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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2023

or

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

For the transition period from to .

Commission File No. 000-22513

AMAZON.COM, INC.
(Exact name of registrant as specified in its charter)

Delaware	**91-1646860**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

410 Terry Avenue North, Seattle, Washington 98109-5210
(206) 266-1000
(Address and telephone number, including area code, of registrant's principal executive offices)

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, par value $.01 per share	AMZN	Nasdaq Global Select Market

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

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

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

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

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

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

10,317,750,796 shares of common stock, par value $0.01 per share, outstanding as of July 21, 2023

AMAZON.COM, INC.
FORM 10-Q
For the Quarterly Period Ended June 30, 2023

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

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

	Three Months Ended June 30,		Six Months Ended June 30,		Twelve Months Ended June 30,	
	2022	2023	2022	2023	2022	2023
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH, BEGINNING OF PERIOD	$ 36,599	$ 49,734	$ 36,477	$ 54,253	$ 40,667	$ 37,700
OPERATING ACTIVITIES:						
Net income (loss)	(2,028)	6,750	(5,872)	9,922	11,607	13,072
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	9,716	11,589	18,909	22,712	37,748	45,724
Stock-based compensation	5,209	7,127	8,459	11,875	15,319	23,037
Non-operating expense (income), net	6,104	47	14,793	581	3,201	2,754
Deferred income taxes	(1,955)	(2,744)	(3,956)	(3,216)	(6,670)	(7,408)
Changes in operating assets and liabilities:						
Inventories	(3,890)	(2,373)	(6,504)	(2,002)	(15,478)	1,910
Accounts receivable, net and other	(6,799)	(5,167)	(8,315)	(3,646)	(19,761)	(17,228)
Accounts payable	3,699	3,029	(5,681)	(8,235)	6,140	391
Accrued expenses and other	(1,412)	(1,938)	(7,315)	(7,701)	553	(1,944)
Unearned revenue	321	156	1,657	974	2,915	1,533
Net cash provided by (used in) operating activities	8,965	16,476	6,175	21,264	35,574	61,841
INVESTING ACTIVITIES:						
Purchases of property and equipment	(15,724)	(11,455)	(30,675)	(25,662)	(65,358)	(58,632)
Proceeds from property and equipment sales and incentives	1,626	1,043	2,835	2,180	6,297	4,669
Acquisitions, net of cash acquired, and other	(259)	(316)	(6,600)	(3,829)	(7,635)	(5,545)
Sales and maturities of marketable securities	2,608	1,551	25,361	2,666	53,706	8,906
Purchases of marketable securities	(329)	(496)	(2,093)	(834)	(25,590)	(1,306)
Net cash provided by (used in) investing activities	(12,078)	(9,673)	(11,172)	(25,479)	(38,580)	(51,908)
FINANCING ACTIVITIES:						
Common stock repurchased	(3,334)	—	(6,000)	—	(6,000)	—
Proceeds from short-term debt, and other	4,865	4,399	18,608	17,179	23,462	40,124
Repayments of short-term debt, and other	(7,610)	(7,641)	(13,841)	(11,244)	(18,417)	(34,957)
Proceeds from long-term debt	12,824	—	12,824	—	13,200	8,342
Repayments of long-term debt	(1)	(2,000)	(1)	(3,386)	(1,511)	(4,643)
Principal repayments of finance leases	(2,059)	(1,220)	(4,836)	(2,600)	(9,789)	(5,705)
Principal repayments of financing obligations	(59)	(77)	(138)	(134)	(205)	(244)
Net cash provided by (used in) financing activities	4,626	(6,539)	6,616	(185)	740	2,917
Foreign currency effect on cash, cash equivalents, and restricted cash	(412)	69	(396)	214	(701)	(483)
Net increase (decrease) in cash, cash equivalents, and restricted cash	1,101	333	1,223	(4,186)	(2,967)	12,367
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH, END OF PERIOD	$ 37,700	$ 50,067	$ 37,700	$ 50,067	$ 37,700	$ 50,067

See accompanying notes to consolidated financial statements.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
Net product sales	$ 56,575	$ 59,032	$ 113,030	$ 116,013
Net service sales	64,659	75,351	124,648	145,728
Total net sales	121,234	134,383	237,678	261,741
Operating expenses:				
Cost of sales	66,424	69,373	132,923	137,164
Fulfillment	20,342	21,305	40,613	42,210
Technology and infrastructure	18,072	21,931	32,914	42,381
Sales and marketing	10,086	10,745	18,406	20,917
General and administrative	2,903	3,202	5,497	6,245
Other operating expense (income), net	90	146	339	369
Total operating expenses	117,917	126,702	230,692	249,286
Operating income	3,317	7,681	6,986	12,455
Interest income	159	661	267	1,272
Interest expense	(584)	(840)	(1,056)	(1,663)
Other income (expense), net	(5,545)	61	(14,115)	(382)
Total non-operating expense	(5,970)	(118)	(14,904)	(773)
Income (loss) before income taxes	(2,653)	7,563	(7,918)	11,682
Benefit (provision) for income taxes	637	(804)	2,059	(1,752)
Equity-method investment activity, net of tax	(12)	(9)	(13)	(8)
Net income (loss)	$ (2,028)	$ 6,750	$ (5,872)	$ 9,922
Basic earnings per share	$ (0.20)	$ 0.66	$ (0.58)	$ 0.97
Diluted earnings per share	$ (0.20)	$ 0.65	$ (0.58)	$ 0.95
Weighted-average shares used in computation of earnings per share:				
Basic	10,175	10,285	10,173	10,268
Diluted	10,175	10,449	10,173	10,398

See accompanying notes to consolidated financial statements.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	**2023**	**2022**	**2023**
Net income (loss)	$ (2,028)	$ 6,750	$ (5,872)	$ 9,922
Other comprehensive income (loss):				
Foreign currency translation adjustments, net of tax of $76, $(22), $60, and $(32)	(2,186)	264	(2,519)	650
Net change in unrealized gains (losses) on available-for-sale debt securities:				
Unrealized gains (losses), net of tax of $0, $(5), $1, and $(34)	(238)	17	(900)	112
Reclassification adjustment for losses (gains) included in “Other income (expense), net,” net of tax of $0, $(5), $0, and $(15)	7	12	13	45
Net unrealized gains (losses) on available-for-sale debt securities	(231)	29	(887)	157
Total other comprehensive income (loss)	(2,417)	293	(3,406)	807
Comprehensive income (loss)	$ (4,445)	$ 7,043	$ (9,278)	$ 10,729

See accompanying notes to consolidated financial statements.

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

	December 31, 2022	June 30, 2023
		(unaudited)
ASSETS		
Current assets:		
Cash and cash equivalents	$ 53,888	$ 49,529
Marketable securities	16,138	14,441
Inventories	34,405	36,587
Accounts receivable, net and other	42,360	39,925
Total current assets	146,791	140,482
Property and equipment, net	186,715	193,784
Operating leases	66,123	70,332
Goodwill	20,288	22,785
Other assets	42,758	50,224
Total assets	$ 462,675	$ 477,607
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 79,600	$ 69,481
Accrued expenses and other	62,566	64,235
Unearned revenue	13,227	14,522
Total current liabilities	155,393	148,238
Long-term lease liabilities	72,968	75,822
Long-term debt	67,150	63,092
Other long-term liabilities	21,121	21,853
Commitments and contingencies (Note 4)		
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; 10,757 and 10,828 shares issued; 10,242 and 10,313 shares outstanding)	108	108
Treasury stock, at cost	(7,837)	(7,837)
Additional paid-in capital	75,066	86,896
Accumulated other comprehensive income (loss)	(4,487)	(3,680)
Retained earnings	83,193	93,115
Total stockholders' equity	146,043	168,602
Total liabilities and stockholders' equity	$ 462,675	$ 477,607

See accompanying notes to consolidated financial statements.

AMAZON.COM, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

Note 1 — ACCOUNTING POLICIES AND SUPPLEMENTAL DISCLOSURES

Unaudited Interim Financial Information

We have prepared the accompanying consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”) for interim financial reporting. These consolidated financial statements are unaudited and, in our opinion, include all adjustments, consisting of normal recurring adjustments and accruals necessary for a fair presentation of our consolidated cash flows, operating results, and balance sheets for the periods presented. Operating results for the periods presented are not necessarily indicative of the results that may be expected for 2023 due to seasonal and other factors. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) have been omitted in accordance with the rules and regulations of the SEC. These consolidated financial statements should be read in conjunction with the audited consolidated financial statements and accompanying notes in Item 8 of Part II, “Financial Statements and Supplementary Data,” of our 2022 Annual Report on Form 10-K.

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 health care services and 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.

For the six months ended June 30, 2023, we recorded approximately $510 million of estimated severance costs primarily related to planned role eliminations. These charges were recorded primarily in “Sales and marketing,” “Technology and infrastructure,” and “General and administrative” on our consolidated statements of operations and included approximately $320 million recorded within our AWS segment.

For the six months ended June 30, 2022 and 2023, we recorded approximately $260 million and $250 million of impairments of property and equipment and operating leases primarily related to physical stores in 2022 and fulfillment network facilities in 2023. 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 six months ended June 30, 2022 and 2023, we also recorded expenses of approximately $230 million and $180 million primarily in “Fulfillment” in 2022 and “Cost of sales” and “Fulfillment” in 2023, on our consolidated statements of operations primarily relating to terminating contracts for certain leases not yet commenced as well as other purchase commitments, which primarily impacted our North America segment.

Supplemental Cash Flow Information

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

	Three Months Ended June 30,		Six Months Ended June 30,		Twelve Months Ended June 30,	
	2022	2023	2022	2023	2022	2023
SUPPLEMENTAL CASH FLOW INFORMATION:						
Cash paid for interest on debt, net of capitalized interest	$ 349	$ 954	$ 628	$ 1,356	$ 1,271	$ 2,289
Cash paid for operating leases	2,088	2,528	4,455	4,995	7,960	9,173
Cash paid for interest on finance leases	95	77	202	158	437	330
Cash paid for interest on financing obligations	55	41	113	100	198	194
Cash paid for income taxes, net of refunds	3,145	3,735	3,598	4,354	4,682	6,791
Assets acquired under operating leases	5,101	4,104	7,276	7,730	23,531	19,254
Property and equipment acquired under finance leases, net of remeasurements and modifications	61	240	227	248	3,579	696
Property and equipment recognized during the construction period of build-to-suit lease arrangements	986	84	2,351	215	6,117	1,051
Property and equipment derecognized after the construction period of build-to-suit lease arrangements, with the associated leases recognized as operating	1,079	—	1,112	720	1,243	4,766

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):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
Shares used in computation of basic earnings per share	10,175	10,285	10,173	10,268
Total dilutive effect of outstanding stock awards	—	164	—	130
Shares used in computation of diluted earnings per share	10,175	10,449	10,173	10,398

Other Income (Expense), Net

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
Marketable equity securities valuation gains (losses)	$ (4,322)	$ 299	$ (12,567)	$ (181)
Equity warrant valuation gains (losses)	(1,124)	(220)	(1,436)	(161)
Upward adjustments relating to equity investments in private companies	58	10	65	26
Foreign currency gains (losses)	(117)	9	(103)	79
Other, net	(40)	(37)	(74)	(145)
Total other income (expense), net	(5,545)	61	(14,115)	(382)

Included in other income (expense), net is a marketable equity securities valuation gain (loss) of $(3.9) billion and $187 million in Q2 2022 and Q2 2023, and $(11.5) billion and $(280) million for the six months ended June 30, 2022 and 2023, 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 June 30, 2023, 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, and had a fair value of $2.9 billion and $2.6 billion as of December 31, 2022 and June 30, 2023. 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.

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

	Three Months Ended March 31,	
	2022	2023
Revenues	$ 95	$ 661
Gross profit	(502)	(535)
Loss from operations	(1,579)	(1,433)
Net loss	(1,593)	(1,349)

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 $2.8 billion and $2.7 billion as of December 31, 2022 and June 30, 2023.

Accounts Receivable, Net and Other

Included in "Accounts receivable, net and other" on our consolidated balance sheets are receivables primarily related to customers, vendors, and sellers, as well as prepaid expenses and other current assets. As of December 31, 2022 and June 30, 2023, customer receivables, net, were $26.6 billion and $25.3 billion, vendor receivables, net, were $6.9 billion and $5.6 billion, seller receivables, net, were $1.3 billion and $1.3 billion, and other receivables, net, were $3.1 billion and $2.7 billion. Seller receivables are amounts due from sellers related to our seller lending program, which provides funding to sellers primarily to procure inventory. Prepaid expenses and other current assets were $4.5 billion and $5.0 billion as of December 31, 2022 and June 30, 2023.

We estimate losses on receivables based on expected losses, including our historical experience of actual losses. The allowance for doubtful accounts was $1.4 billion and $1.5 billion as of December 31, 2022 and June 30, 2023.

Digital Video and Music Content

The total capitalized costs of video, which is primarily released content, and music as of December 31, 2022 and June 30, 2023 were $16.7 billion and $17.8 billion. The weighted average remaining life of our capitalized video content is 3.6 years. Total video and music expense was $3.7 billion and $4.4 billion in Q2 2022 and Q2 2023, and $7.3 billion and $8.4 billion for the six months ended June 30, 2022 and 2023.

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, 2022 was $16.1 billion, of which $8.6 billion was recognized as revenue during the six months ended June 30, 2023. Included in "Other long-term liabilities" on our consolidated balance sheets was $2.9 billion and $2.7 billion of unearned revenue as of December 31, 2022 and June 30, 2023.

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 consolidated financial statements. For contracts with original terms that exceed one year, those commitments not yet recognized were $132.1 billion as of June 30, 2023. The weighted-average remaining life of our long-term contracts is 3.6 years. However, the amount and timing of revenue recognition is largely driven by customer usage, which can extend beyond the original contractual term.

