging because the evaluation of whether a tax position is more likely than not to be sustained and the measurement of the benefit of various tax positions can be complex and involves significant auditor judgment. Management's evaluation of tax positions is based on interpretations of tax laws and legal rulings, and may be impacted by regulatory changes and judicial and examination activity.

***How We Addressed  
the Matter in Our  
Audit***

We tested controls over the Company's process to assess the technical merits of its tax contingencies, including controls over: the assessment as to whether a tax position is more likely than not to be sustained; the measurement of the benefit of its tax positions, both initially and on an ongoing basis; and the development of the related disclosures.

We involved our international tax, transfer pricing, and research and development tax professionals in assessing the technical merits of certain of the Company's tax positions. Depending on the nature of the specific tax position and, as applicable, developments with the relevant tax authorities relating thereto, our procedures included obtaining and examining the Company's analysis including the Company's correspondence with such tax authorities and evaluating the underlying facts upon which the tax positions are based. We used our knowledge of and experience with international, transfer pricing, and other income tax laws of the relevant taxing jurisdictions to evaluate the Company's accounting for its tax contingencies. We evaluated developments in the applicable regulatory environments to assess potential effects on the Company's positions, including recent decisions in relevant court cases. We analyzed the appropriateness of the Company's assumptions and the accuracy of the Company's calculations and data used to determine the amount of tax benefits to recognize. We evaluated the Company's income tax disclosures in relation to these matters.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1996.  
Seattle, Washington  
February 2, 2023

**AMAZON.COM, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in millions)

	Year Ended December 31,		
	2020	2021	2022
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH, BEGINNING OF PERIOD \$	36,410	\$ 42,377	\$ 36,477
<b>OPERATING ACTIVITIES:</b>			
Net income (loss)	21,331	33,364	(2,722)
Adjustments to reconcile net income (loss) to net cash from operating activities:			
Depreciation and amortization of property and equipment and capitalized content costs, operating lease assets, and other	25,180	34,433	41,921
Stock-based compensation	9,208	12,757	19,621
Other expense (income), net	(2,582)	(14,306)	16,966
Deferred income taxes	(554)	(310)	(8,148)
Changes in operating assets and liabilities:			
Inventories	(2,849)	(9,487)	(2,592)
Accounts receivable, net and other	(8,169)	(18,163)	(21,897)
Accounts payable	17,480	3,602	2,945
Accrued expenses and other	5,754	2,123	(1,558)
Unearned revenue	1,265	2,314	2,216
Net cash provided by (used in) operating activities	66,064	46,327	46,752
<b>INVESTING ACTIVITIES:</b>			
Purchases of property and equipment	(40,140)	(61,053)	(63,645)
Proceeds from property and equipment sales and incentives	5,096	5,657	5,324
Acquisitions, net of cash acquired, and other	(2,325)	(1,985)	(8,316)
Sales and maturities of marketable securities	50,237	59,384	31,601
Purchases of marketable securities	(72,479)	(60,157)	(2,565)
Net cash provided by (used in) investing activities	(59,611)	(58,154)	(37,601)
<b>FINANCING ACTIVITIES:</b>			
Common stock repurchased	—	—	(6,000)
Proceeds from short-term debt, and other	6,796	7,956	41,553
Repayments of short-term debt, and other	(6,177)	(7,753)	(37,554)
Proceeds from long-term debt	10,525	19,003	21,166
Repayments of long-term debt	(1,553)	(1,590)	(1,258)
Principal repayments of finance leases	(10,642)	(11,163)	(7,941)
Principal repayments of financing obligations	(53)	(162)	(248)
Net cash provided by (used in) financing activities	(1,104)	6,291	9,718
Foreign currency effect on cash, cash equivalents, and restricted cash	618	(364)	(1,093)
Net increase (decrease) in cash, cash equivalents, and restricted cash	5,967	(5,900)	17,776
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH, END OF PERIOD	\$ 42,377	\$ 36,477	\$ 54,253

See accompanying notes to consolidated financial statements.

**AMAZON.COM, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(in millions, except per share data)

	Year Ended December 31,		
	2020	2021	2022
Net product sales	\$ 215,915	\$ 241,787	\$ 242,901
Net service sales	170,149	228,035	271,082
Total net sales	386,064	469,822	513,983
Operating expenses:			
Cost of sales	233,307	272,344	288,831
Fulfillment	58,517	75,111	84,299
Technology and content	42,740	56,052	73,213
Sales and marketing	22,008	32,551	42,238
General and administrative	6,668	8,823	11,891
Other operating expense (income), net	(75)	62	1,263
Total operating expenses	363,165	444,943	501,735
Operating income	22,899	24,879	12,248
Interest income	555	448	989
Interest expense	(1,647)	(1,809)	(2,367)
Other income (expense), net	2,371	14,633	(16,806)
Total non-operating income (expense)	1,279	13,272	(18,184)
Income (loss) before income taxes	24,178	38,151	(5,936)
Benefit (provision) for income taxes	(2,863)	(4,791)	3,217
Equity-method investment activity, net of tax	16	4	(3)
Net income (loss)	\$ 21,331	\$ 33,364	\$ (2,722)
Basic earnings per share	\$ 2.13	\$ 3.30	\$ (0.27)
Diluted earnings per share	\$ 2.09	\$ 3.24	\$ (0.27)
Weighted-average shares used in computation of earnings per share:			
Basic	10,005	10,117	10,189
Diluted	10,198	10,296	10,189

See accompanying notes to consolidated financial statements.

**AMAZON.COM, INC.**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**  
(in millions)

	Year Ended December 31,		
	2020	2021	2022
Net income (loss)	\$ 21,331	\$ 33,364	\$ (2,722)
Other comprehensive income (loss):			
Foreign currency translation adjustments, net of tax of \$(36), \$47, and \$100	561	(819)	(2,586)
Net change in unrealized gains (losses) on available-for-sale debt securities:			
Unrealized gains (losses), net of tax of \$(83), \$72, and \$159	273	(343)	(823)
Reclassification adjustment for losses (gains) included in "Other income (expense), net," net of tax of \$8, \$13, and \$0	(28)	(34)	298
Net unrealized gains (losses) on available-for-sale debt securities	245	(377)	(525)
Total other comprehensive income (loss)	806	(1,196)	(3,111)
Comprehensive income (loss)	\$ 22,137	\$ 32,168	\$ (5,833)

See accompanying notes to consolidated financial statements.

**AMAZON.COM, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
(in millions, except per share data)

	December 31,	
	2021	2022
<b><u>ASSETS</u></b>		
Current assets:		
Cash and cash equivalents	\$ 36,220	\$ 53,888
Marketable securities	59,829	16,138
Inventories	32,640	34,405
Accounts receivable, net and other	32,891	42,360
Total current assets	161,580	146,791
Property and equipment, net	160,281	186,715
Operating leases	56,082	66,123
Goodwill	15,371	20,288
Other assets	27,235	42,758
Total assets	\$ 420,549	\$ 462,675
<b><u>LIABILITIES AND STOCKHOLDERS' EQUITY</u></b>		
Current liabilities:		
Accounts payable	\$ 78,664	\$ 79,600
Accrued expenses and other	51,775	62,566
Unearned revenue	11,827	13,227
Total current liabilities	142,266	155,393
Long-term lease liabilities	67,651	72,968
Long-term debt	48,744	67,150
Other long-term liabilities	23,643	21,121
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock (\$0.01 par value; 500 shares authorized; no shares issued or outstanding)	—	—
Common stock (\$0.01 par value; 100,000 shares authorized; 10,644 and 10,757 shares issued; 10,175 and 10,242 shares outstanding)	106	108
Treasury stock, at cost	(1,837)	(7,837)
Additional paid-in capital	55,437	75,066
Accumulated other comprehensive income (loss)	(1,376)	(4,487)
Retained earnings	85,915	83,193
Total stockholders' equity	138,245	146,043
Total liabilities and stockholders' equity	\$ 420,549	\$ 462,675

See accompanying notes to consolidated financial statements.

**AMAZON.COM, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
(in millions)

	Common Stock						
	Shares	Amount	Treasury Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Stockholders' Equity
Balance as of January 1, 2020	9,950	\$ 104	\$ (1,837)	\$ 33,559	\$ (986)	\$ 31,220	\$ 62,060
Net income	—	—	—	—	—	21,331	21,331
Other comprehensive income (loss)	—	—	—	—	806	—	806
Stock-based compensation and issuance of employee benefit plan stock	116	1	—	9,206	—	—	9,207
Balance as of December 31, 2020	10,066	105	(1,837)	42,765	(180)	52,551	93,404
Net income	—	—	—	—	—	33,364	33,364
Other comprehensive income (loss)	—	—	—	—	(1,196)	—	(1,196)
Stock-based compensation and issuance of employee benefit plan stock	109	1	—	12,672	—	—	12,673
Balance as of December 31, 2021	10,175	106	(1,837)	55,437	(1,376)	85,915	138,245
Net loss	—	—	—	—	—	(2,722)	(2,722)
Other comprehensive income (loss)	—	—	—	—	(3,111)	—	(3,111)
Stock-based compensation and issuance of employee benefit plan stock	113	2	—	19,629	—	—	19,631
Common stock repurchased	(46)	—	(6,000)	—	—	—	(6,000)
Balance as of December 31, 2022	10,242	\$ 108	\$ (7,837)	\$ 75,066	\$ (4,487)	\$ 83,193	\$ 146,043

See accompanying notes to consolidated financial statements.



**AMAZON.COM, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**Note 1 — DESCRIPTION OF BUSINESS, ACCOUNTING POLICIES, AND SUPPLEMENTAL DISCLOSURES**

***Description of Business***

We seek to be Earth's most customer-centric company. In each of our segments, we serve our primary customer sets, consisting of consumers, sellers, developers, enterprises, content creators, advertisers, and employees. We serve consumers through our online and physical stores and focus on selection, price, and convenience. We offer programs that enable sellers to grow their businesses, sell their products in our stores, and fulfill orders through us, and programs that allow authors, independent publishers, musicians, filmmakers, Twitch streamers, skill and app developers, and others to publish and sell content. We serve developers and enterprises of all sizes through AWS, which offers a broad set of on-demand technology services, including compute, storage, database, analytics, and machine learning, and other services. We also manufacture and sell electronic devices. In addition, we provide advertising services to sellers, vendors, publishers, authors, and others, through programs such as sponsored ads, display, and video advertising.

We have organized our operations into three segments: North America, International, and AWS. See "Note 10 — Segment Information."

***Common Stock Split***

On May 27, 2022, we effected a 20-for-1 stock split of our common stock and proportionately increased the number of authorized shares of common stock. All share, restricted stock unit ("RSU"), and per share or per RSU information throughout this Annual Report on Form 10-K has been retroactively adjusted to reflect the stock split. The shares of common stock retain a par value of \$0.01 per share. Accordingly, an amount equal to the par value of the increased shares resulting from the stock split was reclassified from "Additional paid-in capital" to "Common stock."

***Prior Period Reclassifications***

Certain prior period amounts have been reclassified to conform to the current period presentation. "Other operating expense (income), net" was reclassified into "Depreciation and amortization of property and equipment and capitalized content costs, operating lease assets, and other" on our consolidated statements of cash flows.

***Principles of Consolidation***

The consolidated financial statements include the accounts of Amazon.com, Inc. and its consolidated entities (collectively, the "Company"), consisting of its wholly-owned subsidiaries and those entities in which we have a variable interest and of which we are the primary beneficiary, including certain entities in India and certain entities that support our seller lending financing activities. Intercompany balances and transactions between consolidated entities are eliminated.

