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

FORM 10-Q

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

For the Quarterly Period Ended December 31, 2022

OR

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

For the Transition Period From

to

Commission File Number 001-37845

MICROSOFT CORPORATION

WASHINGTON
(STATE OF INCORPORATION)

91-1144442
(I.R.S. ID)

ONE MICROSOFT WAY, REDMOND, WASHINGTON 98052-6399
(425) 882-8080
www.microsoft.com/investor

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

Title of each class	Trading Symbol	Name of exchange on which registered
Common stock, \$0.00000625 par value per share	MSFT	NASDAQ
3.125% Notes due 2028	MSFT	NASDAQ
2.625% Notes due 2033	MSFT	NASDAQ

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

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

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

Large Accelerated Filer
Non-accelerated Filer

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding as of January 19, 2023
Common Stock, \$0.00000625 par value per share	7,443,803,533 shares

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SIGNATURE

PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS
INCOME STATEMENTS

(In millions, except per share amounts) (Unaudited)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Revenue:				
Product	\$ 16,517	\$ 20,779	\$ 32,258	\$ 37,410
Service and other	36,230	30,949	70,611	59,635
Total revenue	52,747	51,728	102,869	97,045
Cost of revenue:				
Product	5,690	6,331	9,992	10,123
Service and other	11,798	10,629	22,948	20,483
Total cost of revenue	17,488	16,960	32,940	30,606
Gross margin	35,259	34,768	69,929	66,439
Research and development	6,844	5,758	13,472	11,357
Sales and marketing	5,679	5,379	10,805	9,926
General and administrative	2,337	1,384	3,735	2,671
Operating income	20,399	22,247	41,917	42,485
Other income (expense), net	(60)	268	(6)	554
Income before income taxes	20,339	22,515	41,911	43,039
Provision for income taxes	3,914	3,750	7,930	3,769
Net income	\$ 16,425	\$ 18,765	\$ 33,981	\$ 39,270
Earnings per share:				
Basic	\$ 2.20	\$ 2.50	\$ 4.56	\$ 5.23
Diluted	\$ 2.20	\$ 2.48	\$ 4.54	\$ 5.19
Weighted average shares outstanding:				
Basic	7,451	7,505	7,454	7,509
Diluted	7,473	7,555	7,479	7,561

Refer to accompanying notes.

COMPREHENSIVE INCOME STATEMENTS

(In millions) (Unaudited)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Net income	\$ 16,425	\$ 18,765	\$ 33,981	\$ 39,270
Other comprehensive income (loss), net of tax:				
Net change related to derivatives	(32)	0	(25)	2
Net change related to investments	348	(743)	(1,549)	(1,165)
Translation adjustments and other	570	(103)	(205)	(222)
Other comprehensive income (loss)	886	(846)	(1,779)	(1,385)
Comprehensive income	\$ 17,311	\$ 17,919	\$ 32,202	\$ 37,885

Refer to accompanying notes.

BALANCE SHEETS

(In millions) (Unaudited)

	December 31, 2022	June 30, 2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 15,646	\$ 13,931
Short-term investments	83,862	90,826
Total cash, cash equivalents, and short-term investments	99,508	104,757
Accounts receivable, net of allowance for doubtful accounts of \$485 and \$633	35,833	44,261
Inventories	2,980	3,742
Other current assets	19,502	16,924
Total current assets	157,823	169,684
Property and equipment, net of accumulated depreciation of \$63,459 and \$59,660	82,755	74,398
Operating lease right-of-use assets	13,624	13,148
Equity investments	7,097	6,891
Goodwill	67,905	67,524
Intangible assets, net	10,354	11,298
Other long-term assets	24,994	21,897
Total assets	\$ 364,552	\$ 364,840
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 15,354	\$ 19,000
Current portion of long-term debt	3,997	2,749
Accrued compensation	9,030	10,661
Short-term income taxes	3,553	4,067
Short-term unearned revenue	36,982	45,538
Other current liabilities	12,802	13,067
Total current liabilities	81,718	95,082
Long-term debt	44,119	47,032
Long-term income taxes	24,169	26,069
Long-term unearned revenue	2,644	2,870
Deferred income taxes	289	230
Operating lease liabilities	11,998	11,489
Other long-term liabilities	16,479	15,526
Total liabilities	181,416	198,298
Commitments and contingencies		
Stockholders' equity:		
Common stock and paid-in capital – shares authorized 24,000; outstanding 7,447 and 7,464	90,225	86,939
Retained earnings	99,368	84,281
Accumulated other comprehensive loss	(6,457)	(4,678)
Total stockholders' equity	183,136	166,542
Total liabilities and stockholders' equity	\$ 364,552	\$ 364,840

Refer to accompanying notes.