Acquisition Activity

On February 22, 2023, we acquired 1Life Healthcare, Inc. ("One Medical"), for cash consideration of approximately $3.5 billion, net of cash acquired, to provide health care options for customers. The acquired assets primarily consist of $1.3 billion of intangible assets and $2.5 billion of goodwill, which is allocated to our North America segment. The valuation of certain assets and liabilities is preliminary and subject to change.

Pro forma results of operations have not been presented because the effects of the One Medical acquisition were not material to our consolidated results of operations. Acquisition-related costs were expensed as incurred and were not significant.

Note 2 — FINANCIAL INSTRUMENTS

Cash, Cash Equivalents, Restricted Cash, and Marketable Securities

As of December 31, 2022 and June 30, 2023, 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. 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, 2022 and June 30, 2023.

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, 2022	June 30, 2023			
	Total Estimated Fair Value	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Total Estimated Fair Value
Cash	$ 10,666	$ 11,142	$ —	$ —	$ 11,142
Level 1 securities:					
Money market funds	27,899	29,095	—	—	29,095
Equity securities (1)	3,709				3,515
Level 2 securities:					
Foreign government and agency securities	535	273	—	(1)	272
U.S. government and agency securities	2,146	2,304	—	(133)	2,171
Corporate debt securities	22,627	16,469	—	(351)	16,118
Asset-backed securities	2,572	2,103	—	(101)	2,002
Other debt securities	237	201	—	(8)	193
	$ 70,391	$ 61,587	$ —	$ (594)	$ 64,508
Less: Restricted cash, cash equivalents, and marketable securities (2)	(365)				(538)
Total cash, cash equivalents, and marketable securities	$ 70,026				$ 63,970

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(1) The related unrealized gains (losses) recorded in “Other income (expense), net” were $(4.2) billion and $284 million in Q2 2022 and Q2 2023, and $(12.3) billion and $(195) million for the six months ended June 30, 2022 and 2023.

(2) We are required to pledge or otherwise restrict a portion of our cash, cash equivalents, and marketable debt 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 debt 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 4 — Commitments and Contingencies.”

The following table summarizes the remaining contractual maturities of our cash equivalents and marketable debt securities as of June 30, 2023 (in millions):

	Amortized Cost	Estimated Fair Value
Due within one year	$ 42,208	$ 42,148
Due after one year through five years	6,404	5,983
Due after five years through ten years	565	534
Due after ten years	1,268	1,186
Total	$ 50,445	$ 49,851

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

Equity Warrants and Non-Marketable Equity Investments

We hold equity warrants giving us the right to acquire stock of other companies. As of December 31, 2022 and June 30, 2023, these warrants had a fair value of $2.1 billion and $1.8 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 classified as Level 2 and 3 assets.

As of December 31, 2022 and June 30, 2023, equity investments not accounted for under the equity-method and without readily determinable fair values had a carrying value of $715 million and $733 million, and are recorded within “Other assets” on our consolidated balance sheets with adjustments recognized in “Other income (expense), net” on our consolidated statements of operations.

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, 2022	June 30, 2023
Cash and cash equivalents	$ 53,888	$ 49,529
Restricted cash included in accounts receivable, net and other	358	523
Restricted cash included in other assets	7	15
Total cash, cash equivalents, and restricted cash shown in the consolidated statements of cash flows	$ 54,253	$ 50,067

Note 3 — LEASES

We have entered into non-cancellable operating and finance leases for fulfillment network, office, data center, and physical store facilities as well as server and networking equipment, aircraft, and vehicles. Gross assets acquired under finance leases, including those where title transfers at the end of the lease, are recorded in “Property and equipment, net” and were $68.0 billion and $64.6 billion as of December 31, 2022 and June 30, 2023. Accumulated amortization associated with finance leases was $45.2 billion and $44.6 billion as of December 31, 2022 and June 30, 2023.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
Operating lease cost	$ 2,133	$ 2,608	$ 4,236	$ 5,120
Finance lease cost:				
Amortization of lease assets	1,530	1,539	3,090	3,085
Interest on lease liabilities	92	76	195	156
Finance lease cost	1,622	1,615	3,285	3,241
Variable lease cost	471	494	940	1,012
Total lease cost	$ 4,226	$ 4,717	$ 8,461	$ 9,373

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

	December 31, 2022	June 30, 2023
Weighted-average remaining lease term – operating leases	11.6 years	11.5 years
Weighted-average remaining lease term – finance leases	10.3 years	11.3 years
Weighted-average discount rate – operating leases	2.8 %	3.1 %
Weighted-average discount rate – finance leases	2.3 %	2.5 %

Our lease liabilities were as follows (in millions):

	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

	June 30, 2023		
	Operating Leases	Finance Leases	Total
Gross lease liabilities	$ 87,753	$ 15,533	$ 103,286
Less: imputed interest	(14,383)	(2,075)	(16,458)
Present value of lease liabilities	73,370	13,458	86,828
Less: current portion of lease liabilities	(7,982)	(3,024)	(11,006)
Total long-term lease liabilities	$ 65,388	$ 10,434	$ 75,822

Note 4 — 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 June 30, 2023 (in millions):

	Six Months Ended December 31,	Year Ended December 31,					
	2023	2024	2025	2026	2027	Thereafter	Total
Long-term debt principal and interest	$ 1,082	$ 10,626	$ 7,293	$ 5,034	$ 10,399	$ 63,814	$ 98,248
Operating lease liabilities	5,624	9,649	9,024	8,334	7,602	47,520	87,753
Finance lease liabilities, including interest	1,917	2,245	1,433	1,269	1,077	7,592	15,533
Financing obligations, including interest (1)	234	464	457	464	471	6,712	8,802
Leases not yet commenced	558	2,009	1,887	1,897	1,926	15,712	23,989
Unconditional purchase obligations (2)	4,274	8,032	6,151	5,029	3,560	6,090	33,136
Other commitments (3)(4)	2,153	2,247	1,246	1,102	895	8,497	16,140
Total commitments	$ 15,842	$ 35,272	$ 27,491	$ 23,129	$ 25,930	$ 155,937	$ 283,601

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(1) Includes non-cancellable financing obligations for fulfillment network and data center facilities. Excluding interest, current financing obligations of $266 million and $269 million are recorded within “Accrued expenses and other” and $6.7 billion and $6.6 billion are recorded within “Other long-term liabilities” as of December 31, 2022 and June 30, 2023. The weighted-average remaining term of the financing obligations was 17.9 years and 17.5 years and the weighted-average imputed interest rate was 3.1% as of December 31, 2022 and June 30, 2023.

(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 $5.0 billion of accrued tax contingencies for which we cannot make a reasonably reliable estimate of the amount and period of payment, if any.

In August 2022, we entered into an agreement to acquire iRobot Corporation, as amended in July 2023, for approximately $1.7 billion, including its debt, subject to customary closing conditions. We expect to fund this acquisition with cash on hand.

Other Contingencies

We are disputing claims and denials of refunds or credits, and monitoring or evaluating potential claims, 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 matters described in Item 8 of Part II, "Financial Statements and Supplementary Data — Note 7 — Commitments and Contingencies — Legal Proceedings" of our 2022 Annual Report on Form 10-K and in Item 1 of Part I, "Financial Statements — Note 4 — Commitments and Contingencies — Legal Proceedings" of our Quarterly Report on Form 10-Q for the period ended March 31, 2023, as supplemented by the following:

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. In July 2023, Kove alleged in its damages report that in the event of a finding of liability Amazon Web Services could be subject to $517 million to $1.03 billion in damages. We dispute the allegations of wrongdoing and intend to defend ourselves vigorously in this matter.

In May 2023, Dialect, LLC filed a complaint against Amazon.com, Inc. and Amazon Web Services, Inc. in the United States District Court for the Eastern District for Virginia. The complaint alleges, among other things, that Amazon's Alexa-enabled products and services, such as Echo devices, Fire tablets, Fire TV sticks, Fire TVs, Alexa, and Alexa Voice Services, infringe U.S. Patent Nos. 7,693,720 and 9,031,845, each entitled "Mobile Systems and Methods for Responding to Natural Language Speech Utterance"; 8,015,006, entitled "Systems and Methods for Processing Natural Language Speech Utterances with Context-Specific Domain Agents"; 8,140,327, entitled "System and Method for Filtering and Eliminating Noise from Natural Language Utterances to Improve Speech Recognition and Parsing"; 8,195,468 and 9,495,957, each entitled "Mobile Systems and Methods of Supporting Natural Language Human-Machine Interactions"; and 9,263,039, entitled "Systems and Methods for Responding to Natural Language Speech Utterance." 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 7 — Income Taxes."

Note 5 — DEBT

As of June 30, 2023, we had $66.5 billion of unsecured senior notes outstanding (the "Notes") and $972 million of borrowings under our credit facility. Our total long-term debt obligations are as follows (in millions):

	Maturities (1)	Stated Interest Rates	Effective Interest Rates	December 31, 2022	June 30, 2023
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	2024 - 2057	2.80% - 5.20%	2.95% - 4.33%	16,000	15,000
2020 Notes issuance of $10.0 billion	2025 - 2060	0.80% - 2.70%	0.88% - 2.77%	10,000	9,000
2021 Notes issuance of $18.5 billion	2024 - 2061	0.45% - 3.25%	0.57% - 3.31%	18,500	17,500
April 2022 Notes issuance of $12.8 billion	2024 - 2062	2.73% - 4.10%	2.83% - 4.15%	12,750	12,750
December 2022 Notes issuance of $8.3 billion	2024 - 2032	4.55% - 4.70%	4.61% - 4.83%	8,250	8,250
Credit Facility				1,042	972
Total face value of long-term debt				70,542	67,472
Unamortized discount and issuance costs, net				(393)	(383)
Less: current portion of long-term debt				(2,999)	(3,997)
Long-term debt				$ 67,150	$ 63,092

(1) The weighted-average remaining lives of the 2014, 2017, 2020, 2021, April 2022, and December 2022 Notes were 12.1, 14.6, 18.1, 13.6, 12.8, and 5.4 years as of June 30, 2023. The combined weighted-average remaining life of the Notes was 13.2 years as of June 30, 2023.

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 $61.4 billion and $59.5 billion as of December 31, 2022 and June 30, 2023, which is based on quoted prices for our debt as of those dates.

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 June 30, 2023, $8.0 billion of the Term Loan was outstanding, which was included in "Accrued expenses and other" on our consolidated balance sheets and had an interest rate of 5.9%.

We have a $1.5 billion secured revolving credit facility with a lender that is secured by certain seller receivables, which 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 $1.0 billion and $972 million of borrowings outstanding under the Credit Facility as of December 31, 2022 and June 30, 2023, which had an interest rate of 5.6% and 6.3%, respectively. As of December 31, 2022 and June 30, 2023, we have pledged $1.2 billion and $1.1 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, 2022 and June 30, 2023.

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. There were $6.8 billion and $4.4 billion of borrowings outstanding under the Commercial Paper Programs as of December 31, 2022 and June 30, 2023, 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 4.5% and 5.0%, 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"), with a term that extends 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, 2022 and June 30, 2023.

We have 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 and June 30, 2023.

We also utilize other short-term credit facilities for working capital purposes. There were $1.2 billion and $1.1 billion of borrowings outstanding under these facilities as of December 31, 2022 and June 30, 2023, which were included in "Accrued expenses and other" on our consolidated balance sheets. In addition, we had $7.5 billion of unused letters of credit as of June 30, 2023.

Note 6 — STOCKHOLDERS' EQUITY

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 during the six months ended June 30, 2022 under these programs. There were no repurchases of our common stock during the six months ended June 30, 2023. As of June 30, 2023, we have $6.1 billion remaining under the repurchase program.

Stock Award Activity

Common shares outstanding plus shares underlying outstanding stock awards totaled 10.6 billion and 10.8 billion as of December 31, 2022 and June 30, 2023. These totals include all vested and unvested stock awards outstanding, including those awards we estimate will be forfeited. Stock-based compensation expense is as follows (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
Cost of sales	$ 213	$ 251	$ 359	$ 416
Fulfillment	763	932	1,261	1,535
Technology and infrastructure	2,814	4,043	4,459	6,617
Sales and marketing	990	1,303	1,655	2,296
General and administrative	429	598	725	1,011
Total stock-based compensation expense	$ 5,209	$ 7,127	$ 8,459	$ 11,875

The following table summarizes our restricted stock unit activity for the six months ended June 30, 2023 (in millions):

	Number of Units	Weighted-Average Grant-Date Fair Value
Outstanding as of December 31, 2022	384.4	$ 144
Units granted	200.3	103
Units vested	(70.1)	143
Units forfeited	(33.1)	138
Outstanding as of June 30, 2023	481.5	128

Scheduled vesting for outstanding restricted stock units as of June 30, 2023, is as follows (in millions):

	Six Months Ended December 31,	Year Ended December 31,					
	2023	2024	2025	2026	2027	Thereafter	Total
Scheduled vesting — restricted stock units	70.7	224.5	128.6	47.0	7.4	3.3	481.5

As of June 30, 2023, there was $28.0 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 1.0 year. The estimated forfeiture rate as of December 31, 2022 and June 30, 2023 was 26.5% and 26.3%. Changes in our estimates and assumptions relating to forfeitures may cause us to realize material changes in stock-based compensation expense in the future.