***Use of Estimates***

The preparation of financial statements in conformity with GAAP requires estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures of contingent liabilities in the consolidated financial statements and accompanying notes. Estimates are used for, but not limited to, income taxes, useful lives of equipment, commitments and contingencies, valuation of acquired intangibles and goodwill, stock-based compensation forfeiture rates, vendor funding, inventory valuation, collectability of receivables, impairment of property and equipment and operating leases, valuation and impairment of investments, self-insurance liabilities, and viewing patterns of capitalized video content. Actual results could differ materially from these estimates. We review the useful lives of equipment on an ongoing basis, and effective January 1, 2022 we changed our estimate of the useful lives for our servers from four years to five years and for our networking equipment from five years to six years. The longer useful lives are due to continuous improvements in our hardware, software, and data center designs. The effect of this change in estimate for the year ended December 31, 2022, based on servers and networking equipment that were included in "Property and equipment, net" as of December 31, 2021 and those acquired during the year ended December 31, 2022, was a reduction in depreciation and amortization expense of \$3.6 billion and a benefit to net loss of \$2.8 billion, or \$0.28 per basic share and \$0.28 per diluted share.

For the year ended December 31, 2022, we recorded approximately \$1.1 billion, of which \$720 million was recorded in the fourth quarter, of impairments of property and equipment and operating leases primarily related to physical stores. These charges were recorded in "Other operating expense (income), net" on our consolidated statements of operations and primarily impacted our North America segment. For the year ended December 31, 2022, we also recorded expenses of approximately

\$480 million primarily in “Fulfillment” on our consolidated statements of operations relating to terminating contracts for certain leases not yet commenced as well as other purchase commitments, which primarily impacted our North America segment.

For the year ended December 31, 2022, we recorded approximately \$720 million, of which \$640 million was recorded in the fourth quarter, of estimated severance costs primarily related to planned role eliminations. These charges were recorded primarily in “Technology and content,” “Fulfillment,” and “General and administrative” on our consolidated statements of operations and primarily impacted our North America segment.

### **Supplemental Cash Flow Information**

The following table shows supplemental cash flow information (in millions):

	Year Ended December 31,		
	2020	2021	2022
<b>SUPPLEMENTAL CASH FLOW INFORMATION:</b>			
Cash paid for interest on debt	\$ 916	\$ 1,098	\$ 1,561
Cash paid for operating leases	\$ 4,475	\$ 6,722	\$ 8,633
Cash paid for interest on finance leases	\$ 612	\$ 521	\$ 374
Cash paid for interest on financing obligations	\$ 102	\$ 153	\$ 207
Cash paid for income taxes, net of refunds	\$ 1,713	\$ 3,688	\$ 6,035
Assets acquired under operating leases	\$ 16,217	\$ 25,369	\$ 18,800
Property and equipment acquired under finance leases, net of remeasurements and modifications	\$ 11,588	\$ 7,061	\$ 675
Property and equipment recognized during the construction period of build-to-suit lease arrangements	\$ 2,267	\$ 5,846	\$ 3,187
Property and equipment derecognized after the construction period of build-to-suit lease arrangements, with the associated leases recognized as operating	\$ —	\$ 230	\$ 5,158

### **Earnings Per Share**

Basic earnings per share is calculated using our weighted-average outstanding common shares. Diluted earnings per share is calculated using our weighted-average outstanding common shares including the dilutive effect of stock awards as determined under the treasury stock method. In periods when we have a net loss, stock awards are excluded from our calculation of earnings per share as their inclusion would have an antidilutive effect.

The following table shows the calculation of diluted shares (in millions):

	Year Ended December 31,		
	2020	2021	2022
Shares used in computation of basic earnings per share	10,005	10,117	10,189
Total dilutive effect of outstanding stock awards	193	179	—
Shares used in computation of diluted earnings per share	10,198	10,296	10,189

### **Revenue**

Revenue is measured based on the amount of consideration that we expect to receive, reduced by estimates for return allowances, promotional discounts, and rebates. Revenue also excludes any amounts collected on behalf of third parties, including sales and indirect taxes. In arrangements where we have multiple performance obligations, the transaction price is allocated to each performance obligation using the relative stand-alone selling price. We generally determine stand-alone selling prices based on the prices charged to customers or using expected cost plus a margin.

A description of our principal revenue generating activities is as follows:

**Retail sales** - We offer consumer products through our online and physical stores. Revenue is recognized when control of the goods is transferred to the customer, which generally occurs upon our delivery to a third-party carrier or, in the case of an Amazon delivery, to the customer.

**Third-party seller services** - We offer programs that enable sellers to sell their products in our stores, and fulfill orders through us. We are not the seller of record in these transactions. The commissions and any related fulfillment and shipping fees we earn from these arrangements are recognized when the services are rendered, which generally occurs upon delivery of the related products to a third-party carrier or, in the case of an Amazon delivery, to the customer.



*Subscription services* - Our subscription sales include fees associated with Amazon Prime memberships and access to content including digital video, audiobooks, digital music, e-books, and other non-AWS subscription services. Prime memberships provide our customers with access to an evolving suite of benefits that represent a single stand-ready obligation. Subscriptions are paid for at the time of or in advance of delivering the services. Revenue from such arrangements is recognized over the subscription period.

*Advertising services* - We provide advertising services to sellers, vendors, publishers, authors, and others, through programs such as sponsored ads, display, and video advertising. Revenue is recognized as ads are delivered based on the number of clicks or impressions.

*AWS* - Our AWS arrangements include global sales of compute, storage, database, and other services. Revenue is allocated to services using stand-alone selling prices and is primarily recognized when the customer uses these services, based on the quantity of services rendered, such as compute or storage capacity delivered on-demand. Certain services, including compute and database, are also offered as a fixed quantity over a specified term, for which revenue is recognized ratably. Sales commissions we pay in connection with contracts that exceed one year are capitalized and amortized over the contract term.

*Other* - Other revenue includes sales related to various other offerings, such as certain licensing and distribution of video content and shipping services, and our co-branded credit card agreements. Revenue is recognized when content is licensed or distributed and as or when services are performed.

### ***Return Allowances***

Return allowances, which reduce revenue and cost of sales, are estimated using historical experience. Liabilities for return allowances are included in “Accrued expenses and other” and were \$859 million, \$1.0 billion, and \$1.3 billion as of December 31, 2020, 2021, and 2022. Additions to the allowance were \$3.5 billion, \$5.1 billion, and \$5.5 billion and deductions from the allowance were \$3.6 billion, \$4.9 billion, and \$5.2 billion in 2020, 2021, and 2022. Included in “Inventories” on our consolidated balance sheets are assets totaling \$852 million, \$882 million, and \$948 million as of December 31, 2020, 2021, and 2022, for the rights to recover products from customers associated with our liabilities for return allowances.

### ***Cost of Sales***

Cost of sales primarily consists of the purchase price of consumer products, inbound and outbound shipping costs, including costs related to sortation and delivery centers and where we are the transportation service provider, and digital media content costs where we record revenue gross, including video and music. Shipping costs to receive products from our suppliers are included in our inventory, and recognized as cost of sales upon sale of products to our customers. Payment processing and related transaction costs, including those associated with seller transactions, are classified in “Fulfillment” on our consolidated statements of operations.

### ***Vendor Agreements***

We have agreements with our vendors to receive consideration primarily for cooperative marketing efforts, promotions, incentives, and volume rebates. We generally consider these amounts received from vendors to be a reduction of the prices we pay for their goods, including property and equipment, or services, and are recorded as a reduction of the cost of inventory, cost of services, or cost of property and equipment. Volume rebates typically depend on reaching minimum purchase thresholds. We evaluate the likelihood of reaching purchase thresholds using past experience and current year forecasts. When volume rebates can be reasonably estimated, we record a portion of the rebate as we make progress towards the purchase threshold.

### ***Fulfillment***

Fulfillment costs primarily consist of those costs incurred in operating and staffing our North America and International segments’ fulfillment centers, physical stores, and customer service centers, including facilities and equipment expenses, such as depreciation and amortization, and rent; costs attributable to buying, receiving, inspecting, and warehousing inventories; picking, packaging, and preparing customer orders for shipment; payment processing and related transaction costs, including costs associated with our guarantee for certain seller transactions; responding to inquiries from customers; and supply chain management for our manufactured electronic devices. Fulfillment costs also include amounts paid to third parties that assist us in fulfillment and customer service operations.

### **Technology and Content**

Technology and content costs include payroll and related expenses for employees involved in the research and development of new and existing products and services, development, design, and maintenance of our stores, curation and display of products and services made available in our online stores, and infrastructure costs. Infrastructure costs include servers, networking equipment, and data center related depreciation and amortization, rent, utilities, and other expenses necessary to support AWS and other Amazon businesses. Collectively, these costs reflect the investments we make in order to offer a wide variety of products and services to our customers, including expenditures related to initiatives to build and deploy innovative and efficient software and electronic devices and the development of a satellite network for global broadband service and autonomous vehicles for ride-hailing services. Technology and content costs are generally expensed as incurred.

### **Sales and Marketing**

Sales and marketing costs include advertising and payroll and related expenses for personnel engaged in marketing and selling activities, including sales commissions related to AWS. We pay commissions to third parties when their customer referrals result in sales. We also participate in cooperative advertising arrangements with certain of our vendors, and other third parties.

Advertising and other promotional costs to market our products and services are expensed as incurred and were \$10.9 billion, \$16.9 billion, and \$20.6 billion in 2020, 2021, and 2022.

### **General and Administrative**

General and administrative expenses primarily consist of costs for corporate functions, including payroll and related expenses; facilities and equipment expenses, such as depreciation and amortization expense and rent; and professional fees.

### **Stock-Based Compensation**

Compensation cost for all equity-classified stock awards expected to vest is measured at fair value on the date of grant and recognized over the service period. The fair value of restricted stock units is determined based on the number of shares granted and the quoted price of our common stock. Such value is recognized as expense over the service period, net of estimated forfeitures, using the accelerated method. The estimated number of stock awards that will ultimately vest requires judgment, and to the extent actual results or updated estimates differ from our current estimates, such amounts will be recorded as a cumulative adjustment in the period estimates are revised. We consider many factors when estimating expected forfeitures, including historical forfeiture experience by grant year and employee level. Additionally, stock-based compensation includes stock appreciation rights that are expected to settle in cash. These liability-classified awards are remeasured to fair value at the end of each reporting period until settlement or expiration.

### **Other Operating Expense (Income), Net**

Other operating expense (income), net, consists primarily of the amortization of intangible assets and, for 2020, a benefit from accelerated vesting of warrants to acquire equity of a vendor partially offset by a lease impairment and, for 2022, \$1.1 billion of impairments of property and equipment and operating leases.

### **Other Income (Expense), Net**

Other income (expense), net, is as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
Marketable equity securities valuation gains (losses)	\$ 525	\$ 11,526	\$ (13,870)
Equity warrant valuation gains (losses)	1,527	1,315	(2,132)
Upward adjustments relating to equity investments in private companies	342	1,866	76
Foreign currency gains (losses)	35	(55)	(340)
Other, net	(58)	(19)	(540)
Total other income (expense), net	2,371	14,633	(16,806)

Included in other income (expense), net in 2021 and 2022 is a marketable equity securities valuation gain (loss) of \$11.8 billion and \$(12.7) billion from our equity investment in Rivian Automotive, Inc. (“Rivian”). Our investment in Rivian’s preferred stock was accounted for at cost, with adjustments for observable changes in prices or impairments, prior to Rivian’s initial public offering in November 2021, which resulted in the conversion of our preferred stock to Class A common stock. As of December 31, 2022, we held 158 million shares of Rivian’s Class A common stock, representing an approximate 17% ownership interest, and an approximate 16% voting interest. We determined that we have the ability to exercise significant influence over Rivian through our equity investment, our commercial arrangement for the purchase of electric vehicles, and one of our employees serving on Rivian’s board of directors. We elected the fair value option to account for our equity investment in Rivian, which is included in “Marketable securities” on our consolidated balance sheets.