CASH FLOWS STATEMENTS

(In millions) (Unaudited)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Operations				
Net income	\$ 16,425	\$ 18,765	\$ 33,981	\$ 39,270
Adjustments to reconcile net income to net cash from operations:				
Depreciation, amortization, and other	3,648	3,496	6,438	6,708
Stock-based compensation expense	2,538	1,897	4,730	3,599
Net recognized losses (gains) on investments and derivatives	214	(307)	192	(671)
Deferred income taxes	(1,305)	183	(2,496)	(5,787)
Changes in operating assets and liabilities:				
Accounts receivable	(3,164)	(5,543)	8,565	4,943
Inventories	1,305	394	762	(383)
Other current assets	(392)	830	(724)	1,770
Other long-term assets	(65)	(908)	(731)	(1,506)
Accounts payable	(2,058)	235	(3,625)	(236)
Unearned revenue	(5,186)	(4,343)	(8,508)	(7,228)
Income taxes	(2,863)	(2,057)	(2,453)	596
Other current liabilities	1,819	1,745	(2,205)	(2,398)
Other long-term liabilities	257	93	445	343
Net cash from operations	11,173	14,480	34,371	39,020
Financing				
Repayments of debt	(750)	0	(1,750)	(4,826)
Common stock issued	243	291	818	903
Common stock repurchased	(5,459)	(7,433)	(11,032)	(15,117)
Common stock cash dividends paid	(5,066)	(4,652)	(9,687)	(8,858)
Other, net	(317)	(192)	(581)	(364)
Net cash used in financing	(11,349)	(11,986)	(22,232)	(28,262)
Investing				
Additions to property and equipment	(6,274)	(5,865)	(12,557)	(11,675)
Acquisition of companies, net of cash acquired, and purchases of intangible and other assets	(679)	(850)	(1,028)	(2,056)
Purchases of investments	(11,599)	(2,505)	(16,612)	(12,814)
Maturities of investments	6,928	5,253	13,590	14,115
Sales of investments	4,775	2,895	7,486	8,525
Other, net	(301)	(89)	(1,161)	(506)
Net cash used in investing	(7,150)	(1,161)	(10,282)	(4,411)
Effect of foreign exchange rates on cash and cash equivalents	88	106	(142)	33
Net change in cash and cash equivalents	(7,238)	1,439	1,715	6,380
Cash and cash equivalents, beginning of period	22,884	19,165	13,931	14,224
Cash and cash equivalents, end of period	\$ 15,646	\$ 20,604	\$ 15,646	\$ 20,604

Refer to accompanying notes.

STOCKHOLDERS' EQUITY STATEMENTS

(In millions, except per share amounts) (Unaudited)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Common stock and paid-in capital				
Balance, beginning of period	\$ 88,535	\$ 83,751	\$ 86,939	\$ 83,111
Common stock issued	243	291	818	903
Common stock repurchased	(1,090)	(1,411)	(2,261)	(3,088)
Stock-based compensation expense	2,538	1,897	4,730	3,599
Other, net	(1)	0	(1)	3
Balance, end of period	90,225	84,528	90,225	84,528
Retained earnings				
Balance, beginning of period	92,374	66,944	84,281	57,055
Net income	16,425	18,765	33,981	39,270
Common stock cash dividends	(5,059)	(4,646)	(10,123)	(9,297)
Common stock repurchased	(4,372)	(6,018)	(8,771)	(11,983)
Balance, end of period	99,368	75,045	99,368	75,045
Accumulated other comprehensive income (loss)				
Balance, beginning of period	(7,343)	1,283	(4,678)	1,822
Other comprehensive income (loss)	886	(846)	(1,779)	(1,385)
Balance, end of period	(6,457)	437	(6,457)	437
Total stockholders' equity	\$ 183,136	\$ 160,010	\$ 183,136	\$ 160,010
Cash dividends declared per common share	\$ 0.68	\$ 0.62	\$ 1.36	\$ 1.24

Refer to accompanying notes.

NOTES TO FINANCIAL STATEMENTS

(*Unaudited*)

NOTE 1 — ACCOUNTING POLICIES

Accounting Principles

Our unaudited interim consolidated financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). In the opinion of management, the unaudited interim consolidated financial statements reflect all adjustments of a normal recurring nature that are necessary for a fair presentation of the results for the interim periods presented. Interim results are not necessarily indicative of results for a full year. The information included in this Form 10-Q should be read in conjunction with information included in the Microsoft Corporation fiscal year 2022 Form 10-K filed with the U.S. Securities and Exchange Commission on July 28, 2022.

Principles of Consolidation

The consolidated financial statements include the accounts of Microsoft Corporation and its subsidiaries. Intercompany transactions and balances have been eliminated.