Changes in Stockholders' Equity

The following table shows changes in stockholders' equity (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
Total beginning stockholders' equity	$ 134,001	$ 154,526	$ 138,245	$ 146,043
Beginning common stock	107	108	106	108
Stock-based compensation and issuance of employee benefit plan stock	—	—	1	—
Ending common stock	107	108	107	108
Beginning treasury stock	(4,503)	(7,837)	(1,837)	(7,837)
Common stock repurchased	(3,334)	—	(6,000)	—
Ending treasury stock	(7,837)	(7,837)	(7,837)	(7,837)
Beginning additional paid-in capital	58,691	79,863	55,437	75,066
Stock-based compensation and issuance of employee benefit plan stock	5,180	7,033	8,434	11,830
Ending additional paid-in capital	63,871	86,896	63,871	86,896
Beginning accumulated other comprehensive income (loss)	(2,365)	(3,973)	(1,376)	(4,487)
Other comprehensive income (loss)	(2,417)	293	(3,406)	807
Ending accumulated other comprehensive income (loss)	(4,782)	(3,680)	(4,782)	(3,680)
Beginning retained earnings	82,071	86,365	85,915	83,193
Net income (loss)	(2,028)	6,750	(5,872)	9,922
Ending retained earnings	80,043	93,115	80,043	93,115
Total ending stockholders' equity	$ 131,402	$ 168,602	$ 131,402	$ 168,602

Note 7 — INCOME TAXES

Our tax provision or benefit from income taxes for interim periods is determined using an estimate of our annual effective tax rate, adjusted for discrete items, if any, that are taken into account in the relevant period. Each quarter we update our estimate of the annual effective tax rate, and if our estimated tax rate changes, we make a cumulative adjustment.

Our quarterly tax provision, and our quarterly estimate of our annual effective tax rate, is subject to significant variation due to several factors, including variability in accurately predicting our pre-tax and taxable income and loss and the mix of jurisdictions to which they relate, intercompany transactions, the applicability of special tax regimes, changes in how we do business, acquisitions, investments, developments in tax controversies, changes in our stock price, changes in our deferred tax assets and liabilities and their valuation, foreign currency gains (losses), changes in statutes, regulations, case law, and administrative practices, principles, and interpretations related to tax, including changes to the global tax framework, competition, and other laws and accounting rules in various jurisdictions, and relative changes of expenses or losses for which tax benefits are not recognized. Our effective tax rate can be more or less volatile based on the amount of pre-tax income or loss. For example, the impact of discrete items and non-deductible expenses on our effective tax rate is greater when our pre-tax income is lower. In addition, we record valuation allowances against deferred tax assets when there is uncertainty about our ability to generate future income in relevant jurisdictions.

For 2023, we estimate that our effective tax rate will be favorably impacted by the foreign income deduction and U.S. federal research and development credit and adversely affected by state income taxes. In addition, valuation gains and losses from our equity investment in Rivian impact our pre-tax income and may cause variability in our effective tax rate.

Our income tax benefit for the six months ended June 30, 2022 was $2.1 billion, which included $3.2 billion of net discrete tax benefits primarily attributable to a valuation loss related to our equity investment in Rivian. Our income tax provision for the six months ended June 30, 2023 was $1.8 billion, which included $306 million of net discrete tax benefits, consisting of $805 million resulting from a change in the estimated qualifying expenditures associated with our 2022 U.S.

federal R&D credit and a related increase in our foreign income deduction tax benefit, partially offset by discrete tax expense related to shortfalls from stock-based compensation.

Cash paid for income taxes, net of refunds was $3.1 billion and $3.7 billion in Q2 2022 and Q2 2023, and $3.6 billion and $4.4 billion for the six months ended June 30, 2022 and 2023.

As of December 31, 2022 and June 30, 2023, tax contingencies were approximately $4.0 billion and $5.0 billion. 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.

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 Amazon in 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 are defending our position vigorously in the Indian courts, and we expect to recoup taxes paid. If this matter is adversely resolved, we could recognize 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.

Note 8 — 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 infrastructure," "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 costs recorded in "Technology and infrastructure" are incurred in the U.S. and are included in our North America and AWS segments. The majority of infrastructure costs recorded in "Technology and infrastructure" are allocated to the AWS segment based on usage. 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 advertising and subscription services 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 advertising and subscription services 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):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
North America				
Net sales	$ 74,430	$ 82,546	$ 143,674	$ 159,427
Operating expenses	75,057	79,335	145,869	155,318
Operating income (loss)	$ (627)	$ 3,211	$ (2,195)	$ 4,109
International				
Net sales	$ 27,065	$ 29,697	$ 55,824	$ 58,820
Operating expenses	28,836	30,592	58,876	60,962
Operating loss	$ (1,771)	$ (895)	$ (3,052)	$ (2,142)
AWS				
Net sales	$ 19,739	$ 22,140	$ 38,180	$ 43,494
Operating expenses	14,024	16,775	25,947	33,006
Operating income	$ 5,715	$ 5,365	$ 12,233	$ 10,488
Consolidated				
Net sales	$ 121,234	$ 134,383	$ 237,678	$ 261,741
Operating expenses	117,917	126,702	230,692	249,286
Operating income	3,317	7,681	6,986	12,455
Total non-operating expense	(5,970)	(118)	(14,904)	(773)
Benefit (provision) for income taxes	637	(804)	2,059	(1,752)
Equity-method investment activity, net of tax	(12)	(9)	(13)	(8)
Net income (loss)	$ (2,028)	$ 6,750	$ (5,872)	$ 9,922

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
Net Sales:				
Online stores (1)	$ 50,855	$ 52,966	$ 101,984	$ 104,062
Physical stores (2)	4,721	5,024	9,312	9,919
Third-party seller services (3)	27,376	32,332	52,711	62,152
Subscription services (4)	8,716	9,894	17,126	19,551
Advertising services (5)	8,757	10,683	16,634	20,192
AWS	19,739	22,140	38,180	43,494
Other (6)	1,070	1,344	1,731	2,371
Consolidated	$ 121,234	$ 134,383	$ 237,678	$ 261,741

(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 media content 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, health care services, and shipping services, and our co-branded credit card agreements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

This Quarterly Report on Form 10-Q includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact, including statements regarding guidance, industry prospects, or future results of operations or financial position, made in this Quarterly Report on Form 10-Q are forward-looking. We use words such as anticipates, believes, expects, future, intends, and similar expressions to identify forward-looking statements. Forward-looking statements reflect management's current expectations and are inherently uncertain. Actual results and outcomes could differ materially for a variety of reasons, including, among others, fluctuations in foreign exchange rates, changes in global economic conditions and customer demand and spending, inflation, interest rates, regional labor market constraints, world events, the rate of growth of the Internet, online commerce, and cloud services, the amount that Amazon.com invests in new business opportunities and the timing of those investments, the mix of products and services sold to customers, the mix of net sales derived from products as compared with services, the extent to which we owe income or other taxes, competition, management of growth, potential fluctuations in operating results, international growth and expansion, the outcomes of claims, litigation, government investigations, and other proceedings, fulfillment, sortation, delivery, and data center optimization, risks of inventory management, variability in demand, the degree to which we enter into, maintain, and develop commercial agreements, proposed and completed acquisitions and strategic transactions, payments risks, and risks of fulfillment throughput and productivity. In addition, global economic and geopolitical conditions and additional or unforeseen circumstances, developments, or events may give rise to or amplify many of these risks. These risks and uncertainties, as well as other risks and uncertainties that could cause our actual results or outcomes to differ significantly from management's expectations, are described in greater detail in Item 1A of Part II, "Risk Factors."

For additional information, see Item 7 of Part II, "Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview" of our 2022 Annual Report on Form 10-K.

Critical Accounting 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. Critical accounting estimates are those estimates made in accordance with GAAP that involve a significant level of estimation uncertainty and have had or are reasonably likely to have a material impact on the financial condition or results of operations of the Company. Based on this definition, we have identified the critical accounting estimates addressed below. We also have other key accounting policies, which involve the use of estimates, judgments, and assumptions that are significant to understanding our results. For additional information, see Item 8 of Part II, "Financial Statements and Supplementary Data — Note 1 — Description of Business, Accounting Policies, and Supplemental Disclosures" of our 2022 Annual Report on Form 10-K and Item 1 of Part I, "Financial Statements — Note 1 — Accounting Policies and Supplemental Disclosures," of this Form 10-Q. Although we believe that our estimates, assumptions, and judgments are reasonable, they are based upon information presently available. Actual results may differ significantly from these estimates under different assumptions, judgments, or conditions.

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. These assumptions about future disposition of inventory are inherently uncertain and changes in our estimates and assumptions may cause us to realize material write-downs in the future. As a measure of sensitivity, for every 1% of additional inventory valuation allowance as of June 30, 2023, we would have recorded an additional cost of sales of approximately $385 million.

In addition, we enter into supplier commitments for certain electronic device components and certain products. These commitments are based on forecasted customer demand. If we reduce these commitments, we may incur additional costs.

Income Taxes

We are subject to income taxes in the U.S. (federal and state) and numerous foreign jurisdictions. Tax laws, regulations, administrative practices, principles, and interpretations in various jurisdictions may be subject to significant change, with or without notice, due to economic, political, and other conditions, and significant judgment is required in evaluating and estimating our provision and accruals for these taxes. There are many transactions that occur during the ordinary course of business for which the ultimate tax determination is uncertain. In addition, our actual and forecasted earnings are subject to change due to economic, political, and other conditions and significant judgment is required in determining our ability to use our deferred tax assets.

Our effective tax rates could be affected by numerous factors, such as changes in our business operations, acquisitions, investments, entry into new businesses and geographies, intercompany transactions, the relative amount of our foreign earnings, including earnings being lower than anticipated in jurisdictions where we have lower statutory rates and higher than anticipated in jurisdictions where we have higher statutory rates, losses incurred in jurisdictions for which we are not able to realize related tax benefits, the applicability of special tax regimes, changes in foreign exchange rates, changes in our stock price, changes to our forecasts of income and loss and the mix of jurisdictions to which they relate, changes in our deferred tax assets and liabilities and their valuation, changes in the laws, regulations, administrative practices, principles, and interpretations related to tax, including changes to the global tax framework, competition, and other laws and accounting rules in various jurisdictions. In addition, a number of countries have enacted or are actively pursuing changes to their tax laws applicable to corporate multinationals.

We are also currently subject to tax controversies in various jurisdictions, and these jurisdictions may assess additional income tax liabilities against us. Developments in an audit, investigation, or other tax controversy could have a material effect on our operating results or cash flows in the period or periods for which that development occurs, as well as for prior and subsequent periods. We regularly assess the likelihood of an adverse outcome resulting from these proceedings to determine the adequacy of our tax accruals. Although we believe our tax estimates are reasonable, the final outcome of audits, investigations, and any other tax controversies could be materially different from our historical income tax provisions and accruals.

Liquidity and Capital Resources

Cash flow information is as follows (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,		Twelve Months Ended June 30,	
	2022	2023	2022	2023	2022	2023
Cash provided by (used in):						
Operating activities	$ 8,965	$ 16,476	$ 6,175	$ 21,264	$ 35,574	$ 61,841
Investing activities	(12,078)	(9,673)	(11,172)	(25,479)	(38,580)	(51,908)
Financing activities	4,626	(6,539)	6,616	(185)	740	2,917

Our principal sources of liquidity are cash flows generated from operations and our cash, cash equivalents, and marketable securities balances, which, at fair value, were $70.0 billion and $64.0 billion as of December 31, 2022 and June 30, 2023. Amounts held in foreign currencies were $18.3 billion and $14.8 billion as of December 31, 2022 and June 30, 2023. Our foreign currency balances include British Pounds, Canadian Dollars, Euros, Indian Rupee, and Japanese Yen.

Cash provided by (used in) operating activities was $9.0 billion and $16.5 billion for Q2 2022 and Q2 2023, and $6.2 billion and $21.3 billion for the six months ended June 30, 2022 and 2023. Our operating cash flows result primarily from cash received from our consumer, seller, developer, enterprise, and content creator customers, and advertisers, offset by cash payments we make for products and services, employee compensation, payment processing and related transaction costs, operating leases, and interest payments. Cash received from our customers and other activities generally corresponds to our net sales. The increase in operating cash flow for the trailing twelve months ended June 30, 2023, compared to the comparable prior year period, was due to changes in net income (loss), excluding non-cash expenses, and changes in working capital. Working capital at any specific point in time is subject to many variables, including variability in demand, inventory management and category expansion, the timing of cash receipts and payments, customer and vendor payment terms, and fluctuations in foreign exchange rates.

Cash provided by (used in) investing activities corresponds with cash capital expenditures, including leasehold improvements, incentives received from property and equipment vendors, proceeds from asset sales, cash outlays for acquisitions, investments in other companies and intellectual property rights, and purchases, sales, and maturities of marketable securities. Cash provided by (used in) investing activities was $(12.1) billion and $(9.7) billion for Q2 2022 and Q2 2023, and $(11.2) billion and $(25.5) billion for the six months ended June 30, 2022 and 2023, with the variability caused primarily by purchases, sales, and maturities of marketable securities. Cash capital expenditures were $14.1 billion and $10.4 billion during Q2 2022 and Q2 2023, and $27.8 billion and $23.5 billion for the six months ended June 30, 2022 and 2023, which primarily reflect investments in technology infrastructure (the majority of which is to support AWS business growth) and in additional capacity to support our fulfillment network. We expect cash capital expenditures to decrease in 2023, primarily due to lower spending on our fulfillment network. We made cash payments, net of acquired cash, related to acquisition and other investment activity of $259 million and $316 million during Q2 2022 and Q2 2023, and $6.6 billion and $3.8 billion for the six months ended June 30, 2022 and 2023. We funded the acquisitions of MGM Holdings Inc. in 2022 and One Medical in 2023 with cash on hand. We expect to fund the acquisition of iRobot Corporation with cash on hand.

Cash provided by (used in) financing activities was $4.6 billion and $(6.5) billion for Q2 2022 and Q2 2023, and $6.6 billion and $(185) million for the six months ended June 30, 2022 and 2023. Cash inflows from financing activities resulted from proceeds from short-term debt, and other and long-term debt of $17.7 billion and $4.4 billion for Q2 2022 and Q2 2023, and $31.4 billion and $17.2 billion for the six months ended June 30, 2022 and 2023. Cash outflows from financing activities resulted from repurchases of common stock in 2022, payments of short-term debt, and other, long-term debt, finance leases, and financing obligations of $13.1 billion and $10.9 billion in Q2 2022 and Q2 2023, and $24.8 billion and $17.4 billion for the six months ended June 30, 2022 and 2023. Property and equipment acquired under finance leases was $61 million and $240 million during Q2 2022 and Q2 2023, and $227 million and $248 million for the six months ended June 30, 2022 and 2023.