Required summarized financial information of Rivian as disclosed in its most recent SEC filings is as follows (in millions):

	Year Ended December 31, 2020	Year Ended December 31, 2021	Nine Months Ended September 30, 2022
Revenues	\$ —	\$ 55	\$ 995
Gross profit	—	(465)	(2,123)
Loss from operations	(1,021)	(4,220)	(5,061)
Net loss	(1,018)	(4,688)	(5,029)

  

	December 31, 2021	September 30, 2022
Total current assets	\$ 18,559	\$ 14,424
Total assets	22,294	19,023
Total current liabilities	1,313	2,109
Total liabilities	2,780	3,686

### **Income Taxes**

Income tax expense includes U.S. (federal and state) and foreign income taxes. Certain foreign subsidiary earnings and losses are subject to current U.S. taxation and the subsequent repatriation of those earnings is not subject to tax in the U.S. We intend to invest substantially all of our foreign subsidiary earnings, as well as our capital in our foreign subsidiaries, indefinitely outside of the U.S. in those jurisdictions in which we would incur significant, additional costs upon repatriation of such amounts.

Deferred income tax balances reflect the effects of temporary differences between the carrying amounts of assets and liabilities and their tax bases, as well as net operating loss and tax credit carryforwards, and are stated at enacted tax rates expected to be in effect when taxes are actually paid or recovered.

Deferred tax assets represent amounts available to reduce income taxes payable in future periods. Deferred tax assets are evaluated for future realization and reduced by a valuation allowance to the extent we believe they will not be realized. We consider many factors when assessing the likelihood of future realization of our deferred tax assets, including recent cumulative loss experience and expectations of future earnings, capital gains and investment in such jurisdiction, the carry-forward periods available to us for tax reporting purposes, and other relevant factors.

We utilize a two-step approach to recognizing and measuring uncertain income tax positions (tax contingencies). The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates it is more likely than not the position will be sustained on audit, including resolution of related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement. We consider many factors when evaluating our tax positions and estimating our tax benefits, which may require periodic adjustments and which may not accurately forecast actual outcomes. We include interest and penalties related to our tax contingencies in income tax expense.

### **Fair Value of Financial Instruments**

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. To increase the comparability of fair value measures, the following hierarchy prioritizes the inputs to valuation methodologies used to measure fair value:

**Level 1** — Valuations based on quoted prices for identical assets and liabilities in active markets.

**Level 2** — Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

**Level 3** — Valuations based on unobservable inputs reflecting our own assumptions, consistent with reasonably available assumptions made by other market participants. These valuations require significant judgment.

We measure the fair value of money market funds and certain marketable equity securities based on quoted prices in active markets for identical assets or liabilities. Other marketable securities were valued either based on recent trades of securities in inactive markets or based on quoted market prices of similar instruments and other significant inputs derived from or corroborated by observable market data. We did not hold significant amounts of marketable securities categorized as Level 3 assets as of December 31, 2021 and 2022.

We hold equity warrants giving us the right to acquire stock of other companies. As of December 31, 2021 and 2022, these warrants had a fair value of \$3.4 billion and \$2.1 billion, and are recorded within “Other assets” on our consolidated balance sheets with gains and losses recognized in “Other income (expense), net” on our consolidated statements of operations. These warrants are primarily classified as Level 2 assets.

### ***Cash and Cash Equivalents***

We classify all highly liquid instruments with an original maturity of three months or less as cash equivalents.

### ***Inventories***

Inventories, consisting of products available for sale, are primarily accounted for using the first-in, first-out method, and are valued at the lower of cost and net realizable value. This valuation requires us to make judgments, based on currently available information, about the likely method of disposition, such as through sales to individual customers, returns to product vendors, or liquidations, and expected recoverable values of each disposition category. The inventory valuation allowance, representing a write-down of inventory, was \$2.6 billion and \$2.8 billion as of December 31, 2021 and 2022.

We provide Fulfillment by Amazon services in connection with certain of our sellers’ programs. Third-party sellers maintain ownership of their inventory, regardless of whether fulfillment is provided by us or the third-party sellers, and therefore these products are not included in our inventories.

We also purchase electronic device components from a variety of suppliers and use several contract manufacturers to provide manufacturing services for our products. During the normal course of business, in order to manage manufacturing lead times and help ensure adequate supply, we enter into agreements with contract manufacturers and suppliers for certain electronic device components. We have certain non-cancellable purchase commitments arising from these agreements. These commitments are based on forecasted customer demand. If we reduce these commitments, we may incur additional costs. We also have firm, non-cancellable commitments for certain products offered in our Whole Foods Market stores.

### ***Accounts Receivable, Net and Other***

Included in “Accounts receivable, net and other” on our consolidated balance sheets are amounts primarily related to customers, vendors, and sellers. As of December 31, 2021 and 2022, customer receivables, net, were \$20.2 billion and \$26.6 billion, vendor receivables, net, were \$5.3 billion and \$6.9 billion, and seller receivables, net, were \$1.0 billion and \$1.3 billion. Seller receivables are amounts due from sellers related to our seller lending program, which provides funding to sellers primarily to procure inventory.

We estimate losses on receivables based on expected losses, including our historical experience of actual losses. Receivables are considered impaired and written-off when it is probable that all contractual payments due will not be collected in accordance with the terms of the agreement. The allowance for doubtful accounts was \$1.1 billion, \$1.1 billion, and \$1.4 billion as of December 31, 2020, 2021, and 2022. Additions to the allowance were \$1.4 billion, \$1.0 billion, and \$1.6 billion, and deductions to the allowance were \$1.0 billion, \$1.1 billion, and \$1.3 billion in 2020, 2021, and 2022.

### ***Software Development Costs***

We incur software development costs related to products to be sold, leased, or marketed to external users, internal-use software, and our websites. Software development costs capitalized were not significant for the years presented. All other costs, including those related to design or maintenance, are expensed as incurred.



### ***Property and Equipment, Net***

Property and equipment are stated at cost less accumulated depreciation and amortization. Incentives that we receive from property and equipment vendors are recorded as a reduction to our costs. Property includes buildings and land that we own, along with property we have acquired under build-to-suit lease arrangements when we have control over the building during the construction period and finance lease arrangements. Equipment includes assets such as servers and networking equipment, heavy equipment, and other fulfillment equipment. Depreciation and amortization is recorded on a straight-line basis over the estimated useful lives of the assets (generally the lesser of 40 years or the remaining life of the underlying building, four years prior to January 1, 2022 and five years subsequent to January 1, 2022 for our servers, five years prior to January 1, 2022 and six years subsequent to January 1, 2022 for our networking equipment, ten years for heavy equipment, and three to ten years for other fulfillment equipment). Depreciation and amortization expense is classified within the corresponding operating expense categories on our consolidated statements of operations.

### ***Leases***

We categorize leases with contractual terms longer than twelve months as either operating or finance. Finance leases are generally those leases that allow us to substantially utilize or pay for the entire asset over its estimated life. Assets acquired under finance leases are recorded in "Property and equipment, net." All other leases are categorized as operating leases. Our leases generally have terms that range from one to ten years for equipment and one to twenty years for property.

Certain lease contracts include obligations to pay for other services, such as operations and maintenance. For leases of property, we account for these other services as a component of the lease. For substantially all other leases, the services are accounted for separately and we allocate payments to the lease and other services components based on estimated stand-alone prices.

Lease liabilities are recognized at the present value of the fixed lease payments, reduced by landlord incentives using a discount rate based on similarly secured borrowings available to us. Lease assets are recognized based on the initial present value of the fixed lease payments, reduced by landlord incentives, plus any direct costs from executing the leases or lease prepayments reclassified from "Other assets" upon lease commencement. Leasehold improvements are capitalized at cost and amortized over the lesser of their expected useful life or the lease term.

When we have the option to extend the lease term, terminate the lease before the contractual expiration date, or purchase the leased asset, and it is reasonably certain that we will exercise the option, we consider the option in determining the classification and measurement of the lease. Our leases may include variable payments based on measures that include changes in price indices, market interest rates, or the level of sales at a physical store, which are expensed as incurred.

Costs associated with operating lease assets are recognized on a straight-line basis within operating expenses over the term of the lease. Finance lease assets are amortized within operating expenses on a straight-line basis over the shorter of the estimated useful lives of the assets or, in the instance where title does not transfer at the end of the lease term, the lease term. The interest component of a finance lease is included in interest expense and recognized using the effective interest method over the lease term.

We establish assets and liabilities for the present value of estimated future costs to retire long-lived assets at the termination or expiration of a lease. Such assets are amortized over the lease period into operating expense, and the recorded liabilities are accreted to the future value of the estimated retirement costs.

### ***Financing Obligations***

We record assets and liabilities for estimated construction costs under build-to-suit lease arrangements when we have control over the building during the construction period. If we continue to control the building after the construction period, the arrangement is classified as a financing obligation instead of a lease. The building is depreciated over the shorter of its useful life or the term of the obligation.

If we do not control the building after the construction period ends, the assets and liabilities for construction costs are derecognized, and we classify the lease as operating.

### ***Goodwill and Indefinite-Lived Intangible Assets***

We evaluate goodwill and indefinite-lived intangible assets for impairment annually or more frequently when an event occurs or circumstances change that indicate the carrying value may not be recoverable. We may elect to utilize a qualitative assessment to evaluate whether it is more likely than not that the fair value of a reporting unit or indefinite-lived intangible asset is less than its carrying value and if so, we perform a quantitative test. We compare the carrying value of each reporting unit and indefinite-lived intangible asset to its estimated fair value and if the fair value is determined to be less than the carrying value, we recognize an impairment loss for the difference. We estimate the fair value of the reporting units using discounted cash



flows. Forecasts of future cash flows are based on our best estimate of future net sales and operating expenses, based primarily on expected category expansion, pricing, market segment share, and general economic conditions.

We completed the required annual impairment test of goodwill for all reporting units and indefinite-lived intangible assets as of April 1, 2022, resulting in no impairments. The fair value of our reporting units substantially exceeded their carrying value. There were no events that caused us to update our annual impairment test. See “Note 5 — Acquisitions, Goodwill, and Acquired Intangible Assets.”

### ***Other Assets***

Included in “Other assets” on our consolidated balance sheets are amounts primarily related to video and music content, net of accumulated amortization; long-term deferred tax assets; acquired intangible assets, net of accumulated amortization; equity warrant assets and certain equity investments; and satellite network launch services deposits. We recognize certain transactions with governments when there is reasonable assurance that incentives included in the agreements, such as cash or certain tax credits, will be received and we are able to comply with any related conditions. These incentives are recorded as reductions to the cost of related assets or expenses.

### ***Digital Video and Music Content***

We obtain video content, inclusive of episodic television and movies, and music content for customers through licensing agreements that have a wide range of licensing provisions including both fixed and variable payment schedules. When the license fee for a specific video or music title is determinable or reasonably estimable and the content is available to us, we recognize an asset and a corresponding liability for the amounts owed. We reduce the liability as payments are made and we amortize the asset to “Cost of sales” on an accelerated basis, based on estimated usage or viewing patterns, or on a straight-line basis. If the licensing fee is not determinable or reasonably estimable, no asset or liability is recorded and licensing costs are expensed as incurred. We also develop original video content for which the production costs are capitalized and amortized to “Cost of sales” predominantly on an accelerated basis that follows the estimated viewing patterns associated with the content. The weighted average remaining life of our capitalized video content is 2.6 years. We review usage and viewing patterns impacting the amortization of capitalized video content on an ongoing basis and reflect any changes prospectively. Changes in historical and anticipated viewing patterns are lengthening the weighted average life of our capitalized video content. We anticipate the changes in viewing patterns will positively impact 2023 operating income by approximately \$1.0 billion, generally ratably throughout the year.

Our produced and licensed video content is primarily monetized together as a unit, referred to as a film group, in each major geography where we offer Amazon Prime memberships. These film groups are evaluated for impairment whenever an event occurs or circumstances change indicating the fair value is less than the carrying value. The total capitalized costs of video, which is primarily released content, and music as of December 31, 2021 and 2022 were \$10.7 billion and \$16.7 billion. Total video and music expense was \$13.0 billion and \$16.6 billion for the year ended December 31, 2021 and 2022. Total video and music expense includes licensing and production costs associated with content offered within Amazon Prime memberships, and costs associated with digital subscriptions and sold or rented content.