We had no borrowings outstanding under the two unsecured revolving credit facilities, $4.4 billion of borrowings outstanding under the commercial paper programs, $972 million of borrowings outstanding under our Credit Facility, and $8.0 billion of borrowings outstanding under the Term Loan as of June 30, 2023. See Item 1 of Part I, "Financial Statements — Note 5 — Debt" for additional information.

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.

Our U.S. taxable income is reduced by accelerated depreciation deductions and increased by the impact of capitalized research and development expenses. U.S. tax rules provide for enhanced accelerated depreciation deductions by allowing us to expense a portion of qualified property, primarily equipment. These enhanced deductions are scheduled to phase out annually from 2023 through 2026. Additionally, effective January 1, 2022, research and development expenses are required to be capitalized and amortized for U.S. tax purposes, which delays the deductibility of these expenses. As a result, we expect the cash taxes we pay in 2023 to increase significantly. Cash taxes paid (net of refunds) were $3.1 billion and $3.7 billion for Q2 2022 and Q2 2023, and $3.6 billion and $4.4 billion for the six months ended June 30, 2022 and 2023.

As of December 31, 2022 and June 30, 2023, restricted cash, cash equivalents, and marketable securities were $365 million and $538 million. See Item 1 of Part I, "Financial Statements — Note 4 — Commitments and Contingencies" and "Financial Statements — Note 5 — Debt" for additional discussion of our principal contractual commitments, as well as our pledged assets. Additionally, we have purchase obligations and open purchase orders, including for inventory and capital expenditures, that support normal operations and are primarily due in the next twelve months. These purchase obligations and open purchase orders are generally cancellable in full or in part through the contractual provisions.

We believe that cash flows generated from operations and our cash, cash equivalents, and marketable securities balances, as well as our borrowing arrangements, will be sufficient to meet our anticipated operating cash needs for at least the next twelve months. However, any projections of future cash needs and cash flows are subject to substantial uncertainty. See Item 1A of Part II, "Risk Factors." We continually evaluate opportunities to sell additional equity or debt securities, obtain credit facilities, obtain finance and operating lease arrangements, enter into financing obligations, repurchase common stock, pay dividends, or repurchase, refinance, or otherwise restructure our debt for strategic reasons or to further strengthen our financial position.

The sale of additional equity or convertible debt securities would be dilutive to our shareholders. In addition, we will, from time to time, consider the acquisition of, or investment in, complementary businesses, products, services, capital infrastructure, and technologies, which might affect our liquidity requirements or cause us to secure additional financing, or issue additional equity or debt securities. There can be no assurance that additional credit lines or financing instruments will be available in amounts or on terms acceptable to us, if at all. In addition, economic conditions and actions by policymaking bodies are contributing to rising interest rates and significant capital market volatility, which, along with increases in our borrowing levels, could increase our future borrowing costs.

Results of Operations

We have organized our operations into three segments: North America, International, and AWS. These segments reflect the way the Company evaluates its business performance and manages its operations. See Item 1 of Part I, "Financial Statements — Note 8 — Segment Information."

Overview

Macroeconomic factors, including inflation, increased interest rates, significant capital market and supply chain volatility, and global economic and geopolitical developments, have direct and indirect impacts on our results of operations that are difficult to isolate and quantify. In addition, changes in fuel, utility, and food costs, rising interest rates, and recessionary fears may impact customer demand and our ability to forecast consumer spending patterns. We also expect the current macroeconomic environment and enterprise customer cost optimization efforts to impact our AWS revenue growth rates. We expect some or all of these factors to continue to impact our operations into Q3 2023.

Net Sales

Net sales include product and service sales. Product sales represent revenue from the sale of products and related shipping fees and digital media content where we record revenue gross. Service sales primarily represent third-party seller fees, which includes commissions and any related fulfillment and shipping fees, AWS sales, advertising services, Amazon Prime membership fees, and certain digital media content subscriptions. Net sales information is as follows (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	**2023**	**2022**	**2023**
Net Sales:				
North America	$ 74,430	$ 82,546	$ 143,674	$ 159,427
International	27,065	29,697	55,824	58,820
AWS	19,739	22,140	38,180	43,494
Consolidated	$ 121,234	$ 134,383	$ 237,678	$ 261,741
Year-over-year Percentage Growth (Decline):				
North America	10 %	11 %	9 %	11 %
International	(12)	10	(9)	5
AWS	33	12	35	14
Consolidated	7	11	7	10
Year-over-year Percentage Growth (Decline), excluding the effect of foreign exchange rates:				
North America	10 %	11 %	9 %	11 %
International	(1)	10	0	10
AWS	33	12	35	14
Consolidated	10	11	10	11
Net sales mix:				
North America	62 %	61 %	60 %	61 %
International	22	22	24	22
AWS	16	17	16	17
Consolidated	100 %	100 %	100 %	100 %

Sales increased 11% in Q2 2023, and 10% for the six months ended June 30, 2023 compared to the comparable prior year periods. Changes in foreign exchange rates reduced net sales by $285 million for Q2 2023, and by $2.7 billion for the six months ended June 30, 2023. For a discussion of the effect of foreign exchange rates on sales growth, see "Effect of Foreign Exchange Rates" below.

North America sales increased 11% in Q2 2023, and 11% for the six months ended June 30, 2023 compared to the comparable prior year periods. The sales growth primarily reflects increased unit sales, primarily by third-party sellers, advertising sales, and subscription services. Increased unit sales were driven largely by our continued focus on price, selection, and convenience for our customers, including from our shipping offers.

International sales increased 10% in Q2 2023, and 5% for the six months ended June 30, 2023 compared to the comparable prior year periods, primarily due to increased unit sales, primarily by third-party sellers, advertising sales, and subscription services, partially offset by the impact of changes in foreign exchange rates. Increased unit sales were driven largely by our continued focus on price, selection, and convenience for our customers, including from our shipping offers. Changes in foreign exchange rates reduced International net sales by $180 million for Q2 2023, and by $2.4 billion for the six months ended June 30, 2023.

AWS sales increased 12% in Q2 2023, and 14% for the six months ended June 30, 2023 compared to the comparable prior year periods. The sales growth primarily reflects increased customer usage, partially offset by pricing changes, primarily driven by long-term customer contracts.

Operating Income (Loss)

Operating income (loss) by segment is as follows (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
Operating Income (Loss)				
North America	$ (627)	$ 3,211	$ (2,195)	$ 4,109
International	(1,771)	(895)	(3,052)	(2,142)
AWS	5,715	5,365	12,233	10,488
Consolidated	$ 3,317	$ 7,681	$ 6,986	$ 12,455

Operating income increased from $3.3 billion in Q2 2022 to $7.7 billion in Q2 2023, and increased from $7.0 billion for the six months ended June 30, 2022 to $12.5 billion for the six months ended June 30, 2023. We believe that operating income is a more meaningful measure than gross profit and gross margin due to the diversity of our product categories and services.

The North America operating income in Q2 2023 and for the six months ended June 30, 2023, as compared to the operating loss in the comparable prior year periods, is primarily due to increased unit sales and increased advertising sales, partially offset by increased technology and infrastructure costs, increased shipping and fulfillment costs, and growth in certain operating expenses. Changes in foreign exchange rates negatively impacted operating income by $7 million for Q2 2023, and positively impacted operating income by $34 million for the six months ended June 30, 2023.

The decrease in International operating loss in absolute dollars in Q2 2023 and for the six months ended June 30, 2023, compared to the comparable prior year periods, is primarily due to increased unit sales and increased advertising sales, partially offset by increased fulfillment and shipping costs, increased technology and infrastructure costs, and growth in certain operating expenses. Changes in foreign exchange rates positively impacted operating loss by $32 million for Q2 2023, and negatively impacted operating loss by $142 million for the six months ended June 30, 2023.

The decrease in AWS operating income in absolute dollars in Q2 2023 and for the six months ended June 30, 2023, compared to the comparable prior year periods, is primarily due to increased payroll and related expenses and spending on technology infrastructure, both of which were primarily driven by additional investments to support AWS business growth, partially offset by increased sales. Changes in foreign exchange rates positively impacted operating income by $79 million for Q2 2023, and by $351 million for the six months ended June 30, 2023.

Operating Expenses

Information about operating expenses is as follows (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2023	2022	2023
Operating expenses:				
Cost of sales	$ 66,424	$ 69,373	$ 132,923	$ 137,164
Fulfillment	20,342	21,305	40,613	42,210
Technology and infrastructure	18,072	21,931	32,914	42,381
Sales and marketing	10,086	10,745	18,406	20,917
General and administrative	2,903	3,202	5,497	6,245
Other operating expense (income), net	90	146	339	369
Total operating expenses	$ 117,917	$ 126,702	$ 230,692	$ 249,286
Year-over-year Percentage Growth:				
Cost of sales	4 %	4 %	5 %	3 %
Fulfillment	15	5	19	4
Technology and infrastructure	30	21	25	29
Sales and marketing	34	7	34	14
General and administrative	35	10	33	14
Other operating expense (income), net	673	63	588	9
Percent of Net Sales:				
Cost of sales	54.8 %	51.6 %	55.9 %	52.4 %
Fulfillment	16.8	15.9	17.1	16.1
Technology and infrastructure	14.9	16.3	13.8	16.2
Sales and marketing	8.3	8.0	7.7	8.0
General and administrative	2.4	2.4	2.3	2.4
Other operating expense (income), net	0.1	0.1	0.1	0.1

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.

The increase in cost of sales in absolute dollars in Q2 2023 and for the six months ended June 30, 2023, compared to the comparable prior year periods, is primarily due to increased product and shipping costs resulting from increased sales, partially offset by fulfillment network efficiencies. Changes in foreign exchange rates reduced cost of sales by $208 million for Q2 2023, and by $1.8 billion for the six months ended June 30, 2023.

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. Shipping costs, which include sortation and delivery centers and transportation costs, were $19.3 billion and $20.5 billion in Q2 2022 and Q2 2023, and $38.9 billion and $40.4 billion for the six months ended June 30, 2022 and 2023. We expect our cost of shipping to continue to increase to the extent our customers accept and use our shipping offers at an increasing rate, we use more expensive shipping methods, and we offer additional services. We seek to mitigate costs of shipping over time in part through achieving higher sales volumes, optimizing our fulfillment network, negotiating better terms with our suppliers, and achieving better operating efficiencies. We believe that offering low prices to our customers is fundamental to our future success, and one way we offer lower prices is through shipping offers.

Costs to operate our AWS segment are primarily classified as “Technology and infrastructure” as we leverage a shared infrastructure that supports both our internal technology requirements and external sales to AWS customers.

Fulfillment

Fulfillment costs primarily consist of those costs incurred in operating and staffing our North America and International fulfillment centers, physical stores, and customer service centers and payment processing costs. While AWS payment processing and related transaction costs are included in “Fulfillment,” AWS costs are primarily classified as “Technology and infrastructure.” Fulfillment costs as a percentage of net sales may vary due to several factors, such as payment processing and related transaction costs, our level of productivity and accuracy, changes in volume, size, and weight of units received and fulfilled, the extent to which third-party sellers utilize Fulfillment by Amazon services, timing of fulfillment network and physical store expansion, the extent we utilize fulfillment services provided by third parties, mix of products and services sold, and our ability to affect customer service contacts per unit by implementing improvements in our operations and enhancements to our customer self-service features. Additionally, sales by our sellers have higher payment processing and related transaction costs as a percentage of net sales compared to our retail sales because payment processing costs are based on the gross purchase price of underlying transactions.

The increase in fulfillment costs in absolute dollars in Q2 2023 and for the six months ended June 30, 2023, compared to the comparable prior year periods, is primarily due to increased sales, partially offset by fulfillment network efficiencies. Changes in foreign exchange rates reduced fulfillment costs by $35 million for Q2 2023, and by $431 million for the six months ended June 30, 2023.

We seek to expand our fulfillment network to accommodate a greater selection and in-stock inventory levels and to meet anticipated shipment volumes from sales of our own products as well as sales by third parties for which we provide the fulfillment services. We regularly evaluate our facility requirements.

Technology and Infrastructure

Technology and infrastructure 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.

We seek to invest efficiently in numerous areas of technology and infrastructure so we may continue to enhance the customer experience and improve our process efficiency through rapid technology developments, while operating at an ever increasing scale. Our technology and infrastructure investment and capital spending projects often support a variety of product and service offerings due to geographic expansion and the cross-functionality of our systems and operations. We expect spending in technology and infrastructure to increase over time as we continue to add employees and infrastructure. These costs are allocated to segments based on usage. The increase in technology and infrastructure costs in absolute dollars in Q2 2023 and for the six months ended June 30, 2023, compared to the comparable prior year periods, is primarily due to increased payroll and related costs associated with technical teams responsible for expanding our existing products and services and initiatives to introduce new products and service offerings, and an increase in spending on infrastructure. Changes in foreign exchange rates reduced technology and infrastructure costs by $95 million for Q2 2023, and by $399 million for the six months ended June 30, 2023. See Item 7 of Part II, “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Overview” of our 2022 Annual Report on Form 10-K for a discussion of how management views advances in technology and the importance of innovation.

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 direct customers to our stores primarily through a number of marketing channels, such as our sponsored search, social and online advertising, third-party customer referrals, television advertising, and other initiatives. Our marketing costs are largely variable, based on growth in sales and changes in rates. To the extent there is increased or decreased competition for these traffic sources, or to the extent our mix of these channels shifts, we would expect to see a corresponding change in our marketing costs.

The increase in sales and marketing costs in absolute dollars in Q2 2023 and for the six months ended June 30, 2023, compared to the comparable prior year periods, is primarily due to increased payroll and related expenses for personnel engaged in marketing and selling activities.