### ***Investments***

We generally invest our excess cash in AAA-rated money market funds and investment grade short- to intermediate-term fixed income securities. Such investments are included in “Cash and cash equivalents” or “Marketable securities” on the accompanying consolidated balance sheets.

Marketable fixed income securities are classified as available-for-sale and reported at fair value with unrealized gains and losses included in “Accumulated other comprehensive income (loss).” Each reporting period, we evaluate whether declines in fair value below carrying value are due to expected credit losses, as well as our ability and intent to hold the investment until a forecasted recovery occurs. Expected credit losses are recorded as an allowance through “Other income (expense), net” on our consolidated statements of operations.

Equity investments in private companies for which we do not have the ability to exercise significant influence are accounted for at cost, with adjustments for observable changes in prices or impairments, and are classified as “Other assets” on our consolidated balance sheets with adjustments recognized in “Other income (expense), net” on our consolidated statements of operations. Each reporting period, we perform a qualitative assessment to evaluate whether the investment is impaired. Our assessment includes a review of recent operating results and trends, recent sales/acquisitions of the investee securities, and other publicly available data. If the investment is impaired, we write it down to its estimated fair value. As of December 31, 2021 and 2022, these investments had a carrying value of \$603 million and \$715 million.

Equity investments are accounted for using the equity method of accounting, or at fair value if we elect the fair value option, if the investment gives us the ability to exercise significant influence, but not control, over an investee. Equity-method

investments are included within “Other assets” on our consolidated balance sheets. Our share of the earnings or losses as reported by equity-method investees, amortization of basis differences, related gains or losses, and impairments, if any, are recognized in “Equity-method investment activity, net of tax” on our consolidated statements of operations. Each reporting period, we evaluate whether declines in fair value below carrying value are other-than-temporary and if so, we write down the investment to its estimated fair value.

Equity investments that have readily determinable fair values, including investments for which we have elected the fair value option, are included in “Marketable securities” on our consolidated balance sheets and measured at fair value with changes recognized in “Other income (expense), net” on our consolidated statements of operations.

### ***Long-Lived Assets***

Long-lived assets, other than goodwill and indefinite-lived intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets might not be recoverable. Conditions that would necessitate an impairment assessment include a significant decline in the observable market value of an asset, a significant change in the extent or manner in which an asset is used, or any other significant adverse change that would indicate that the carrying amount of an asset or group of assets may not be recoverable.

For long-lived assets used in operations, including lease assets, impairment losses are only recorded if the asset’s carrying amount is not recoverable through its undiscounted, probability-weighted future cash flows. We measure the impairment loss based on the difference between the carrying amount and estimated fair value. Long-lived assets are considered held for sale when certain criteria are met, including when management has committed to a plan to sell the asset, the asset is available for sale in its immediate condition, and the sale is probable within one year of the reporting date. Assets held for sale are reported at the lower of cost or fair value less costs to sell. Assets held for sale were not significant as of December 31, 2021 and 2022.

### ***Accrued Expenses and Other***

Included in “Accrued expenses and other” on our consolidated balance sheets are liabilities primarily related to leases and asset retirement obligations, tax-related liabilities, current debt, payroll and related expenses, unredeemed gift cards, self-insurance liabilities, customer liabilities, marketing liabilities, acquired digital media content, and other operating expenses.

As of December 31, 2021 and 2022, our liabilities for payroll related expenses were \$7.4 billion and \$7.7 billion and our liabilities for unredeemed gift cards were \$5.2 billion and \$5.4 billion. We reduce the liability for a gift card when redeemed by a customer. The portion of gift cards that we do not expect to be redeemed is recognized based on customer usage patterns.

### ***Self-Insurance Liabilities***

Although we maintain certain high-deductible, third-party insurance coverage for catastrophic losses, we effectively self-insure for exposure primarily related to workers’ compensation, employee health care benefits, general and product liability, and automobile liability, including liability resulting from third-party transportation service providers. We estimate self-insurance liabilities by considering historical claims experience, frequency and costs of claims, projected claims development, inflation, and other actuarial assumptions. Changes in the number or costs of claims, healthcare costs, judgment and settlement amounts, associated legal expenses, and other factors could cause actual results to differ materially from these estimates. As of December 31, 2021 and 2022, our total self-insurance liabilities were \$2.2 billion and \$4.0 billion and are included in “Accrued expenses and other” on our consolidated balance sheets. In the fourth quarter of 2022, we increased our reserves for general, product, and automobile liabilities by \$1.3 billion primarily driven by changes in our estimates about the costs of asserted and unasserted claims, which was primarily recorded in “Cost of sales” on our consolidated statements of operations and impacted our North America segment.

### ***Unearned Revenue***

Unearned revenue is recorded when payments are received or due in advance of performing our service obligations and is recognized over the service period. Unearned revenue primarily relates to prepayments of AWS services and Amazon Prime memberships. Our total unearned revenue as of December 31, 2021 was \$14.0 billion, of which \$11.3 billion was recognized as revenue during the year ended December 31, 2022 and our total unearned revenue as of December 31, 2022 was \$16.1 billion. Included in “Other long-term liabilities” on our consolidated balance sheets was \$2.2 billion and \$2.9 billion of unearned revenue as of December 31, 2021 and 2022.

Additionally, we have performance obligations, primarily related to AWS, associated with commitments in customer contracts for future services that have not yet been recognized in our financial statements. For contracts with original terms that exceed one year, those commitments not yet recognized were \$110.4 billion as of December 31, 2022. The weighted average remaining life of our long-term contracts is 3.7 years. However, the amount and timing of revenue recognition is largely driven by customer usage, which can extend beyond the original contractual term.



### Other Long-Term Liabilities

Included in “Other long-term liabilities” on our consolidated balance sheets are liabilities primarily related to financing obligations, asset retirement obligations, unearned revenue, tax contingencies, digital video and music content, and deferred tax liabilities.

### Foreign Currency

We have internationally-focused stores for which the net sales generated, as well as most of the related expenses directly incurred from those operations, are denominated in local functional currencies. The functional currency of our subsidiaries that either operate or support these stores is generally the same as the local currency. Assets and liabilities of these subsidiaries are translated into U.S. Dollars at period-end foreign exchange rates, and revenues and expenses are translated at average rates prevailing throughout the period. Translation adjustments are included in “Accumulated other comprehensive income (loss),” a separate component of stockholders’ equity. Transaction gains and losses including intercompany transactions denominated in a currency other than the functional currency of the entity involved are included in “Other income (expense), net” on our consolidated statements of operations. In connection with the settlement and remeasurement of intercompany balances, we recorded gains (losses) of \$(118) million, \$19 million, and \$386 million in 2020, 2021, and 2022.

## Note 2 — FINANCIAL INSTRUMENTS

### Cash, Cash Equivalents, Restricted Cash, and Marketable Securities

As of December 31, 2021 and 2022, our cash, cash equivalents, restricted cash, and marketable securities primarily consisted of cash, AAA-rated money market funds, U.S. and foreign government and agency securities, other investment grade securities, and marketable equity securities. Cash equivalents and marketable securities are recorded at fair value. The following table summarizes, by major security type, our cash, cash equivalents, restricted cash, and marketable securities that are measured at fair value on a recurring basis and are categorized using the fair value hierarchy (in millions):

	December 31, 2021			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Total Estimated Fair Value
Cash	\$ 10,942	\$ —	\$ —	\$ 10,942
Level 1 securities:				
Money market funds	20,312	—	—	20,312
Equity securities (1)				1,646
Level 2 securities:				
Foreign government and agency securities	181	—	—	181
U.S. government and agency securities	4,316	9	(25)	4,300
Corporate debt securities	35,810	75	(121)	35,764
Asset-backed securities	6,763	7	(32)	6,738
Other fixed income securities	688	2	(4)	686
Equity securities (1)(3)				15,740
	<u>\$ 79,012</u>	<u>\$ 93</u>	<u>\$ (182)</u>	<u>\$ 96,309</u>
Less: Restricted cash, cash equivalents, and marketable securities (2)				(260)
Total cash, cash equivalents, and marketable securities				<u>\$ 96,049</u>

	December 31, 2022			
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Total Estimated Fair Value
Cash	\$ 10,666	\$ —	\$ —	\$ 10,666
Level 1 securities:				
Money market funds	27,899	—	—	27,899
Equity securities (1)(3)				3,709
Level 2 securities:				
Foreign government and agency securities	537	—	(2)	535
U.S. government and agency securities	2,301	—	(155)	2,146
Corporate debt securities	23,111	—	(484)	22,627
Asset-backed securities	2,721	—	(149)	2,572
Other fixed income securities	249	—	(12)	237
	<u>\$ 67,484</u>	<u>\$ —</u>	<u>\$ (802)</u>	<u>\$ 70,391</u>
Less: Restricted cash, cash equivalents, and marketable securities (2)				(365)
Total cash, cash equivalents, and marketable securities				<u>\$ 70,026</u>

- (1) The related unrealized gain (loss) recorded in “Other income (expense), net” was \$448 million, \$11.6 billion, and \$(13.6) billion for the years ended December 31, 2020, 2021, and 2022.
- (2) We are required to pledge or otherwise restrict a portion of our cash, cash equivalents, and marketable fixed income securities primarily as collateral for real estate, amounts due to third-party sellers in certain jurisdictions, debt, and standby and trade letters of credit. We classify cash, cash equivalents, and marketable fixed income securities with use restrictions of less than twelve months as “Accounts receivable, net and other” and of twelve months or longer as non-current “Other assets” on our consolidated balance sheets. See “Note 7 — Commitments and Contingencies.”
- (3) Our equity investment in Rivian had a fair value of \$15.6 billion and \$2.9 billion as of December 31, 2021 and December 31, 2022, respectively. The investment was subject to regulatory sales restrictions resulting in a discount for lack of marketability of approximately \$800 million as of December 31, 2021, which expired in Q1 2022.

The following table summarizes gross gains and gross losses realized on sales of marketable fixed income securities (in millions):

	Year Ended December 31,		
	2020	2021	2022
Realized gains	\$ 92	\$ 85	\$ 43
Realized losses	56	38	341

The following table summarizes the remaining contractual maturities of our cash equivalents and marketable fixed income securities as of December 31, 2022 (in millions):

	Amortized Cost	Estimated Fair Value
Due within one year	\$ 46,854	\$ 46,782
Due after one year through five years	7,622	7,047
Due after five years through ten years	602	565
Due after ten years	1,740	1,622
Total	<u>\$ 56,818</u>	<u>\$ 56,016</u>

Actual maturities may differ from the contractual maturities because borrowers may have certain prepayment conditions.

### Consolidated Statements of Cash Flows Reconciliation

The following table provides a reconciliation of the amount of cash, cash equivalents, and restricted cash reported within the consolidated balance sheets to the total of the same such amounts shown in the consolidated statements of cash flows (in millions):

	December 31, 2021	December 31, 2022
Cash and cash equivalents	\$ 36,220	\$ 53,888
Restricted cash included in accounts receivable, net and other	242	358
Restricted cash included in other assets	15	7
Total cash, cash equivalents, and restricted cash shown in the consolidated statements of cash flows	<u>\$ 36,477</u>	<u>\$ 54,253</u>

### Note 3 — PROPERTY AND EQUIPMENT

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

	December 31,	
	2021	2022
Gross property and equipment (1):		
Land and buildings	\$ 81,104	\$ 91,650
Equipment	128,683	157,458
Other assets	4,118	4,602
Construction in progress	24,895	30,020
Gross property and equipment	<u>238,800</u>	<u>283,730</u>
Total accumulated depreciation and amortization (1)	<u>78,519</u>	<u>97,015</u>
Total property and equipment, net	<u>\$ 160,281</u>	<u>\$ 186,715</u>

(1) Includes the original cost and accumulated depreciation of fully-depreciated assets.

Depreciation and amortization expense on property and equipment was \$16.2 billion, \$22.9 billion, and \$24.9 billion which includes amortization of property and equipment acquired under finance leases of \$8.5 billion, \$9.9 billion, and \$6.1 billion for 2020, 2021, and 2022.