While costs associated with Amazon Prime membership benefits and other shipping offers are not included in sales and marketing expense, we view these offers as effective worldwide marketing tools, and intend to continue offering them indefinitely.

General and Administrative

The increase in general and administrative costs in absolute dollars in Q2 2023 and for the six months ended June 30, 2023, compared to the comparable prior year periods, is primarily due to an increase in payroll and related expenses.

Other Operating Expense (Income), Net

Other operating expense (income), net was $90 million and $146 million for Q2 2022 and Q2 2023, and $339 million and $369 million for the six months ended June 30, 2022 and 2023, and was primarily related to asset impairments for physical store closures in 2022 and for fulfillment network facilities in 2023, and the amortization of intangible assets.

Interest Income and Expense

Our interest income was $159 million and $661 million during Q2 2022 and Q2 2023, and $267 million and $1.3 billion for the six months ended June 30, 2022 and 2023, primarily due to an increase in prevailing rates. We generally invest our excess cash in AAA-rated money market funds and investment grade short- to intermediate-term marketable debt securities. Our interest income corresponds with the average balance of invested funds based on the prevailing rates, which vary depending on the geographies and currencies in which they are invested.

Interest expense was $584 million and $840 million during Q2 2022 and Q2 2023, and $1.1 billion and $1.7 billion for the six months ended June 30, 2022 and 2023, and was primarily related to debt and finance leases. See Item 1 of Part I, "Financial Statements — Note 3 — Leases and Note 5 — Debt" for additional information.

Other Income (Expense), Net

Other income (expense), net was $(5.5) billion and $61 million during Q2 2022 and Q2 2023, and $(14.1) billion and $(382) million for the six months ended June 30, 2022 and 2023. The primary components of other income (expense), net are related to equity securities valuations and adjustments, equity warrant valuations, and foreign currency. Included in other income (expense), net is a marketable equity securities valuation gain (loss) of $(3.9) billion and $187 million in Q2 2022 and Q2 2023, and $(11.5) billion and $(280) million for the six months ended June 30, 2022 and 2023, from our equity investment in Rivian.

Income Taxes

Our income tax benefit for the six months ended June 30, 2022 was $2.1 billion, which included $3.2 billion of net discrete tax benefits primarily attributable to a valuation loss related to our equity investment in Rivian. Our income tax provision for the six months ended June 30, 2023 was $1.8 billion, which included $306 million of net discrete tax benefits. See Item 1 of Part I, "Financial Statements — Note 7 — Income Taxes" for additional information.

Non-GAAP Financial Measures

Regulation G, Conditions for Use of Non-GAAP Financial Measures, and other SEC regulations define and prescribe the conditions for use of certain non-GAAP financial information. Our measures of free cash flows and the effect of foreign exchange rates on our consolidated statements of operations meet the definition of non-GAAP financial measures.

We provide multiple measures of free cash flows because we believe these measures provide additional perspective on the impact of acquiring property and equipment with cash and through finance leases and financing obligations.

Free Cash Flow

Free cash flow is cash flow from operations reduced by "Purchases of property and equipment, net of proceeds from sales and incentives." The following is a reconciliation of free cash flow to the most comparable GAAP cash flow measure, "Net cash provided by (used in) operating activities," for the trailing twelve months ended June 30, 2022 and 2023 (in millions):

	Twelve Months Ended June 30,	
	2022	2023
Net cash provided by (used in) operating activities	$ 35,574	$ 61,841
Purchases of property and equipment, net of proceeds from sales and incentives	(59,061)	(53,963)
Free cash flow	$ (23,487)	$ 7,878
Net cash provided by (used in) investing activities	$ (38,580)	$ (51,908)
Net cash provided by (used in) financing activities	$ 740	$ 2,917

Free Cash Flow Less Principal Repayments of Finance Leases and Financing Obligations

Free cash flow less principal repayments of finance leases and financing obligations is free cash flow reduced by "Principal repayments of finance leases" and "Principal repayments of financing obligations." Principal repayments of finance leases and financing obligations approximates the actual payments of cash for our finance leases and financing obligations. The following is a reconciliation of free cash flow less principal repayments of finance leases and financing obligations to the most comparable GAAP cash flow measure, "Net cash provided by (used in) operating activities," for the trailing twelve months ended June 30, 2022 and 2023 (in millions):

	Twelve Months Ended June 30, 2022	Twelve Months Ended June 30, 2023
Net cash provided by (used in) operating activities	$ 35,574	$ 61,841
Purchases of property and equipment, net of proceeds from sales and incentives	(59,061)	(53,963)
Free cash flow	(23,487)	7,878
Principal repayments of finance leases	(9,789)	(5,705)
Principal repayments of financing obligations	(205)	(244)
Free cash flow less principal repayments of finance leases and financing obligations	$ (33,481)	1,929
Net cash provided by (used in) investing activities	$ (38,580)	$ (51,908)
Net cash provided by (used in) financing activities	$ 740	$ 2,917

Free Cash Flow Less Equipment Finance Leases and Principal Repayments of All Other Finance Leases and Financing Obligations

Free cash flow less equipment finance leases and principal repayments of all other finance leases and financing obligations is free cash flow reduced by equipment acquired under finance leases, which is included in "Property and equipment acquired under finance leases, net of remeasurements and modifications," principal repayments of all other finance lease liabilities, which is included in "Principal repayments of finance leases," and "Principal repayments of financing obligations." All other finance lease liabilities and financing obligations consists of property. In this measure, equipment acquired under finance leases is reflected as if these assets had been purchased with cash, which is not the case as these assets have been leased. The following is a reconciliation of free cash flow less equipment finance leases and principal repayments of all other finance leases and financing obligations to the most comparable GAAP cash flow measure, "Net cash provided by (used in) operating activities," for the trailing twelve months ended June 30, 2022 and 2023 (in millions):

	Twelve Months Ended June 30, 2022	Twelve Months Ended June 30, 2023
Net cash provided by (used in) operating activities	$ 35,574	$ 61,841
Purchases of property and equipment, net of proceeds from sales and incentives	(59,061)	(53,963)
Free cash flow	(23,487)	7,878
Equipment acquired under finance leases (1)	(1,621)	(269)
Principal repayments of all other finance leases (2)	(751)	(631)
Principal repayments of financing obligations	(205)	(244)
Free cash flow less equipment finance leases and principal repayments of all other finance leases and financing obligations	$ (26,064)	$ 6,734
Net cash provided by (used in) investing activities	$ (38,580)	$ (51,908)
Net cash provided by (used in) financing activities	$ 740	$ 2,917

(1) For the twelve months ended June 30, 2022 and 2023, this amount relates to equipment included in "Property and equipment acquired under finance leases, net of remeasurements and modifications" of $3,579 million and $696 million.

(2) For the twelve months ended June 30, 2022 and 2023, this amount relates to property included in "Principal repayments of finance leases" of $9,789 million and $5,705 million.

All of these free cash flows measures have limitations as they omit certain components of the overall cash flow statement and do not represent the residual cash flow available for discretionary expenditures. For example, these measures of free cash flows do not incorporate the portion of payments representing principal reductions of debt or cash payments for business acquisitions. Additionally, our mix of property and equipment acquisitions with cash or other financing options may change over time. Therefore, we believe it is important to view free cash flows measures only as a complement to our entire consolidated statements of cash flows.

Effect of Foreign Exchange Rates

Information regarding the effect of foreign exchange rates, versus the U.S. Dollar, on our net sales, operating expenses, and operating income is provided to show reported period operating results had the foreign exchange rates remained the same as those in effect in the comparable prior year period. The effect on our net sales, operating expenses, and operating income from changes in our foreign exchange rates versus the U.S. Dollar is as follows (in millions):

	Three Months Ended June 30,						Six Months Ended June 30,					
	2022			2023			2022			2023		
	As Reported	Exchange Rate Effect (1)	At Prior Year Rates (2)	As Reported	Exchange Rate Effect (1)	At Prior Year Rates (2)	As Reported	Exchange Rate Effect (1)	At Prior Year Rates (2)	As Reported	Exchange Rate Effect (1)	At Prior Year Rates (2)
Net sales	$ 121,234	$ 3,599	$ 124,833	$ 134,383	$ 285	$ 134,668	$ 237,678	$ 5,440	$ 243,118	$ 261,741	$ 2,721	$ 264,462
Operating expenses	117,917	3,764	121,681	126,702	389	127,091	230,692	5,731	236,423	249,286	2,964	252,250
Operating income	3,317	(165)	3,152	7,681	(104)	7,577	6,986	(291)	6,695	12,455	(243)	12,212

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(1) Represents the change in reported amounts resulting from changes in foreign exchange rates from those in effect in the comparable prior year period for operating results.

(2) Represents the outcome that would have resulted had foreign exchange rates in the reported period been the same as those in effect in the comparable prior year period for operating results.

Guidance

We provided guidance on August 3, 2023, in our earnings release furnished on Form 8-K as set forth below. These forward-looking statements reflect Amazon.com's expectations as of August 3, 2023, and are subject to substantial uncertainty. Our results are inherently unpredictable and may be materially affected by many factors, such as fluctuations in foreign exchange rates, changes in global economic and geopolitical conditions and customer demand and spending (including the impact of recessionary fears), inflation, interest rates, regional labor market constraints, world events, the rate of growth of the Internet, online commerce, and cloud services, as well as those outlined in Item 1A of Part II, "Risk Factors."

Third Quarter 2023 Guidance

- Net sales are expected to be between $138.0 billion and $143.0 billion, or to grow between 9% and 13% compared with third quarter 2022. This guidance anticipates a favorable impact of approximately 120 basis points from foreign exchange rates.
- Operating income is expected to be between $5.5 billion and $8.5 billion, compared with $2.5 billion in third quarter 2022.
- This guidance assumes, among other things, that no additional business acquisitions, restructurings, or legal settlements are concluded.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk for the effect of interest rate changes, foreign currency fluctuations, and changes in the market values of our investments. Information relating to quantitative and qualitative disclosures about market risk is set forth below and in Item 2 of Part I, “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources.”

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio and our debt. Our long-term debt is carried at amortized cost and fluctuations in interest rates do not impact our consolidated financial statements. However, the fair value of our long-term debt, which pays interest at a fixed rate, will generally fluctuate with movements of interest rates, increasing in periods of declining rates of interest and declining in periods of increasing rates of interest. We generally invest our excess cash in AAA-rated money market funds and investment grade short- to intermediate-term marketable debt securities. Marketable debt securities with fixed interest rates may have their fair market value adversely affected due to a rise in interest rates, and we may suffer losses in principal if forced to sell securities that have declined in market value due to changes in interest rates.

Foreign Exchange Risk

During Q2 2023, net sales from our International segment accounted for 22% of our consolidated revenues. Net sales and related expenses generated from our internationally-focused stores, including within Canada and Mexico (which are included in our North America segment), are primarily denominated in the functional currencies of the corresponding stores and primarily include Euros, British Pounds, and Japanese Yen. The results of operations of, and certain of our intercompany balances associated with, our internationally-focused stores and AWS are exposed to foreign exchange rate fluctuations. Upon consolidation, as foreign exchange rates vary, net sales and other operating results may differ materially from expectations, and we may record significant gains or losses on the remeasurement of intercompany balances. For example, as a result of fluctuations in foreign exchange rates throughout the period compared to rates in effect the prior year, International segment net sales in Q2 2023 decreased by $180 million in comparison with Q2 2022.

We have foreign exchange risk related to foreign-denominated cash, cash equivalents, and marketable securities (“foreign funds”). Based on the balance of foreign funds as of June 30, 2023, of $14.8 billion, an assumed 5%, 10%, and 20% adverse change to foreign exchange would result in declines of $740 million, $1.5 billion, and $3.0 billion.

We also have foreign exchange risk related to our intercompany balances denominated in various currencies. Based on the intercompany balances as of June 30, 2023, an assumed 5%, 10%, and 20% adverse change to foreign exchange rates would result in losses of $245 million, $490 million, and $985 million, recorded to “Other income (expense), net.”

See Item 2 of Part I, “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations — Effect of Foreign Exchange Rates” for additional information on the effect on reported results of changes in foreign exchange rates.

Equity Investment Risk

As of June 30, 2023, our recorded value in equity and equity warrant investments in public and private companies was $6.8 billion. Our equity and equity warrant investments in publicly traded companies, which include our equity investment in Rivian, represent $4.5 billion of our investments as of June 30, 2023, and are recorded at fair value, which is subject to market price volatility. We record our equity warrant investments in private companies at fair value and adjust our equity investments in private companies for observable price changes or impairments. Valuations of private companies are inherently more complex due to the lack of readily available market data. The current global economic conditions provide additional uncertainty. As such, we believe that market sensitivities are not practicable.

Item 4. Controls and Procedures

We carried out an evaluation required by the Securities Exchange Act of 1934 (the "1934 Act"), under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rule 13a-15(e) of the 1934 Act, as of the end of the period covered by this report. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the 1934 Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and to provide reasonable assurance that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

During the most recent fiscal quarter, there has not occurred any change in our internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives as specified above. Management does not expect, however, that our disclosure controls and procedures will prevent or detect all error and fraud. Any control system, no matter how well designed and operated, is based upon certain assumptions and can provide only reasonable, not absolute, assurance that its objectives will be met. Further, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

See Item 1 of Part I, "Financial Statements — Note 4 — Commitments and Contingencies — Legal Proceedings."

Item 1A. Risk Factors

Please carefully consider the following discussion of significant factors, events, and uncertainties that make an investment in our securities risky. The events and consequences discussed in these risk factors could, in circumstances we may or may not be able to accurately predict, recognize, or control, have a material adverse effect on our business, growth, reputation, prospects, financial condition, operating results (including components of our financial results), cash flows, liquidity, and stock price. These risk factors do not identify all risks that we face; our operations could also be affected by factors, events, or uncertainties that are not presently known to us or that we currently do not consider to present significant risks to our operations. In addition to the factors discussed in Item 2 of Part I, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and in the risk factors below, global economic and geopolitical conditions and additional or unforeseen circumstances, developments, or events may give rise to or amplify many of the risks discussed below. Many of the risks discussed below also impact our customers, including third-party sellers, which could indirectly have a material adverse effect on us.

Business and Industry Risks

We Face Intense Competition

Our businesses are rapidly evolving and intensely competitive, and we have many competitors across geographies, including cross-border competition, and in different industries, including physical, e-commerce, and omnichannel retail, e-commerce services, web and infrastructure computing services, electronic devices, digital content, advertising, grocery, and transportation and logistics services. Some of our current and potential competitors have greater resources, longer histories, more customers, and/or greater brand recognition, particularly with our newly-launched products and services and in our newer geographic regions. They may secure better terms from vendors, adopt more aggressive pricing, and devote more resources to technology, infrastructure, fulfillment, and marketing.

Competition continues to intensify, including with the development of new business models and the entry of new and well-funded competitors, and as our competitors enter into business combinations or alliances and established companies in other market segments expand to become competitive with our business. In addition, new and enhanced technologies, including search, web and infrastructure computing services, practical applications of artificial intelligence and machine learning, digital content, and electronic devices continue to increase our competition. The Internet facilitates competitive entry and comparison shopping, which enhances the ability of new, smaller, or lesser known businesses to compete against us. As a result of competition, our product and service offerings may not be successful, we may fail to gain or may lose business, and we may be required to increase our spending or lower prices, any of which could materially reduce our sales and profits.

Our Expansion into New Products, Services, Technologies, and Geographic Regions Subjects Us to Additional Risks

We may have limited or no experience in our newer market segments, and our customers may not adopt our product or service offerings. These offerings, which can present new and difficult technology challenges, may subject us to claims if customers of these offerings experience, or are otherwise impacted by, service disruptions, delays, setbacks, or failures or quality issues. In addition, profitability, if any, in our newer activities may not meet our expectations, and we may not be successful enough in these newer activities to recoup our investments in them, which investments are often significant. Failure to realize the benefits of amounts we invest in new technologies, products, or services could result in the value of those investments being written down or written off. In addition, our sustainability initiatives may be unsuccessful for a variety of reasons, including if we are unable to realize the expected benefits of new technologies or if we do not successfully plan or execute new strategies, which could harm our business or damage our reputation.

Our International Operations Expose Us to a Number of Risks

Our international activities are significant to our revenues and profits, and we plan to further expand internationally. In certain international market segments, we have relatively little operating experience and may not benefit from any first-to-market advantages or otherwise succeed. It is costly to establish, develop, and maintain international operations and stores, and promote our brand internationally. Our international operations may not become profitable on a sustained basis.

In addition to risks described elsewhere in this section, our international sales and operations are subject to a number of risks, including:

- local economic and political conditions;
- government regulation (such as regulation of our product and service offerings and of competition); restrictive governmental actions (such as trade protection measures, including export duties and quotas and custom duties and tariffs); nationalization; and restrictions on foreign ownership;
- restrictions on sales or distribution of certain products or services and uncertainty regarding liability for products, services, and content, including uncertainty as a result of less Internet-friendly legal systems, local laws, lack of legal precedent, and varying rules, regulations, and practices regarding the physical and digital distribution of media products and enforcement of intellectual property rights;
- business licensing or certification requirements, such as for imports, exports, web services, and electronic devices;
- limitations on the repatriation and investment of funds and foreign currency exchange restrictions;
- limited fulfillment and technology infrastructure;
- shorter payable and longer receivable cycles and the resultant negative impact on cash flow;
- laws and regulations regarding privacy, data use, data protection, data security, data localization, network security, consumer protection, payments, advertising, and restrictions on pricing or discounts;
- lower levels of use of the Internet;
- lower levels of consumer spending and fewer opportunities for growth compared to the U.S.;
- lower levels of credit card usage and increased payment risk;
- difficulty in staffing, developing, and managing foreign operations as a result of distance, language, and cultural differences;
- different employee/employer relationships and the existence of works councils and labor unions;
- compliance with the U.S. Foreign Corrupt Practices Act and other applicable U.S. and foreign laws prohibiting corrupt payments to government officials and other third parties;
- laws and policies of the U.S. and other jurisdictions affecting trade, foreign investment, loans, and taxes; and
- geopolitical events, including war and terrorism.

As international physical, e-commerce, and omnichannel retail, cloud services, and other services grow, competition will intensify, including through adoption of evolving business models. Local companies may have a substantial competitive advantage because of their greater understanding of, and focus on, the local customer, as well as their more established local brand names. The inability to hire, train, retain, and manage sufficient required personnel may limit our international growth.

The People's Republic of China ("PRC") and India regulate Amazon's and its affiliates' businesses and operations in country through regulations and license requirements that may restrict (i) foreign investment in and operation of the Internet, IT infrastructure, data centers, retail, delivery, and other sectors, (ii) Internet content, and (iii) the sale of media and other products and services. For example, in order to meet local ownership, regulatory licensing, and cybersecurity requirements, we provide certain technology services in China through contractual relationships with third parties that hold PRC licenses to provide services. In India, the government restricts the ownership or control of Indian companies by foreign entities involved in online multi-brand retail trading activities. For www.amazon.in, we provide certain marketing tools and logistics services to third-party sellers to enable them to sell online and deliver to customers, and we hold an indirect minority interest in an entity that is a third-party seller on the www.amazon.in marketplace. Although we believe these structures and activities comply with existing laws, they involve unique risks, and the PRC and India may from time to time consider and implement additional changes in their regulatory, licensing, or other requirements that could impact these structures and activities. There are substantial uncertainties regarding the interpretation of PRC and Indian laws and regulations, and it is possible that these governments will ultimately take a view contrary to ours. In addition, our Chinese and Indian businesses and operations may be unable to continue to operate if we or our affiliates are unable to access sufficient funding or, in China, enforce contractual relationships we or our affiliates have in place. Violation of any existing or future PRC, Indian, or other laws or regulations or changes in the interpretations of those laws and regulations could result in our businesses in those countries being subject to fines and other financial penalties, having licenses revoked, or being forced to restructure our operations or shut down entirely.

The Variability in Our Retail Business Places Increased Strain on Our Operations

Demand for our products and services can fluctuate significantly for many reasons, including as a result of seasonality, promotions, product launches, or unforeseeable events, such as in response to global economic conditions such as recessionary fears or rising inflation, natural or human-caused disasters (including public health crises) or extreme weather (including as a result of climate change), or geopolitical events. For example, we expect a disproportionate amount of our retail sales to occur during our fourth quarter. Our failure to stock or restock popular products in sufficient amounts such that we fail to meet customer demand could significantly affect our revenue and our future growth. When we overstock products, we may be required to take significant inventory markdowns or write-offs and incur commitment costs, which could materially reduce profitability. We regularly experience increases in our net shipping cost due to complimentary upgrades, split-shipments, and additional long-zone shipments necessary to ensure timely delivery for the holiday season. If too many customers access our websites within a short period of time due to increased demand, we may experience system interruptions that make our websites unavailable or prevent us from efficiently fulfilling orders, which may reduce the volume of goods we offer or sell and the attractiveness of our products and services. In addition, we may be unable to adequately staff our fulfillment network and customer service centers during these peak periods and delivery and other fulfillment companies and customer service co-sourcers may be unable to meet the seasonal demand. Risks described elsewhere in this Item 1A relating to fulfillment network optimization and inventory are magnified during periods of high demand.

As a result of holiday sales, as of December 31 of each year, our cash, cash equivalents, and marketable securities balances typically reach their highest level (other than as a result of cash flows provided by or used in investing and financing activities) because consumers primarily use credit cards in our stores and the related receivables settle quickly. Typically, there is also a corresponding increase in accounts payable as of December 31 due to inventory purchases and third-party seller sales. Our accounts payable balance generally declines during the first three months of the year as vendors and sellers are paid, resulting in a corresponding decline in our cash, cash equivalents, and marketable securities balances.

We Are Impacted by Fraudulent or Unlawful Activities of Sellers

The law relating to the liability of online service providers is currently unsettled. In addition, governmental agencies have in the past and could in the future require changes in the way this business is conducted. Under our seller programs, we maintain policies and processes designed to prevent sellers from collecting payments, fraudulently or otherwise, when buyers never receive the products they ordered or when the products received are materially different from the sellers' descriptions, and to prevent sellers in our stores or through other stores from selling unlawful, counterfeit, pirated, or stolen goods, selling goods in an unlawful or unethical manner, violating the proprietary rights of others, or otherwise violating our policies. When these policies and processes are circumvented or fail to operate sufficiently, it can harm our business or damage our reputation and we could face civil or criminal liability for unlawful activities by our sellers. Under our A-to-z Guarantee, we may reimburse customers for payments up to certain limits in these situations, and as our third-party seller sales grow, the cost of this program will increase and could negatively affect our operating results.

We Face Risks Related to Adequately Protecting Our Intellectual Property Rights and Being Accused of Infringing Intellectual Property Rights of Third Parties

We regard our trademarks, service marks, copyrights, patents, trade dress, trade secrets, proprietary technology, and similar intellectual property as critical to our success, and we rely on trademark, copyright, and patent law, trade secret protection, and confidentiality and/or license agreements with our employees, customers, and others to protect our proprietary rights. Effective intellectual property protection is not available in every country in which our products and services are made available. We also may not be able to acquire or maintain appropriate domain names in all countries in which we do business. Furthermore, regulations governing domain names may not protect our trademarks and similar proprietary rights. We may be unable to prevent third parties from acquiring domain names that are similar to, infringe upon, or diminish the value of our trademarks and other proprietary rights.

We are not always able to discover or determine the extent of any unauthorized use of our proprietary rights. Actions taken by third parties that license our proprietary rights may materially diminish the value of our proprietary rights or reputation. The protection of our intellectual property requires the expenditure of significant financial and managerial resources. Moreover, the steps we take to protect our intellectual property do not always adequately protect our rights or prevent third parties from infringing or misappropriating our proprietary rights. We also cannot be certain that others will not independently develop or otherwise acquire equivalent or superior technology or other intellectual property rights.

We have been subject to, and expect to continue to be subject to, claims and legal proceedings regarding alleged infringement by us of the intellectual property rights of third parties. Such claims, whether or not meritorious, have in the past, and may in the future, result in the expenditure of significant financial and managerial resources, injunctions against us, or significant payments for damages, including to satisfy indemnification obligations or to obtain licenses from third parties who allege that we have infringed their rights. Such licenses may not be available on terms acceptable to us or at all. These risks have been amplified by the increase in third parties whose sole or primary business is to assert such claims.

Our digital content offerings depend in part on effective digital rights management technology to control access to digital content. Breach or malfunctioning of the digital rights management technology that we use could subject us to claims, and content providers may be unwilling to include their content in our service.

We Have Foreign Exchange Risk

The results of operations of, and certain of our intercompany balances associated with, our international stores and product and service offerings are exposed to foreign exchange rate fluctuations. Due to these fluctuations, operating results may differ materially from expectations, and we may record significant gains or losses on the remeasurement of intercompany balances. As we have expanded our international operations, our exposure to exchange rate fluctuations has increased. We also hold cash equivalents and/or marketable securities in foreign currencies such as British Pounds, Canadian Dollars, Euros, and Japanese Yen. When the U.S. Dollar strengthens compared to these currencies, cash equivalents, and marketable securities balances, when translated, may be materially less than expected and vice versa.

Operating Risks

Our Expansion Places a Significant Strain on our Management, Operational, Financial, and Other Resources

We are continuing to rapidly and significantly expand our global operations, including increasing our product and service offerings and scaling our infrastructure to support our retail and services businesses. The complexity of the current scale of our business can place significant strain on our management, personnel, operations, systems, technical performance, financial resources, and internal financial control and reporting functions, and our expansion increases these factors. Failure to manage growth effectively could damage our reputation, limit our growth, and negatively affect our operating results.

We Experience Significant Fluctuations in Our Operating Results and Growth Rate

We are not always able to accurately forecast our growth rate. We base our expense levels and investment plans on sales estimates. A significant portion of our expenses and investments is fixed, and we are not always able to adjust our spending quickly enough if our sales are less than expected.

Our revenue growth may not be sustainable, and our percentage growth rates may decrease. Our revenue and operating profit growth depends on the continued growth of demand for the products and services offered by us or our sellers, and our business is affected by general economic, business, and geopolitical conditions worldwide. A softening of demand, whether caused by changes in customer preferences or a weakening of the U.S. or global economies, may result in decreased revenue or growth.

Our sales and operating results will also fluctuate for many other reasons, including due to factors described elsewhere in this section and the following:

- our ability to retain and increase sales to existing customers, attract new customers, and satisfy our customers' demands;
- our ability to retain and expand our network of sellers;
- our ability to offer products on favorable terms, manage inventory, and fulfill orders;
- the introduction of competitive stores, websites, products, services, price decreases, or improvements;
- changes in usage or adoption rates of the Internet, e-commerce, electronic devices, and web services, including outside the U.S.;
- timing, effectiveness, and costs of expansion and upgrades of our systems and infrastructure;
- the success of our geographic, service, and product line expansions;
- the extent to which we finance, and the terms of any such financing for, our current operations and future growth;
- the outcomes of legal proceedings and claims, which may include significant monetary damages or injunctive relief and could have a material adverse impact on our operating results;
- variations in the mix of products and services we sell;
- variations in our level of merchandise and vendor returns;
- the extent to which we offer fast and free delivery, continue to reduce prices worldwide, and provide additional benefits to our customers;
- factors affecting our reputation or brand image (including any actual or perceived inability to achieve our goals or commitments, whether related to sustainability, customers, employees, or other topics);

- the extent to which we invest in technology and infrastructure, fulfillment, and other expense categories;
- increases in the prices of transportation (including fuel), energy products, commodities like paper and packing supplies and hardware products, and technology infrastructure products, including as a result of inflationary pressures;
- constrained labor markets, which increase our payroll costs;
- the extent to which operators of the networks between our customers and our stores successfully charge fees to grant our customers unimpaired and unconstrained access to our online services;
- our ability to collect amounts owed to us when they become due;
- the extent to which new and existing technologies, or industry trends, restrict online advertising or affect our ability to customize advertising or otherwise tailor our product and service offerings;
- the extent to which use of our services is affected by spyware, viruses, phishing and other spam emails, denial of service attacks, data theft, computer intrusions, outages, and similar events; and
- disruptions from natural or human-caused disasters (including public health crises) or extreme weather (including as a result of climate change), geopolitical events and security issues (including terrorist attacks and armed hostilities), labor or trade disputes (including restrictive governmental actions impacting us and our third-party sellers in China or other foreign countries), and similar events.