#### Note 4 — LEASES

We have entered into non-cancellable operating and finance leases for fulfillment, delivery, office, data center, physical store, and sortation facilities as well as server and networking equipment, vehicles, and aircraft. Gross assets acquired under finance leases, inclusive of those where title transfers at the end of the lease, are recorded in “Property and equipment, net” and were \$72.2 billion and \$68.0 billion as of December 31, 2021 and 2022. Accumulated amortization associated with finance leases was \$43.4 billion and \$45.2 billion as of December 31, 2021 and 2022.

Lease cost recognized in our consolidated statements of operations is summarized as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
Operating lease cost	\$ 5,019	\$ 7,199	\$ 8,847
Finance lease cost:			
Amortization of lease assets	8,452	9,857	6,097
Interest on lease liabilities	617	473	361
Finance lease cost	9,069	10,330	6,458
Variable lease cost	1,238	1,556	1,852
Total lease cost	\$ 15,326	\$ 19,085	\$ 17,157

Other information about lease amounts recognized in our consolidated financial statements is as follows:

	December 31, 2021	December 31, 2022
Weighted-average remaining lease term – operating leases	11.3 years	11.6 years
Weighted-average remaining lease term – finance leases	8.1 years	10.3 years
Weighted-average discount rate – operating leases	2.2 %	2.8 %
Weighted-average discount rate – finance leases	2.0 %	2.3 %

Our lease liabilities were as follows (in millions):

	December 31, 2021		
	Operating Leases	Finance Leases	Total
Gross lease liabilities	\$ 66,269	\$ 25,866	\$ 92,135
Less: imputed interest	(7,939)	(2,113)	(10,052)
Present value of lease liabilities	58,330	23,753	82,083
Less: current portion of lease liabilities	(6,349)	(8,083)	(14,432)
Total long-term lease liabilities	\$ 51,981	\$ 15,670	\$ 67,651

  

	December 31, 2022		
	Operating Leases	Finance Leases	Total
Gross lease liabilities	\$ 81,273	\$ 18,019	\$ 99,292
Less: imputed interest	(12,233)	(2,236)	(14,469)
Present value of lease liabilities	69,040	15,783	84,823
Less: current portion of lease liabilities	(7,458)	(4,397)	(11,855)
Total long-term lease liabilities	\$ 61,582	\$ 11,386	\$ 72,968

## Note 5 — ACQUISITIONS, GOODWILL, AND ACQUIRED INTANGIBLE ASSETS

### 2020 Acquisition Activity

During 2020, we acquired certain companies for an aggregate purchase price of \$1.2 billion, net of cash acquired, of which \$1.1 billion was capitalized to in-process research and development intangible assets (“IPR&D”).

### 2021 Acquisition Activity

During 2021, we acquired certain companies for an aggregate purchase price of \$496 million, net of cash acquired.

### 2022 Acquisition Activity

On March 17, 2022, we acquired MGM Holdings Inc., for cash consideration of approximately \$6.1 billion, net of cash acquired, to provide more digital media content options for customers. We also assumed \$2.5 billion of debt, which we repaid immediately after closing. The acquired assets primarily consist of \$3.4 billion of video content and \$4.9 billion of goodwill.

During 2022, we also acquired certain other companies for an aggregate purchase price of \$141 million, net of cash acquired.

Pro forma results of operations have not been presented because the effects of the 2022 acquisitions, individually and in the aggregate, were not material to our consolidated results of operations. Acquisition-related costs were expensed as incurred and were not significant.

### Goodwill

The goodwill of the acquired companies is primarily related to expected improvements in technology performance and functionality, as well as sales growth from future product and service offerings and new customers, together with certain intangible assets that do not qualify for separate recognition. The goodwill of the acquired companies is generally not deductible for tax purposes. The following summarizes our goodwill activity in 2021 and 2022 by segment (in millions):

	North America	International	AWS	Consolidated
Goodwill - January 1, 2021	\$ 12,527	\$ 1,288	\$ 1,202	\$ 15,017
New acquisitions	230	60	76	366
Other adjustments (1)	1	(21)	8	(12)
Goodwill - December 31, 2021	12,758	1,327	1,286	15,371
New acquisitions	3,943	1,054	—	4,997
Other adjustments (1)	(80)	30	(30)	(80)
Goodwill - December 31, 2022	\$ 16,621	\$ 2,411	\$ 1,256	\$ 20,288

(1) Primarily includes changes in foreign exchange rates.



### Intangible Assets

Acquired identifiable intangible assets are valued primarily by using discounted cash flows. These assets are included within “Other assets” on our consolidated balance sheets and consist of the following (in millions):

	December 31,						
	2021			2022			Weighted Average Life Remaining
	Acquired Intangibles, Gross (1)	Accumulated Amortization (1)	Acquired Intangibles, Net	Acquired Intangibles, Gross (1)	Accumulated Amortization (1)	Acquired Intangibles, Net	
Finite-lived intangible assets (2):							
Marketing-related	\$ 2,286	\$ (548)	\$ 1,738	\$ 2,407	\$ (601)	\$ 1,806	18.6
Contract-based	2,327	(565)	1,762	3,661	(813)	2,848	12.8
Technology- and content-based	976	(610)	366	883	(643)	240	3.2
Customer-related	197	(103)	94	184	(128)	56	2.2
Total finite-lived intangible assets	\$ 5,786	\$ (1,826)	\$ 3,960	\$ 7,135	\$ (2,185)	\$ 4,950	14.4
IPR&D and other (3)	\$ 1,147		\$ 1,147	\$ 1,147		\$ 1,147	
Total acquired intangibles	<u>\$ 6,933</u>	<u>\$ (1,826)</u>	<u>\$ 5,107</u>	<u>\$ 8,282</u>	<u>\$ (2,185)</u>	<u>\$ 6,097</u>	

(1) Excludes the original cost and accumulated amortization of fully-amortized intangibles.

(2) Finite-lived intangible assets, excluding acquired video content, have estimated useful lives of between one and twenty-five years, and are being amortized to operating expenses on a straight-line basis.

(3) Intangible assets acquired in a business combination that are in-process and used in research and development activities are considered indefinite-lived until the completion or abandonment of the research and development efforts. Once the research and development efforts are completed, we determine the useful life and begin amortizing the assets.

Amortization expense for acquired finite-lived intangibles was \$509 million, \$512 million, and \$604 million in 2020, 2021, and 2022. Expected future amortization expense of acquired finite-lived intangible assets as of December 31, 2022 is as follows (in millions):

Year Ended December 31,	
2023	\$ 530
2024	456
2025	371
2026	324
2027	314
Thereafter	2,955
	<u>\$ 4,950</u>

## Note 6 — DEBT

As of December 31, 2022, we had \$69.5 billion of unsecured senior notes outstanding (the “Notes”), including \$12.8 billion issued in April 2022 and \$8.3 billion issued in December 2022 for general corporate purposes, and \$1.0 billion of borrowings under our secured revolving credit facility. Our total long-term debt obligations are as follows (in millions):

	Maturities (1)	Stated Interest Rates	Effective Interest Rates	December 31, 2021	December 31, 2022
2012 Notes issuance of \$3.0 billion	2022	2.50%	2.66%	1,250	—
2014 Notes issuance of \$6.0 billion	2024 - 2044	3.80% - 4.95%	3.90% - 5.12%	4,000	4,000
2017 Notes issuance of \$17.0 billion	2023 - 2057	2.40% - 5.20%	2.56% - 4.33%	16,000	16,000
2020 Notes issuance of \$10.0 billion	2023 - 2060	0.40% - 2.70%	0.56% - 2.77%	10,000	10,000
2021 Notes issuance of \$18.5 billion	2023 - 2061	0.25% - 3.25%	0.35% - 3.31%	18,500	18,500
April 2022 Notes issuance of \$12.8 billion	2024 - 2062	2.73% - 4.10%	2.83% - 4.15%	—	12,750
December 2022 Notes issuance of \$8.3 billion	2024 - 2032	4.55% - 4.70%	4.61% - 4.83%	—	8,250
Credit Facility				803	1,042
Total face value of long-term debt				50,553	70,542
Unamortized discount and issuance costs, net				(318)	(393)
Less: current portion of long-term debt				(1,491)	(2,999)
Long-term debt				\$ 48,744	\$ 67,150

(1) The weighted-average remaining lives of the 2014, 2017, 2020, 2021, April 2022, and December 2022 Notes were 12.6, 14.2, 16.7, 13.3, 13.3, and 5.9 years as of December 31, 2022. The combined weighted-average remaining life of the Notes was 13.1 years as of December 31, 2022.

Interest on the Notes is payable semi-annually in arrears. We may redeem the Notes at any time in whole, or from time to time, in part at specified redemption prices. We are not subject to any financial covenants under the Notes. The estimated fair value of the Notes was approximately \$53.3 billion and \$61.4 billion as of December 31, 2021 and 2022, which is based on quoted prices for our debt as of those dates.

We have a \$1.5 billion secured revolving credit facility with a lender that is secured by certain seller receivables, which we increased from \$1.0 billion to \$1.5 billion in August 2022 and we may from time to time increase in the future subject to lender approval (the “Credit Facility”). The Credit Facility is available until August 2025, bears interest based on the daily Secured Overnight Financing Rate plus 1.25%, and has a commitment fee of up to 0.45% on the undrawn portion. There were \$803 million and \$1.0 billion of borrowings outstanding under the Credit Facility as of December 31, 2021 and 2022, which had an interest rate of 1.5% and 5.6%, respectively. As of December 31, 2021 and 2022, we have pledged \$918 million and \$1.2 billion of our cash and seller receivables as collateral for debt related to our Credit Facility. The estimated fair value of the Credit Facility, which is based on Level 2 inputs, approximated its carrying value as of December 31, 2021 and 2022.

As of December 31, 2022, future principal payments for our total long-term debt were as follows (in millions):

Year Ended December 31,	
2023	\$ 3,000
2024	8,500
2025	5,249
2026	3,543
2027	8,750
Thereafter	41,500
	\$ 70,542

We have U.S. Dollar and Euro commercial paper programs (the “Commercial Paper Programs”) under which we may from time to time issue unsecured commercial paper up to a total of \$20.0 billion (including up to €3.0 billion) at the date of issue, with individual maturities that may vary but will not exceed 397 days from the date of issue. In March 2022, we increased the size of the Commercial Paper Programs from \$10.0 billion to \$20.0 billion. There were \$725 million and \$6.8 billion of borrowings outstanding under the Commercial Paper Programs as of December 31, 2021 and 2022, which were



included in “Accrued expenses and other” on our consolidated balance sheets and had a weighted-average effective interest rate, including issuance costs, of 0.08% and 4.47%, respectively. We use the net proceeds from the issuance of commercial paper for general corporate purposes.

We have a \$10.0 billion unsecured revolving credit facility with a syndicate of lenders (the “Credit Agreement”), which was amended and restated in March 2022 to increase the borrowing capacity from \$7.0 billion to \$10.0 billion and to extend the term to March 2025. It may be extended for up to three additional one-year terms if approved by the lenders. The interest rate applicable to outstanding balances under the Credit Agreement is the applicable benchmark rate specified in the Credit Agreement plus 0.45%, with a commitment fee of 0.03% on the undrawn portion of the credit facility. There were no borrowings outstanding under the Credit Agreement as of December 31, 2021 and 2022.

In November 2022, we entered into a \$10.0 billion unsecured 364-day revolving credit facility with a syndicate of lenders (the “Short-Term Credit Agreement”), which matures in November 2023 and may be extended for one additional period of 364 days if approved by the lenders. The interest rate applicable to outstanding balances under the Short-Term Credit Agreement is the Secured Overnight Financing Rate specified in the Short-Term Credit Agreement plus 0.45%, with a commitment fee of 0.05% on the undrawn portion. There were no borrowings outstanding under the Short-Term Credit Agreement as of December 31, 2022.