We Face Risks Related to Successfully Optimizing and Operating Our Fulfillment Network and Data Centers

Failures to adequately predict customer demand and consumer spending patterns or otherwise optimize and operate our fulfillment network and data centers successfully from time to time result in excess or insufficient fulfillment or data center capacity, service interruptions, increased costs, and impairment charges, any of which could materially harm our business. As we continue to add fulfillment and data center capability or add new businesses with different requirements, our fulfillment and data center networks become increasingly complex and operating them becomes more challenging. There can be no assurance that we will be able to operate our networks effectively.

In addition, failure to optimize inventory management or staffing in our fulfillment network increases our net shipping cost by increasing the distance products are shipped and reducing the number of units per shipment or delivery. We and our co-sourcers may be unable to adequately staff our fulfillment network and customer service centers. For example, productivity across our fulfillment network is affected by regional labor market constraints, which increase payroll costs and make it difficult to hire, train, and deploy a sufficient number of people to operate our fulfillment network as efficiently as we would like.

Under some of our commercial agreements, we maintain the inventory of other companies, thereby increasing the complexity of tracking inventory and operating our fulfillment network. Our failure to properly handle such inventory or the inability of the other businesses on whose behalf we perform inventory fulfillment services to accurately forecast product demand may result in us being unable to secure sufficient storage space or to optimize our fulfillment network or cause other unexpected costs and other harm to our business and reputation.

We rely on a limited number of shipping companies to deliver inventory to us and completed orders to our customers. An inability to negotiate acceptable terms with these companies or performance problems, staffing limitations, or other difficulties experienced by these companies or by our own transportation systems, including as a result of labor market constraints and related costs, could negatively impact our operating results and customer experience. In addition, our ability to receive inbound inventory efficiently and ship completed orders to customers also may be negatively affected by natural or human-caused disasters (including public health crises) or extreme weather (including as a result of climate change), geopolitical events and security issues, labor or trade disputes, and similar events.

We Could Be Harmed by Data Loss or Other Security Breaches

Because we collect, process, store, and transmit large amounts of data, including confidential, sensitive, proprietary, and business and personal information, failure to prevent or mitigate data loss, theft, misuse, or other security breaches or vulnerabilities affecting our or our vendors' or customers' technology, products, and systems, could: expose us or our customers to a risk of loss, disclosure, or misuse of such information; adversely affect our operating results; result in litigation, liability, or regulatory action (including under laws related to privacy, data use, data protection, data security, network security, and consumer protection); deter customers or sellers from using our stores, products, and services; and otherwise harm our business and reputation. We use third-party technology and systems for a variety of reasons, including, without limitation, encryption and authentication technology, employee email, content delivery to customers, back-office support, and other functions. Some of our systems have experienced past security breaches, and, although they did not have a material adverse effect on our operating results, there can be no assurance that future incidents will not have material adverse effects on our operations or financial results. Although we have developed systems and processes that are designed to protect customer data and prevent such incidents, including systems and processes designed to reduce the impact of a security breach at a third-party vendor or customer, such measures cannot provide absolute security and may fail to operate as intended or be circumvented.

We Face Risks Related to System Interruption and Lack of Redundancy

We experience occasional system interruptions and delays that make our websites and services unavailable or slow to respond and prevent us from efficiently accepting or fulfilling orders or providing services to customers and third parties, which may reduce our net sales and the attractiveness of our products and services. Steps we take to add software and hardware, upgrade our systems and network infrastructure, and improve the stability and efficiency of our systems may not be sufficient to avoid system interruptions or delays that could adversely affect our operating results.

Our computer and communications systems and operations in the past have been, or in the future could be, damaged or interrupted due to events such as natural or human-caused disasters (including public health crises) or extreme weather (including as a result of climate change), geopolitical events and security issues (including terrorist attacks and armed hostilities), computer viruses, physical or electronic break-ins, operational failures (including from energy shortages), and similar events or disruptions. Any of these events could cause system interruption, delays, and loss of critical data, and could prevent us from accepting and fulfilling customer orders and providing services, which could make our product and service offerings less attractive and subject us to liability. Our systems are not fully redundant and our disaster recovery planning may not be sufficient. In addition, our insurance may not provide sufficient coverage to compensate for related losses. Any of these events could damage our reputation and be expensive to remedy.

The Loss of Key Senior Management Personnel or the Failure to Hire and Retain Highly Skilled and Other Personnel Could Negatively Affect Our Business

We depend on our senior management and other key personnel, including our President and CEO. We do not have “key person” life insurance policies. We also rely on other highly skilled personnel. Competition for qualified personnel in the industries in which we operate, as well as senior management, has historically been intense. For example, we experience significant competition in the technology industry, particularly for software engineers, computer scientists, and other technical staff. In addition, changes we make to our current and future work environments may not meet the needs or expectations of our employees or may be perceived as less favorable compared to other companies’ policies, which could negatively impact our ability to hire and retain qualified personnel. The loss of any of our executive officers or other key employees, the failure to successfully transition key roles, or the inability to hire, train, retain, and manage qualified personnel, could harm our business.

We also rely on a significant number of personnel to operate our stores, fulfillment network, and data centers and carry out our other operations. Failure to successfully hire, train, manage, and retain sufficient personnel to meet our needs can strain our operations, increase payroll and other costs, and harm our business and reputation. In addition, changes in laws and regulations applicable to employees, independent contractors, and temporary personnel could increase our payroll costs, decrease our operational flexibility, and negatively impact how we are able to staff our operations and supplement our workforce.

We are also subject to labor union efforts to organize groups of our employees from time to time. These organizational efforts, if successful, decrease our operational flexibility, which could adversely affect our operating efficiency. In addition, our response to any organizational efforts could be perceived negatively and harm our business and reputation.

Our Supplier Relationships Subject Us to a Number of Risks

We have significant suppliers, including content and technology licensors, and in some cases, limited or single-sources of supply, that are important to our sourcing, services, manufacturing, and any related ongoing servicing of merchandise and content. We do not have long-term arrangements with most of our suppliers to guarantee availability of merchandise, content, components, or services, particular payment terms, or the extension of credit limits. Decisions by our current suppliers to limit or stop selling or licensing merchandise, content, components, or services to us on acceptable terms, or delay delivery, including as a result of one or more supplier bankruptcies due to poor economic conditions, as a result of natural or human-caused disasters (including public health crises), or for other reasons, may result in our being unable to procure alternatives from other suppliers in a timely and efficient manner and on acceptable terms, or at all. In addition, violations by our suppliers or other vendors of applicable laws, regulations, contractual terms, intellectual property rights of others, or our Supply Chain Standards, as well as products or practices regarded as unethical, unsafe, or hazardous, could expose us to claims, damage our reputation, limit our growth, and negatively affect our operating results.

Our Commercial Agreements, Strategic Alliances, and Other Business Relationships Expose Us to Risks

We provide physical, e-commerce, and omnichannel retail, cloud services, and other services to businesses through commercial agreements, strategic alliances, and business relationships. Under these agreements, we provide web services, technology, fulfillment, computing, digital storage, and other services, as well as enable sellers to offer products or services through our stores. These arrangements are complex and require substantial infrastructure capacity, personnel, and other resource commitments, which may limit the amount of business we can service. We may not be able to implement, maintain, and develop the components of these commercial relationships, which may include web services, fulfillment, customer service, inventory management, tax collection, payment processing, hardware, content, and third-party software, and engaging third parties to perform services. The amount of compensation we receive under certain of our commercial agreements is partially dependent on the volume of the other company's sales. Therefore, when the other company's offerings are not successful, the compensation we receive may be lower than expected or the agreement may be terminated. Moreover, we may not be able to enter into additional or alternative commercial relationships and strategic alliances on favorable terms. We also may be subject to claims from businesses to which we provide these services if we are unsuccessful in implementing, maintaining, or developing these services.

As our agreements terminate, we may be unable to renew or replace these agreements on comparable terms, or at all. We may in the future enter into amendments on less favorable terms or encounter parties that have difficulty meeting their contractual obligations to us, which could adversely affect our operating results.

Our present and future commercial agreements, strategic alliances, and business relationships create additional risks such as:

- disruption of our ongoing business, including loss of management focus on existing businesses;
- impairment of other relationships;
- variability in revenue and income from entering into, amending, or terminating such agreements or relationships; and
- difficulty integrating under the commercial agreements.

Our Business Suffers When We Are Unsuccessful in Making, Integrating, and Maintaining Acquisitions and Investments

We have acquired and invested in a number of companies, and we may in the future acquire or invest in or enter into joint ventures with additional companies. These transactions involve risks such as:

- disruption of our ongoing business, including loss of management focus on existing businesses;
- problems retaining key personnel;
- additional operating losses and expenses of the businesses we acquired or in which we invested;
- the potential impairment of tangible and intangible assets and goodwill, including as a result of acquisitions;
- the potential impairment of customer and other relationships of the company we acquired or in which we invested or our own customers as a result of any integration of operations;
- the difficulty of completing such transactions, including obtaining regulatory approvals or satisfying other closing conditions, and achieving anticipated benefits within expected timeframes, or at all;
- the difficulty of incorporating acquired operations, technology, and rights into our offerings, and unanticipated expenses related to such integration;
- the difficulty of integrating a new company's accounting, financial reporting, management, information and data security, human resource, and other administrative systems to permit effective management, and the lack of control if such integration is delayed or not successfully implemented;
- losses we may incur as a result of declines in the value of an investment or as a result of incorporating an investee's financial performance into our financial results;
- for investments in which an investee's financial performance is incorporated into our financial results, either in full or in part, or investments for which we are required to file financial statements or provide financial information, the dependence on the investee's accounting, financial reporting, and similar systems, controls, and processes;
- the difficulty of implementing at companies we acquire the controls, procedures, and policies appropriate for a larger public company;
- the risks associated with businesses we acquire or invest in, which may differ from or be more significant than the risks our other businesses face;
- potential unknown liabilities associated with a company we acquire or in which we invest; and

- for foreign transactions, additional risks related to the integration of operations across different cultures and languages, and the economic, political, and regulatory risks associated with specific countries.

As a result of future acquisitions or mergers, we might need to issue additional equity securities, spend our cash, or incur debt, contingent liabilities, or amortization expenses related to intangible assets, any of which could reduce our profitability and harm our business or only be available on unfavorable terms, if at all. In addition, valuations supporting our acquisitions and strategic investments could change rapidly. We could determine that such valuations have experienced impairments or other-than-temporary declines in fair value which could adversely impact our financial results.

We Face Significant Inventory Risk

In addition to risks described elsewhere in this Item 1A relating to fulfillment network and inventory optimization by us and third parties, we are exposed to significant inventory risks that may adversely affect our operating results as a result of seasonality, new product launches, rapid changes in product cycles and pricing, defective merchandise, changes in customer demand and consumer spending patterns, changes in consumer tastes with respect to our products, spoilage, and other factors. We endeavor to accurately predict these trends and avoid overstocking or understocking products we manufacture and/or sell. Demand for products, however, can change significantly between the time inventory or components are ordered and the date of sale. In addition, when we begin selling or manufacturing a new product, it may be difficult to establish vendor relationships, determine appropriate product or component selection, and accurately forecast demand. The acquisition of certain types of inventory or components requires significant lead-time and prepayment and they may not be returnable. We carry a broad selection and significant inventory levels of certain products, such as consumer electronics, and at times we are unable to sell products in sufficient quantities or to meet demand during the relevant selling seasons. Any one of the inventory risk factors set forth above may adversely affect our operating results.

We Are Subject to Payments-Related Risks

We accept payments using a variety of methods, including credit card, debit card, credit accounts (including promotional financing), gift cards, direct debit from a customer's bank account, consumer invoicing, physical bank check, and payment upon delivery. For existing and future payment options we offer to our customers, we currently are subject to, and may become subject to additional, regulations and compliance requirements (including obligations to implement enhanced authentication processes that could result in significant costs and reduce the ease of use of our payments products), as well as fraud. For certain payment methods, including credit and debit cards, we pay interchange and other fees, which may increase over time and raise our operating costs and lower profitability. We rely on third parties to provide certain Amazon-branded payment methods and payment processing services, including the processing of credit cards, debit cards, electronic checks, and promotional financing. In each case, it could disrupt our business if these companies become unwilling or unable to provide these services to us. We also offer co-branded credit card programs, which could adversely affect our operating results if renewed on less favorable terms or terminated. We are also subject to payment card association operating rules, including data security rules, certification requirements, and rules governing electronic funds transfers, which could change or be reinterpreted to make it difficult or impossible for us to comply. Failure to comply with these rules or requirements, as well as any breach, compromise, or failure to otherwise detect or prevent fraudulent activity involving our data security systems, could result in our being liable for card issuing banks' costs, subject to fines and higher transaction fees, and loss of our ability to accept credit and debit card payments from our customers, process electronic funds transfers, or facilitate other types of online payments, and our business and operating results could be adversely affected.

In addition, we provide regulated services in certain jurisdictions because we enable customers to keep account balances with us and transfer money to third parties, and because we provide services to third parties to facilitate payments on their behalf. Jurisdictions subject us to requirements for licensing, regulatory inspection, bonding and capital maintenance, the use, handling, and segregation of transferred funds, consumer disclosures, maintaining or processing data, and authentication. We are also subject to or voluntarily comply with a number of other laws and regulations relating to payments, money laundering, international money transfers, privacy, data use, data protection, data security, data localization, network security, consumer protection, and electronic fund transfers. If we were found to be in violation of applicable laws or regulations, we could be subject to additional requirements and civil and criminal penalties, or forced to cease providing certain services.

We Have a Rapidly Evolving Business Model and Our Stock Price Is Highly Volatile

We have a rapidly evolving business model. The trading price of our common stock fluctuates significantly in response to, among other risks, the risks described elsewhere in this Item 1A, as well as:

- changes in interest rates;
- conditions or trends in the Internet and the industry segments we operate in;
- quarterly variations in operating results;

- fluctuations in the stock market in general and market prices for Internet-related companies in particular;
- changes in financial estimates by us or decisions to increase or decrease future spending or investment levels;
- changes in financial estimates and recommendations by securities analysts;
- changes in our capital structure, including issuance of additional debt or equity to the public;
- changes in the valuation methodology of, or performance by, other e-commerce or technology companies; and
- transactions in our common stock by major investors and certain analyst reports, news, and speculation.

Volatility in our stock price could adversely affect our business and financing opportunities and force us to increase our cash compensation to employees or grant larger stock awards than we have historically, which could hurt our operating results or reduce the percentage ownership of our existing stockholders, or both.

Legal and Regulatory Risks

Government Regulation Is Evolving and Unfavorable Changes Could Harm Our Business

We are subject to general business regulations and laws, as well as regulations and laws specifically governing the Internet, physical, e-commerce, and omnichannel retail, digital content, web services, electronic devices, advertising, artificial intelligence technologies and services, and other products and services that we offer or sell. These regulations and laws cover taxation, privacy, data use, data protection, data security, data localization, network security, consumer protection, pricing, content, copyrights, distribution, transportation, mobile communications, electronic device certification, electronic waste, energy consumption, environmental regulation, electronic contracts and other communications, competition, employment, trade and protectionist measures, web services, the provision of online payment services, registration, licensing, and information reporting requirements, unencumbered Internet access to our services or access to our facilities, the design and operation of websites, health, safety, and sanitation standards, the characteristics, legality, and quality of products and services, product labeling, the commercial operation of unmanned aircraft systems, healthcare, and other matters. It is not clear how existing laws governing issues such as property ownership, libel, privacy, data use, data protection, data security, data localization, network security, and consumer protection apply to aspects of our operations such as the Internet, e-commerce, digital content, web services, electronic devices, advertising, and artificial intelligence technologies and services. A large number of jurisdictions regulate our operations, and the extent, nature, and scope of such regulations is evolving and expanding as the scope of our businesses expand. We are regularly subject to formal and informal reviews, investigations, and other proceedings by governments and regulatory authorities under existing laws, regulations, or interpretations or pursuing new and novel approaches to regulate our operations. For example, we face a number of open investigations based on claims that aspects of our operations violate competition rules, including aspects of Amazon's U.S. and European marketplace for sellers, particularly with respect to use of data, fulfillment services, and featured offers, and legislative and regulatory initiatives in Europe and elsewhere allow authorities to restrict or prohibit certain operations or actions pre-emptively without the need to assess specific competitive effects. Similarly, we face investigations under a growing patchwork of laws and regulations governing the collection, use, and disclosure of data, the interpretation of which continues to evolve, leading to uncertainty about how regulators will view our privacy practices. Unfavorable regulations, laws, decisions, or interpretations by government or regulatory authorities applying those laws and regulations, or inquiries, investigations, or enforcement actions threatened or initiated by them, could cause us to incur substantial costs, expose us to unanticipated civil and criminal liability or penalties (including substantial monetary fines), diminish the demand for, or availability of, our products and services, increase our cost of doing business, require us to change our business practices in a manner materially adverse to our business, damage our reputation, impede our growth, or otherwise have a material effect on our operations. The media, political, and regulatory scrutiny we face, which may continue to increase, amplifies these risks.

Claims, Litigation, Government Investigations, and Other Proceedings May Adversely Affect Our Business and Results of Operations

As an innovative company offering a wide range of consumer and business products and services around the world, we are regularly subject to actual and threatened claims, litigation, reviews, investigations, and other proceedings, including proceedings by governments and regulatory authorities, involving a wide range of issues, including patent and other intellectual property matters, taxes, labor and employment, competition and antitrust, privacy, data use, data protection, data security, data localization, network security, consumer protection, commercial disputes, goods and services offered by us and by third parties, and other matters. The number and scale of these proceedings have increased over time as our businesses have expanded in scope and geographic reach, as our products, services, and operations have become more complex and available to, and used by, more people, and as governments and regulatory authorities seek to regulate us on a pre-emptive basis. For example, we are litigating a number of matters alleging price fixing, monopolization, and consumer protection claims, including those brought by state attorneys general. Any of these types of proceedings can have an adverse effect on us because of legal costs, disruption of our operations, diversion of management resources, negative publicity, and other factors. The outcomes of these matters are inherently unpredictable and subject to significant uncertainties. Determining legal reserves or possible losses from such matters involves judgment and may not reflect the full range of uncertainties and unpredictable outcomes. Until the final resolution of such matters, we may be exposed to losses in excess of the amount recorded, and such amounts could be material. Should any of our estimates and assumptions change or prove to have been incorrect, it could have a material effect on our business, consolidated financial position, results of operations, or cash flows. In addition, it is possible that a resolution of one or more such proceedings, including as a result of a settlement, could involve licenses, sanctions, consent decrees, or orders requiring us to make substantial future payments, preventing us from offering certain products or services, requiring us to change our business practices in a manner materially adverse to our business, requiring development of non-infringing or otherwise altered products or technologies, damaging our reputation, or otherwise having a material effect on our operations.

We Are Subject to Product Liability Claims When People or Property Are Harmed by the Products We Sell or Manufacture

Some of the products we sell or manufacture expose us to product liability or food safety claims relating to personal injury or illness, death, or environmental or property damage, and can require product recalls or other actions. Third parties who sell products using our services and stores also expose us to product liability claims. Additionally, under our A-to-z Guarantee, we may reimburse customers for certain product liability claims up to certain limits in these situations, and as our third-party seller sales grow, the cost of this program will increase and could negatively affect our operating results. Although we maintain liability insurance, we cannot be certain that our coverage will be adequate for liabilities actually incurred or that insurance will continue to be available to us on economically reasonable terms, or at all. Although we impose contractual terms on sellers that are intended to prohibit sales of certain type of products, we may not be able to detect, enforce, or collect sufficient damages for breaches of such agreements. In addition, some of our agreements with our vendors and sellers do not indemnify us from product liability.

We Face Additional Tax Liabilities and Collection Obligations

We are subject to a variety of taxes and tax collection obligations in the U.S. (federal and state) and numerous foreign jurisdictions. We may recognize additional tax expense and be subject to additional tax liabilities, including other liabilities for tax collection obligations due to changes in laws, regulations, administrative practices, principles, and interpretations related to tax, including changes to the global tax framework, competition, and other laws and accounting rules in various jurisdictions. Such changes could come about as a result of economic, political, and other conditions. An increasing number of jurisdictions are considering or have adopted laws or administrative practices that impose new tax measures, including revenue-based taxes, targeting online commerce and the remote selling of goods and services. These include new obligations to withhold or collect sales, consumption, value added, or other taxes on online marketplaces and remote sellers, or other requirements that may result in liability for third party obligations. For example, non-U.S. jurisdictions have proposed or enacted taxes on online advertising and marketplace service revenues. Proliferation of these or similar unilateral tax measures may continue unless broader international tax reform is implemented. Our results of operations and cash flows could be adversely affected by additional taxes imposed on us prospectively or retroactively or additional taxes or penalties resulting from the failure to comply with any collection obligations or failure to provide information about our customers, suppliers, and other third parties for tax reporting purposes to various government agencies. In some cases we also may not have sufficient notice to enable us to build systems and adopt processes to properly comply with new reporting or collection obligations by the effective date.

Our tax expense and liabilities are also affected by other factors, such as changes in our business operations, acquisitions, investments, entry into new businesses and geographies, intercompany transactions, the relative amount of our foreign earnings, losses incurred in jurisdictions for which we are not able to realize related tax benefits, the applicability of special or extraterritorial tax regimes, changes in foreign exchange rates, changes in our stock price, changes to our forecasts of income and loss and the mix of jurisdictions to which they relate, and changes in our tax assets and liabilities and their valuation. In the ordinary course of our business, there are many transactions and calculations for which the ultimate tax determination is uncertain. Significant judgment is required in evaluating and estimating our tax expense, assets, and liabilities.

We are also subject to tax controversies in various jurisdictions that can result in tax assessments against us. Developments in an audit, investigation, or other tax controversy can have a material effect on our operating results or cash flows in the period or periods for which that development occurs, as well as for prior and subsequent periods. Due to the inherent complexity and uncertainty of these matters, interpretations of certain tax laws by authorities, and judicial, administrative, and regulatory processes in certain jurisdictions, the final outcome of any such controversy may be materially different from our expectations. For example, in February 2023, the Indian tax authority determined that tax applies to cloud services fees paid to Amazon in the U.S. We are contesting this determination; however, if this matter is adversely resolved, we may be required to pay additional amounts with respect to current and prior periods and our taxes in the future could increase. We regularly assess the likelihood of an adverse outcome resulting from these proceedings to determine the adequacy of our tax accruals. Although we believe our tax estimates are reasonable, the final outcome of audits, investigations, and any other tax controversies could be materially different from our historical tax accruals.

We Are Subject to Risks Related to Government Contracts and Related Procurement Regulations

Our contracts with U.S., as well as state, local, and foreign, government entities are subject to various procurement regulations and other requirements relating to their formation, administration, and performance. We are subject to audits and investigations relating to our government contracts, and any violations could result in various civil and criminal penalties and administrative sanctions, including termination of contract, refunding or suspending of payments, forfeiture of profits, payment of fines, and suspension or debarment from future government business. In addition, some of these contracts are subject to periodic funding approval and/or provide for termination by the government at any time, without cause.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

On May 5, 2023, Adam Selipsky, CEO Amazon Web Services, adopted a trading plan intended to satisfy Rule 10b5-1(c) to sell up to 136,996 shares of Amazon.com, Inc. common stock between August 15, 2023 and July 18, 2024, subject to certain conditions.

On May 15, 2023, Brian Olsavsky, Senior Vice President and Chief Financial Officer, adopted a trading plan intended to satisfy Rule 10b5-1(c) to sell up to 33,600 shares of Amazon.com, Inc. common stock between August 21, 2023 and November 28, 2023, subject to certain conditions.

Item 6. Exhibits

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of Amazon.com, Inc. (incorporated by reference to the Company's Current Report on Form 8-K, filed May 27, 2022).
3.2	Amended and Restated Bylaws of Amazon.com, Inc. (incorporated by reference to the Company's Current Report on Form 8-K, filed January 6, 2023).
31.1	Certification of Andrew R. Jassy, President and Chief Executive Officer of Amazon.com, Inc., pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.
31.2	Certification of Brian T. Olsavsky, Senior Vice President and Chief Financial Officer of Amazon.com, Inc., pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.
32.1	Certification of Andrew R. Jassy, President and Chief Executive Officer of Amazon.com, Inc., pursuant to 18 U.S.C. Section 1350.
32.2	Certification of Brian T. Olsavsky, Senior Vice President and Chief Financial Officer of Amazon.com, Inc., pursuant to 18 U.S.C. Section 1350.
101	The following financial statements from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, formatted in Inline XBRL: (i) Consolidated Statements of Cash Flows, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income (Loss), (iv) Consolidated Balance Sheets, and (v) Notes to Consolidated Financial Statements, tagged as blocks of text and including detailed tags.
104	The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, formatted in Inline XBRL (included as Exhibit 101).

SIGNATURES

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

AMAZON.COM, INC. (REGISTRANT)

By: /s/ Shelley L. Reynolds

Shelley L. Reynolds
Vice President, Worldwide Controller
(Principal Accounting Officer)

Dated: August 3, 2023

Exhibit 31.1

CERTIFICATIONS

I, Andrew R. Jassy, certify that:

1. I have reviewed this Form 10-Q of Amazon.com, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew R. Jassy

Andrew R. Jassy
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 3, 2023

Exhibit 31.2

CERTIFICATIONS

I, Brian T. Olsavsky, certify that:

1. I have reviewed this Form 10-Q of Amazon.com, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Brian T. Olsavsky

Brian T. Olsavsky

Senior Vice President and
Chief Financial Officer

(Principal Financial Officer)

Date: August 3, 2023

Exhibit 32.1

Certification Pursuant to 18 U.S.C. Section 1350

In connection with the Quarterly Report of Amazon.com, Inc. (the “Company”) on Form 10-Q for the three months ended June 30, 2023, as filed with the Securities and Exchange Commission (the “SEC”) on or about the date hereof (the “Report”), I, Andrew R. Jassy, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

/s/ Andrew R. Jassy

Andrew R. Jassy
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 3, 2023

Exhibit 32.2

Certification Pursuant to 18 U.S.C. Section 1350

In connection with the Quarterly Report of Amazon.com, Inc. (the “Company”) on Form 10-Q for the three months ended June 30, 2023, as filed with the Securities and Exchange Commission (the “SEC”) on or about the date hereof (the “Report”), I, Brian T. Olsavsky, Senior Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

/s/ Brian T. Olsavsky

Brian T. Olsavsky

Senior Vice President and
Chief Financial Officer

(Principal Financial Officer)

Date: August 3, 2023