We also utilize other short-term credit facilities for working capital purposes. There were \$318 million and \$1.2 billion of borrowings outstanding under these facilities as of December 31, 2021 and 2022, which were included in “Accrued expenses and other” on our consolidated balance sheets. In addition, we had \$6.9 billion of unused letters of credit as of December 31, 2022.

In January 2023, we entered into an \$8.0 billion unsecured 364-day term loan with a syndicate of lenders (the “Term Loan”), which matures in January 2024 and bears interest at the Secured Overnight Financing Rate specified in the Term Loan plus 0.75%. If we exercise our option to extend the Term Loan’s maturity to January 2025, the interest rate spread will increase from 0.75% to 1.05%. As of the date of this filing, the entire Term Loan is outstanding.

## Note 7 — COMMITMENTS AND CONTINGENCIES

### Commitments

The following summarizes our principal contractual commitments, excluding open orders for purchases that support normal operations and are generally cancellable, as of December 31, 2022 (in millions):

	Year Ended December 31,						Total
	2023	2024	2025	2026	2027	Thereafter	
Long-term debt principal and interest	\$ 5,165	\$ 10,618	\$ 7,146	\$ 5,253	\$ 10,399	\$ 63,815	\$ 102,396
Operating lease liabilities	9,574	8,658	8,024	7,393	6,675	40,949	81,273
Finance lease liabilities, including interest	4,575	2,248	1,422	1,279	1,088	7,407	18,019
Financing obligations, including interest (1)	465	464	456	464	471	6,712	9,032
Leases not yet commenced	1,252	2,043	2,185	2,160	2,152	17,237	27,029
Unconditional purchase obligations (2)	8,156	7,217	5,366	4,525	3,419	6,093	34,776
Other commitments (3)(4)	3,173	1,608	1,027	982	622	8,652	16,064
Total commitments	<u>\$ 32,360</u>	<u>\$ 32,856</u>	<u>\$ 25,626</u>	<u>\$ 22,056</u>	<u>\$ 24,826</u>	<u>\$ 150,865</u>	<u>\$ 288,589</u>

- (1) Includes non-cancellable financing obligations for fulfillment, sortation, and data center facilities. Excluding interest, current financing obligations of \$196 million and \$266 million are recorded within “Accrued expenses and other” and \$6.2 billion and \$6.7 billion are recorded within “Other long-term liabilities” as of December 31, 2021 and 2022. The weighted-average remaining term of the financing obligations was 18.8 years and 17.9 years and the weighted-average imputed interest rate was 3.2% and 3.1% as of December 31, 2021 and 2022.
- (2) Includes unconditional purchase obligations related to long-term agreements to acquire and license digital media content that are not reflected on the consolidated balance sheets and certain products offered in our Whole Foods Market stores. For those digital media content agreements with variable terms, we do not estimate the total obligation beyond any minimum quantities and/or pricing as of the reporting date. Purchase obligations associated with renewal provisions solely at the option of the content provider are included to the extent such commitments are fixed or a minimum amount is specified.
- (3) Includes asset retirement obligations, liabilities associated with digital media content agreements with initial terms greater than one year, and the estimated timing and amounts of payments for rent and tenant improvements associated with build-to-suit lease arrangements that are under construction.
- (4) Excludes approximately \$4.0 billion of accrued tax contingencies for which we cannot make a reasonably reliable estimate of the amount and period of payment, if any.

In July 2022, we entered into an agreement to acquire 1Life Healthcare, Inc. (One Medical) for approximately \$3.9 billion, including its debt, subject to customary closing conditions. In August 2022, we entered into an agreement to acquire iRobot Corporation for approximately \$1.7 billion, including its debt, subject to customary closing conditions. We expect to fund these acquisitions with cash on hand.

### Suppliers

During 2022, no vendor accounted for 10% or more of our purchases. We generally do not have long-term contracts or arrangements with our vendors to guarantee the availability of merchandise, particular payment terms, or the extension of credit limits.

### Other Contingencies

We are disputing claims and denials of refunds or credits related to various non-income taxes (such as sales, value added, consumption, service, and similar taxes), including in jurisdictions in which we already collect and remit these taxes. These non-income tax controversies typically relate to (i) the taxability of products and services, including cross-border intercompany transactions, (ii) collection and withholding on transactions with third parties, and (iii) the adequacy of compliance with reporting obligations, including evolving documentation requirements. Due to the inherent complexity and uncertainty of these matters and the judicial and regulatory processes in certain jurisdictions, the final outcome of any such controversies may be materially different from our expectations.

## ***Legal Proceedings***

The Company is involved from time to time in claims, proceedings, and litigation, including the following:

In November 2015, Eolas Technologies, Inc. filed a complaint against Amazon.com, Inc. in the United States District Court for the Eastern District of Texas. The complaint alleges, among other things, that the use of “interactive features” on www.amazon.com, including “search suggestions and search results,” infringes U.S. Patent No. 9,195,507, entitled “Distributed Hypermedia Method and System for Automatically Invoking External Application Providing Interaction and Display of Embedded Objects Within a Hypermedia Document.” The complaint sought a judgment of infringement together with costs and attorneys’ fees. In February 2016, Eolas filed an amended complaint seeking, among other things, an unspecified amount of damages. In February 2017, Eolas alleged in its damages report that in the event of a finding of liability Amazon could be subject to \$130 to \$250 million in damages. In April 2017, the case was transferred to the United States District Court for the Northern District of California. In May 2022, the district court granted summary judgment holding that the patent is invalid. In June 2022, Eolas filed a notice of appeal. We dispute the allegations of wrongdoing and intend to defend ourselves vigorously in this matter.

In May 2018, Rensselaer Polytechnic Institute and CF Dynamic Advances LLC filed a complaint against Amazon.com, Inc. in the United States District Court for the Northern District of New York. The complaint alleges, among other things, that “Alexa Voice Software and Alexa enabled devices” infringe U.S. Patent No. 7,177,798, entitled “Natural Language Interface Using Constrained Intermediate Dictionary of Results.” The complaint seeks an injunction, an unspecified amount of damages, enhanced damages, an ongoing royalty, interest, attorneys’ fees, and costs. We dispute the allegations of wrongdoing and intend to defend ourselves vigorously in this matter.

In December 2018, Kove IO, Inc. filed a complaint against Amazon Web Services, Inc. in the United States District Court for the Northern District of Illinois. The complaint alleges, among other things, that Amazon S3 and DynamoDB infringe U.S. Patent Nos. 7,814,170 and 7,103,640, both entitled “Network Distributed Tracking Wire Transfer Protocol”; and 7,233,978, entitled “Method and Apparatus for Managing Location Information in a Network Separate from the Data to Which the Location Information Pertains.” The complaint seeks an unspecified amount of damages, enhanced damages, attorneys’ fees, costs, interest, and injunctive relief. In March 2022, the case was stayed pending resolution of review petitions we filed with the United States Patent and Trademark Office. In November 2022, the stay was lifted. We dispute the allegations of wrongdoing and intend to defend ourselves vigorously in this matter.

Beginning in March 2020, with *Frame-Wilson v. Amazon.com, Inc.* filed in the United States District Court for the Western District of Washington, private litigants have filed a number of cases in the U.S. and Canada alleging, among other things, price fixing arrangements between Amazon.com, Inc. and vendors and third-party sellers in Amazon’s stores, monopolization and attempted monopolization, and consumer protection and unjust enrichment claims. Attorneys General for the District of Columbia and California brought similar suits in May 2021 and September 2022 in the Superior Court of the District of Columbia and the California Superior Court for the County of San Francisco, respectively. Some of the private cases include allegations of several distinct purported classes, including consumers who purchased a product through Amazon’s stores and consumers who purchased a product offered by Amazon through another e-commerce retailer. The complaints seek billions of dollars of alleged actual damages, treble damages, punitive damages, injunctive relief, civil penalties, attorneys’ fees, and costs. In March 2022 and January 2023, Amazon’s motions to dismiss were granted in part and denied in part in *Frame-Wilson* and *De Coster v. Amazon.com, Inc.* (WD Wash), respectively; both courts dismissed claims alleging that Amazon’s pricing policies are inherently illegal and denied dismissal of claims alleging that Amazon’s pricing policies are an unlawful restraint of trade. In March 2022, the DC Superior Court dismissed the DC Attorney General’s lawsuit in its entirety; the dismissal is under appeal as of January 2023. We dispute the allegations of wrongdoing and intend to defend ourselves vigorously in these matters.

In October 2020, BroadbandiTV, Inc. filed a complaint against Amazon.com, Inc., Amazon.com Services LLC, and Amazon Web Services, Inc. in the United States District Court for the Western District of Texas. The complaint alleges, among other things, that certain Amazon Prime Video features and services infringe U.S. Patent Nos. 9,648,388, 10,546,750, and 10,536,751, each entitled “Video-On-Demand Content Delivery System for Providing Video-On-Demand Services to TV Services Subscribers”; 10,028,026, entitled “System for Addressing On-Demand TV Program Content on TV Services Platform of a Digital TV Services Provider”; and 9,973,825, entitled “Dynamic Adjustment of Electronic Program Guide Displays Based on Viewer Preferences for Minimizing Navigation in VOD Program Selection.” The complaint seeks an unspecified amount of damages. In April 2022, BroadbandiTV alleged in its damages report that, in the event of a finding of liability, Amazon could be subject to \$166 to \$986 million in damages. In September 2022, the court granted summary judgment, holding that the patents are invalid. In October 2022, BroadbandiTV filed a notice of appeal. We dispute the allegations of wrongdoing and will continue to defend ourselves vigorously in this matter.

In November 2020, the European Commission issued a Statement of Objections alleging that Amazon uses data relating to our marketplace sellers in a manner that infringes EU competition rules. The Statement of Objections sought to impose unspecified fines and remedial actions. In December 2022, the European Commission adopted formal commitments without fines, fully resolving the investigation.

In July 2021, the Luxembourg National Commission for Data Protection (the “CNPD”) issued a decision against Amazon Europe Core S.à r.l. claiming that Amazon’s processing of personal data did not comply with the EU General Data Protection Regulation. The decision imposes a fine of €746 million and corresponding practice revisions. We believe the CNPD’s decision to be without merit and intend to defend ourselves vigorously in this matter.

In November 2021, Jawbone Innovations, LLC filed a complaint against Amazon.com, Inc. and Amazon.com Services, Inc. in the United States District Court for the Eastern District of Texas. The complaint alleges, among other things, that Amazon Echo smart speakers and displays, Fire TV Cube, and Echo Buds infringe U.S. Patent Nos. 7,246,058, entitled “Detecting Voiced and Unvoiced Speech Using Both Acoustic and Nonacoustic Sensors”; 8,019,091, entitled “Voice Activity Detector (VAD)-Based Multiple-Microphone Acoustic Noise Suppression”; 8,280,072, entitled “Microphone Array with Rear Venting”; 8,321,213 and 8,326,611, both entitled “Acoustic Voice Activity Detection (AVAD) for Electronic Systems”; 8,467,543, entitled “Microphone and Voice Activity Detection (VAD) Configurations for Use with Communications Systems”; 8,503,691, entitled “Virtual Microphone Arrays Using Dual Omnidirectional Microphone Array (DOMA)”; 10,779,080, entitled “Dual Omnidirectional Microphone Array (DOMA)”; and 11,122,357, entitled “Forming Virtual Microphone Arrays Using Dual Omnidirectional Microphone Array (DOMA).” The complaint seeks an unspecified amount of damages, enhanced damages, attorneys’ fees, costs, interest, and injunctive relief. In November 2022, the case was transferred to the United States District Court for the Northern District of California. We dispute the allegations of wrongdoing and intend to defend ourselves vigorously in this matter.

In December 2021, the Italian Competition Authority (the “ICA”) issued a decision against Amazon Services Europe S.à r.l., Amazon Europe Core S.à r.l., Amazon EU S.à r.l., Amazon Italia Services S.r.l., and Amazon Italia Logistica S.r.l. claiming that certain of our marketplace and logistics practices in Italy infringe EU competition rules. The decision imposes remedial actions and a fine of €1.13 billion, which we are paying and will seek to recover pending conclusion of all appeals. We believe the ICA’s decision to be without merit and intend to defend ourselves vigorously in this matter.

In July 2022, Acceleration Bay, LLC filed a complaint against Amazon Web Services, Inc. in the United States District Court for the District of Delaware. The complaint alleges, among other things, that Amazon EC2, Amazon CloudFront, AWS Lambda, Amazon Lumberyard, Luna, Amazon Prime Video, Twitch, Amazon GameLift, GridMate, Amazon EKS, AWS App Mesh, and Amazon VPC infringe U.S. Patent Nos. 6,701,344, entitled “Distributed Game Environment”; 6,714,966, entitled “Information Delivery Service”; 6,732,147, entitled “Leaving a Broadcast Channel”; 6,829,634, entitled “Broadcasting Network”; and 6,910,069, entitled “Joining a Broadcast Channel.” The complaint seeks injunctive relief, an unspecified amount of damages, enhanced damages, interest, attorneys’ fees, and costs. We dispute the allegations of wrongdoing and intend to defend ourselves vigorously in this matter.

In November 2022, LightGuide, Inc. filed a complaint against Amazon.com, Inc. and Amazon.com Services LLC in the United States District Court for the Eastern District of Texas. The complaint alleges, among other things, that Amazon’s Nike Intent Detection System used in certain fulfillment centers infringes U.S. Patent Nos. 7,515,981, entitled “Light Guided Assembly System”; and 9,658,614 and 10,528,036, each entitled “Light Guided Assembly System and Method.” The complaint seeks an unspecified amount of damages, enhanced damages, attorneys’ fees, costs, interest, and injunctive relief. We dispute the allegations of wrongdoing and intend to defend ourselves vigorously in this matter.

In addition, we are regularly subject to claims, litigation, and other proceedings, including potential regulatory proceedings, involving patent and other intellectual property matters, taxes, labor and employment, competition and antitrust, privacy and data protection, consumer protection, commercial disputes, goods and services offered by us and by third parties, and other matters.

The outcomes of our legal proceedings and other contingencies are inherently unpredictable, subject to significant uncertainties, and could be material to our operating results and cash flows for a particular period. We evaluate, on a regular basis, developments in our legal proceedings and other contingencies that could affect the amount of liability, including amounts in excess of any previous accruals and reasonably possible losses disclosed, and make adjustments and changes to our accruals and disclosures as appropriate. For the matters we disclose that do not include an estimate of the amount of loss or range of losses, such an estimate is not possible or is immaterial, and we may be unable to estimate the possible loss or range of losses that could potentially result from the application of non-monetary remedies. Until the final resolution of such matters, if any of our estimates and assumptions change or prove to have been incorrect, we may experience losses in excess of the amounts recorded, which could have a material effect on our business, consolidated financial position, results of operations, or cash flows.

See also “Note 9 — Income Taxes.”

## Note 8 — STOCKHOLDERS' EQUITY

### Preferred Stock

We have authorized 500 million shares of \$0.01 par value preferred stock. No preferred stock was outstanding for any year presented.

### Common Stock

Common shares outstanding plus shares underlying outstanding stock awards totaled 10.4 billion, 10.5 billion, and 10.6 billion, as of December 31, 2020, 2021, and 2022. These totals include all vested and unvested stock awards outstanding, including those awards we estimate will be forfeited.

### Stock Repurchase Activity

In March 2022, the Board of Directors authorized a program to repurchase up to \$10.0 billion of our common stock, with no fixed expiration, which replaced the previous \$5.0 billion stock repurchase authorization, approved by the Board of Directors in February 2016. We repurchased 46.2 million shares of our common stock for \$6.0 billion in 2022 under these programs. There were no repurchases of common stock in 2020 or 2021. As of December 31, 2022, we have \$6.1 billion remaining under the repurchase program.

### Stock Award Plans

Employees vest in restricted stock unit awards over the corresponding service term, generally between two and five years.

### Stock Award Activity

Stock-based compensation expense is as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
Cost of sales	\$ 283	\$ 540	\$ 757
Fulfillment	1,357	1,946	2,745
Technology and content	5,061	6,645	10,621
Sales and marketing	1,710	2,530	3,875
General and administrative	797	1,096	1,623
Total stock-based compensation expense (1)	\$ 9,208	\$ 12,757	\$ 19,621

(1) The related tax benefits were \$1.9 billion, \$2.7 billion, and \$4.3 billion for 2020, 2021, and 2022.

The following table summarizes our restricted stock unit activity (in millions):

	Number of Units	Weighted Average Grant-Date Fair Value
Outstanding as of January 1, 2020	286.7	\$ 73
Units granted	158.6	119
Units vested	(115.5)	62
Units forfeited	(26.5)	82
Outstanding as of December 31, 2020	303.3	100
Units granted	127.3	167
Units vested	(108.4)	85
Units forfeited	(42.3)	116
Outstanding as of December 31, 2021	279.9	134
Units granted	262.8	142
Units vested	(113.3)	114
Units forfeited	(45.0)	143
Outstanding as of December 31, 2022	384.4	144





Scheduled vesting for outstanding restricted stock units as of December 31, 2022, is as follows (in millions):

	Year Ended					Thereafter	Total
	2023	2024	2025	2026	2027		
Scheduled vesting — restricted stock units	140.8	136.6	67.3	35.8	1.7	2.2	384.4

As of December 31, 2022, there was \$23.8 billion of net unrecognized compensation cost related to unvested stock-based compensation arrangements. This compensation is recognized on an accelerated basis with more than half of the compensation expected to be expensed in the next twelve months, and has a remaining weighted-average recognition period of 1.1 years. The estimated forfeiture rate as of December 31, 2020, 2021, and 2022 was 26.7%, 26.5%, and 26.5%. Changes in our estimates and assumptions relating to forfeitures may cause us to realize material changes in stock-based compensation expense in the future.

During 2020, 2021, and 2022, the fair value of restricted stock units that vested was \$15.5 billion, \$18.2 billion, and \$12.8 billion.

### ***Common Stock Available for Future Issuance***

As of December 31, 2022, common stock available for future issuance to employees is 1.7 billion shares.

## **Note 9 — INCOME TAXES**

In 2020, 2021, and 2022, we recorded net tax provision (benefit) of \$2.9 billion, \$4.8 billion, and \$(3.2) billion. Our U.S. taxable income is reduced by accelerated depreciation deductions and increased by the impact of capitalized research and development expenses. Cash taxes paid, net of refunds, were \$1.7 billion, \$3.7 billion, and \$6.0 billion for 2020, 2021, and 2022.

Certain foreign subsidiary earnings and losses are subject to current U.S. taxation and the subsequent repatriation of those earnings is not subject to tax in the U.S. The U.S. tax rules also provide for enhanced accelerated depreciation deductions by allowing the election of full expensing of qualified property, primarily equipment, through 2022. Our federal tax provision included a partial election for 2020 and 2021, and a full election for 2022. Effective January 1, 2022, research and development expenses are required to be capitalized and amortized for U.S. tax purposes.

The components of the provision (benefit) for income taxes, net are as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
<b>U.S. Federal:</b>			
Current	\$ 1,835	\$ 2,129	\$ 2,175
Deferred	(151)	155	(6,686)
Total	1,684	2,284	(4,511)
<b>U.S. State:</b>			
Current	626	763	1,074
Deferred	(190)	(178)	(1,302)
Total	436	585	(228)
<b>International:</b>			
Current	956	2,209	1,682
Deferred	(213)	(287)	(160)
Total	743	1,922	1,522
Provision (benefit) for income taxes, net	\$ 2,863	\$ 4,791	\$ (3,217)

U.S. and international components of income (loss) before income taxes are as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
U.S.	\$ 20,219	\$ 35,879	\$ (8,225)
International	3,959	2,272	2,289
Income (loss) before income taxes	\$ 24,178	\$ 38,151	\$ (5,936)

The items accounting for differences between income taxes computed at the federal statutory rate and the provision recorded for income taxes are as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
Income taxes computed at the federal statutory rate	\$ 5,078	\$ 8,012	\$ (1,246)
Effect of:			
Tax impact of foreign earnings and losses	(538)	(1,349)	(370)
State taxes, net of federal benefits	343	465	(173)
Tax credits	(639)	(1,136)	(1,006)
Stock-based compensation (1)	(1,107)	(1,094)	612
Foreign income deduction (2)	(372)	(301)	(1,258)
Other, net	98	194	224
Total	<u>\$ 2,863</u>	<u>\$ 4,791</u>	<u>\$ (3,217)</u>

- (1) Includes non-deductible stock-based compensation and excess tax benefits or shortfalls from stock-based compensation. Our tax provision includes \$1.8 billion and \$1.9 billion of excess tax benefits from stock-based compensation for 2020 and 2021, and a \$33 million tax shortfall from stock-based compensation for 2022.
- (2) U.S. companies are eligible for a deduction that lowers the effective tax rate on certain foreign income. This regime is referred to as the Foreign-Derived Intangible Income deduction.

Our provision for income taxes in 2021 was higher than in 2020 primarily due to an increase in pretax income. This was partially offset by an increase in U.S. federal research and development credits and the impact of the distribution of certain intangible assets from Luxembourg to the U.S. in Q4 2021, resulting in the utilization of \$2.6 billion of Luxembourg deferred tax assets previously subject to a valuation allowance.

We generated an income tax benefit in 2022 as compared to a provision for income taxes in 2021 primarily due to a decrease in pretax income and an increase in the foreign income deduction. This was partially offset by a reduction in excess tax benefits from stock-based compensation and a decrease in the tax impact of foreign earnings and losses driven by a decline in the favorable effects of corporate restructuring transactions. The foreign income deduction benefit recognized in 2022 reflects a change in our application of tax regulations related to the computation of qualifying foreign income and includes an income tax benefit of approximately \$655 million related to years prior to 2022.

We intend to invest substantially all of our foreign subsidiary earnings, as well as our capital in our foreign subsidiaries, indefinitely outside of the U.S. in those jurisdictions in which we would incur significant, additional costs upon repatriation of such amounts.

Deferred income tax assets and liabilities are as follows (in millions):

	December 31,	
	2021	2022
Deferred tax assets (1):		
Loss carryforwards U.S. - Federal/States	228	386
Loss carryforwards - Foreign	2,417	2,831
Accrued liabilities, reserves, and other expenses	2,821	3,280
Stock-based compensation	2,738	4,295
Depreciation and amortization	941	1,009
Operating lease liabilities	15,399	18,285
Capitalized research and development	—	6,824
Other items	603	1,023
Tax credits	626	950
Total gross deferred tax assets	25,773	38,883
Less valuation allowances (2)	(3,596)	(4,374)
Deferred tax assets, net of valuation allowances	22,177	34,509
Deferred tax liabilities:		
Depreciation and amortization	(3,562)	(9,039)
Operating lease assets	(14,422)	(17,140)
Assets held for investment	(4,019)	—
Other items	(668)	(817)
Net deferred tax assets (liabilities), net of valuation allowances	\$ (494)	\$ 7,513

(1) Deferred tax assets are presented after tax effects and net of tax contingencies.

(2) Relates primarily to deferred tax assets that would only be realizable upon the generation of net income in certain foreign taxing jurisdictions or future capital gains, as well as tax credits.

Our valuation allowances primarily relate to foreign deferred tax assets, including substantially all of our foreign net operating loss carryforwards as of December 31, 2022. Our foreign net operating loss carryforwards for income tax purposes as of December 31, 2022 were approximately \$10.4 billion before tax effects and certain of these amounts are subject to annual limitations under applicable tax law. If not utilized, a portion of these losses will begin to expire in 2023.

### ***Tax Contingencies***

We are subject to income taxes in the U.S. (federal and state) and numerous foreign jurisdictions. Significant judgment is required in evaluating our tax positions and determining our provision for income taxes. During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. We establish reserves for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. These reserves are established when we believe that certain positions might be challenged despite our belief that our tax return positions are fully supportable. We adjust these reserves in light of changing facts and circumstances, such as the outcome of tax audits. The provision for income taxes includes the impact of reserve provisions and changes to reserves that are considered appropriate.

The reconciliation of our tax contingencies is as follows (in millions):

	December 31,		
	2020	2021	2022
Gross tax contingencies – January 1	\$ 3,923	\$ 2,820	\$ 3,242
Gross increases to tax positions in prior periods	88	403	274
Gross decreases to tax positions in prior periods	(465)	(354)	(172)
Gross increases to current period tax positions	507	507	706
Settlements with tax authorities	(1,207)	(60)	(20)
Lapse of statute of limitations	(26)	(74)	(28)
Gross tax contingencies – December 31 (1)	\$ 2,820	\$ 3,242	\$ 4,002

(1) As of December 31, 2022, we had approximately \$4.0 billion of accrued tax contingencies of which \$2.2 billion, if fully recognized, would decrease our effective tax rate.

As of December 31, 2021 and 2022, we had accrued interest and penalties, net of federal income tax benefit, related to tax contingencies of \$110 million and \$103 million. Interest and penalties, net of federal income tax benefit, recognized for the years ended December 31, 2020, 2021, and 2022 were \$(48) million, \$28 million, and \$(7) million.

We are under examination, or may be subject to examination, by the Internal Revenue Service for the calendar year 2016 and thereafter. These examinations may lead to ordinary course adjustments or proposed adjustments to our taxes or our net operating losses with respect to years under examination as well as subsequent periods.

We are also subject to taxation in various states and other foreign jurisdictions including China, France, Germany, India, Japan, Luxembourg, and the United Kingdom. We are under, or may be subject to, audit or examination and additional assessments by the relevant authorities in respect of these particular jurisdictions primarily for 2011 and thereafter. We are currently disputing tax assessments in multiple jurisdictions, including with respect to the allocation and characterization of income.

In September 2022, the Luxembourg Tax Authority (“LTA”) denied the tax basis of certain intangible assets that we distributed from Luxembourg to the U.S. in 2021. We believe the LTA’s position is without merit and intend to defend ourselves vigorously in this matter.

In February 2023, we received a decision by the Indian Tax Authority (“ITA”) that tax applies to cloud services fees paid to the U.S. We will need to remit taxes on the services in question, including for a portion of prior years, until this matter is resolved, which payments could be significant in the aggregate. We believe the ITA’s decision is without merit, we intend to defend our position vigorously, and we expect to recoup taxes paid. If this matter is adversely resolved, we would reflect significant additional tax expense, including for taxes previously paid.

In October 2014, the European Commission opened a formal investigation to examine whether decisions by the tax authorities in Luxembourg with regard to the corporate income tax paid by certain of our subsidiaries comply with European Union rules on state aid. On October 4, 2017, the European Commission announced its decision that determinations by the tax authorities in Luxembourg did not comply with European Union rules on state aid. Based on that decision the European Commission announced an estimated recovery amount of approximately €250 million, plus interest, for the period May 2006 through June 2014, and ordered Luxembourg tax authorities to calculate the actual amount of additional taxes subject to recovery. Luxembourg computed an initial recovery amount, consistent with the European Commission’s decision, which we deposited into escrow in March 2018, subject to adjustment pending conclusion of all appeals. In December 2017, Luxembourg appealed the European Commission’s decision. In May 2018, we appealed. On May 12, 2021, the European Union General Court annulled the European Commission’s state aid decision. In July 2021, the European Commission appealed the decision to the European Court of Justice. We will continue to defend ourselves vigorously in this matter.

Changes in tax laws, regulations, administrative practices, principles, and interpretations may impact our tax contingencies. Due to various factors, including the inherent complexities and uncertainties of the judicial, administrative, and regulatory processes in certain jurisdictions, the timing of the resolution of income tax controversies is highly uncertain, and the amounts ultimately paid, if any, upon resolution of the issues raised by the taxing authorities may differ from the amounts accrued. It is reasonably possible that within the next twelve months we will receive additional assessments by various tax authorities or possibly reach resolution of income tax controversies in one or more jurisdictions. These assessments or settlements could result in changes to our contingencies related to positions on prior years’ tax filings. The actual amount of any change could vary significantly depending on the ultimate timing and nature of any settlements. We cannot currently provide an estimate of the range of possible outcomes.

## Note 10 — SEGMENT INFORMATION

We have organized our operations into three segments: North America, International, and AWS. We allocate to segment results the operating expenses “Fulfillment,” “Technology and content,” “Sales and marketing,” and “General and administrative” based on usage, which is generally reflected in the segment in which the costs are incurred. The majority of technology infrastructure costs are allocated to the AWS segment based on usage. The majority of the remaining non-infrastructure technology costs are incurred in the U.S. and are allocated to our North America segment. There are no internal revenue transactions between our reportable segments. These segments reflect the way our chief operating decision maker evaluates the Company’s business performance and manages its operations.

### *North America*

The North America segment primarily consists of amounts earned from retail sales of consumer products (including from sellers) and subscriptions through North America-focused online and physical stores. This segment includes export sales from these online stores.

### *International*

The International segment primarily consists of amounts earned from retail sales of consumer products (including from sellers) and subscriptions through internationally-focused online stores. This segment includes export sales from these internationally-focused online stores (including export sales from these online stores to customers in the U.S., Mexico, and Canada), but excludes export sales from our North America-focused online stores.

### *AWS*

The AWS segment consists of amounts earned from global sales of compute, storage, database, and other services for start-ups, enterprises, government agencies, and academic institutions.

Information on reportable segments and reconciliation to consolidated net income (loss) is as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
<b>North America</b>			
Net sales	\$ 236,282	\$ 279,833	\$ 315,880
Operating expenses	227,631	272,562	318,727
Operating income (loss)	\$ 8,651	\$ 7,271	\$ (2,847)
<b>International</b>			
Net sales	\$ 104,412	\$ 127,787	\$ 118,007
Operating expenses	103,695	128,711	125,753
Operating income (loss)	\$ 717	\$ (924)	\$ (7,746)
<b>AWS</b>			
Net sales	\$ 45,370	\$ 62,202	\$ 80,096
Operating expenses	31,839	43,670	57,255
Operating income	\$ 13,531	\$ 18,532	\$ 22,841
<b>Consolidated</b>			
Net sales	\$ 386,064	\$ 469,822	\$ 513,983
Operating expenses	363,165	444,943	501,735
Operating income	22,899	24,879	12,248
Total non-operating income (expense)	1,279	13,272	(18,184)
Benefit (provision) for income taxes	(2,863)	(4,791)	3,217
Equity-method investment activity, net of tax	16	4	(3)
Net income (loss)	\$ 21,331	\$ 33,364	\$ (2,722)

Net sales by groups of similar products and services, which also have similar economic characteristics, is as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
Net Sales:			
Online stores (1)	\$ 197,346	\$ 222,075	\$ 220,004
Physical stores (2)	16,227	17,075	18,963
Third-party seller services (3)	80,461	103,366	117,716
Subscription services (4)	25,207	31,768	35,218
Advertising services (5)	19,773	31,160	37,739
AWS	45,370	62,202	80,096
Other (6)	1,680	2,176	4,247
Consolidated	<u>\$ 386,064</u>	<u>\$ 469,822</u>	<u>\$ 513,983</u>

- (1) Includes product sales and digital media content where we record revenue gross. We leverage our retail infrastructure to offer a wide selection of consumable and durable goods that includes media products available in both a physical and digital format, such as books, videos, games, music, and software. These product sales include digital products sold on a transactional basis. Digital product subscriptions that provide unlimited viewing or usage rights are included in "Subscription services."
- (2) Includes product sales where our customers physically select items in a store. Sales to customers who order goods online for delivery or pickup at our physical stores are included in "Online stores."
- (3) Includes commissions and any related fulfillment and shipping fees, and other third-party seller services.
- (4) Includes annual and monthly fees associated with Amazon Prime memberships, as well as digital video, audiobook, digital music, e-book, and other non-AWS subscription services.
- (5) Includes sales of advertising services to sellers, vendors, publishers, authors, and others, through programs such as sponsored ads, display, and video advertising.
- (6) Includes sales related to various other offerings, such as certain licensing and distribution of video content and shipping services, and our co-branded credit card agreements.

Net sales are attributed to countries primarily based on country-focused online and physical stores or, for AWS purposes, the selling entity. Net sales attributed to countries that represent a significant portion of consolidated net sales are as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
United States	\$ 263,520	\$ 314,006	\$ 356,113
Germany	29,565	37,326	33,598
United Kingdom	26,483	31,914	30,074
Japan	20,461	23,071	24,396
Rest of world	46,035	63,505	69,802
Consolidated	<u>\$ 386,064</u>	<u>\$ 469,822</u>	<u>\$ 513,983</u>

Total segment assets exclude corporate assets, such as cash and cash equivalents, marketable securities, other long-term investments, corporate facilities, goodwill and other acquired intangible assets, and tax assets. Technology infrastructure assets are allocated among the segments based on usage, with the majority allocated to the AWS segment. Total segment assets reconciled to consolidated amounts are as follows (in millions):

	December 31,		
	2020	2021	2022
North America (1)	\$ 108,405	\$ 161,255	\$ 185,268
International (1)	42,212	57,983	64,666
AWS (2)	47,574	63,835	88,491
Corporate	123,004	137,476	124,250
Consolidated	<u>\$ 321,195</u>	<u>\$ 420,549</u>	<u>\$ 462,675</u>

(1) North America and International segment assets primarily consist of property and equipment, operating leases, inventory, and accounts receivable.

(2) AWS segment assets primarily consist of property and equipment and accounts receivable.

Property and equipment, net by segment is as follows (in millions):

	December 31,		
	2020	2021	2022
North America	\$ 54,912	\$ 83,640	\$ 90,076
International	15,375	21,718	23,347
AWS	32,151	43,245	60,324
Corporate	10,676	11,678	12,968
Consolidated	<u>\$ 113,114</u>	<u>\$ 160,281</u>	<u>\$ 186,715</u>

Total net additions to property and equipment by segment are as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
North America (1)	\$ 29,889	\$ 37,397	\$ 23,682
International (1)	8,072	10,259	6,711
AWS (2)	16,530	22,047	27,755
Corporate	3,485	2,622	2,688
Consolidated	<u>\$ 57,976</u>	<u>\$ 72,325</u>	<u>\$ 60,836</u>

(1) Includes property and equipment added under finance leases of \$5.6 billion, \$3.6 billion, and \$422 million in 2020, 2021, and 2022, and under build-to-suit lease arrangements of \$2.7 billion, \$5.6 billion, and \$3.2 billion in 2020, 2021, and 2022.

(2) Includes property and equipment added under finance leases of \$7.7 billion, \$3.5 billion, and \$253 million in 2020, 2021, and 2022, and under build-to-suit lease arrangements of \$130 million, \$51 million, and \$20 million in 2020, 2021, and 2022.

U.S. property and equipment, net and operating leases were \$109.5 billion, \$155.0 billion, and \$180.0 billion, as of December 31, 2020, 2021, and 2022, and non-U.S. property and equipment, net and operating leases were \$41.2 billion, \$61.3 billion, and \$72.9 billion as of December 31, 2020, 2021, and 2022. Except for the U.S., property and equipment, net and operating leases in any single country were less than 10% of consolidated property and equipment, net and operating leases.

Depreciation and amortization expense on property and equipment, including corporate property and equipment, are allocated to all segments based on usage. Total depreciation and amortization expense, by segment, is as follows (in millions):

	Year Ended December 31,		
	2020	2021	2022
North America	\$ 6,421	\$ 9,234	\$ 11,565
International	2,215	3,022	3,483
AWS	7,603	10,653	9,876
Consolidated	<u>\$ 16,239</u>	<u>\$ 22,909</u>	<u>\$ 24,924</u>