Estimates and Assumptions

Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. Examples of estimates and assumptions include: for revenue recognition, determining the nature and timing of satisfaction of performance obligations, and determining the standalone selling price ("SSP") of performance obligations, variable consideration, and other obligations such as product returns and refunds; loss contingencies; product warranties; the fair value of and/or potential impairment of goodwill and intangible assets for our reporting units; product life cycles; useful lives of our tangible and intangible assets; allowances for doubtful accounts; the market value of, and demand for, our inventory; stock-based compensation forfeiture rates; when technological feasibility is achieved for our products; the potential outcome of uncertain tax positions that have been recognized in our consolidated financial statements or tax returns; and determining the timing and amount of impairments for investments. Actual results and outcomes may differ from management's estimates and assumptions due to risks and uncertainties.

In July 2022, we completed an assessment of the useful lives of our server and network equipment. Due to investments in software that increased efficiencies in how we operate our server and network equipment, as well as advances in technology, we determined we should increase the estimated useful lives of both server and network equipment from four years to six years. This change in accounting estimate was effective beginning fiscal year 2023. Based on the carrying amount of server and network equipment included in property and equipment, net as of June 30, 2022, the effect of this change in estimate for the three months ended December 31, 2022 was an increase in operating income of \$945 million and net income of \$768 million, or \$0.10 per both basic and diluted share. The effect of this change for the six months ended December 31, 2022 was an increase in operating income of \$2.0 billion and net income of \$1.6 billion, or \$0.22 per both basic and diluted share.

Financial Instruments

Investments

We consider all highly liquid interest-earning investments with a maturity of three months or less at the date of purchase to be cash equivalents. The fair values of these investments approximate their carrying values. In general, investments with original maturities of greater than three months and remaining maturities of less than one year are classified as short-term investments. Investments with maturities beyond one year may be classified as short-term based on their highly liquid nature and because such marketable securities represent the investment of cash that is available for current operations.

Debt investments are classified as available-for-sale and realized gains and losses are recorded using the specific identification method. Changes in fair value, excluding credit losses and impairments, are recorded in other comprehensive income. Fair value is calculated based on publicly available market information or other estimates determined by management. If the cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, credit quality of debt instrument issuers, and the extent to which the fair value is less than cost. To determine credit losses, we employ a systematic methodology that considers available quantitative and qualitative evidence. In addition, we consider specific adverse conditions related to the financial health of, and business outlook for, the investee. If we have plans to sell the security or it is more likely than not that we will be required to sell the security before recovery, then a decline in fair value below cost is recorded as an impairment charge in other income (expense), net and a new cost basis in the investment is established. If market, industry, and/or investee conditions deteriorate, we may incur future impairments.

Equity investments with readily determinable fair values are measured at fair value. Equity investments without readily determinable fair values are measured using the equity method or measured at cost with adjustments for observable changes in price or impairments (referred to as the measurement alternative). We perform a qualitative assessment on a periodic basis and recognize an impairment if there are sufficient indicators that the fair value of the investment is less than carrying value. Changes in value are recorded in other income (expense), net.

Derivatives

Derivative instruments are recognized as either assets or liabilities and measured at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation.

For derivative instruments designated as fair value hedges, gains and losses are recognized in other income (expense), net with offsetting gains and losses on the hedged items. Gains and losses representing hedge components excluded from the assessment of effectiveness are recognized in other income (expense), net.

For derivative instruments designated as cash flow hedges, gains and losses are initially reported as a component of other comprehensive income and subsequently recognized in other income (expense), net with the corresponding hedged item. Gains and losses representing hedge components excluded from the assessment of effectiveness are recognized in other income (expense), net.

For derivative instruments that are not designated as hedges, gains and losses from changes in fair values are primarily recognized in other income (expense), net.

Fair Value Measurements

We account for certain assets and liabilities at fair value. The hierarchy below lists three levels of fair value based on the extent to which inputs used in measuring fair value are observable in the market. We categorize each of our fair value measurements in one of these three levels based on the lowest level input that is significant to the fair value measurement in its entirety. These levels are:

- *Level 1* – inputs are based upon unadjusted quoted prices for identical instruments in active markets. Our Level 1 investments include U.S. government securities, common and preferred stock, and mutual funds. Our Level 1 derivative assets and liabilities include those actively traded on exchanges.
- *Level 2* – inputs are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques (e.g. the Black-Scholes model) for which all significant inputs are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs including interest rate curves, credit spreads, foreign exchange rates, and forward and spot prices for currencies. Our Level 2 investments include commercial paper, certificates of deposit, U.S. agency securities, foreign government bonds, mortgage- and asset-backed securities, corporate notes and bonds, and municipal securities. Our Level 2 derivative assets and liabilities include certain over-the-counter forward, option, and swap contracts.

- *Level 3* – inputs are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability. The fair values are therefore determined using model-based techniques, including option pricing models and discounted cash flow models. Our Level 3 assets and liabilities include investments in corporate notes and bonds, municipal securities, and goodwill and intangible assets, when they are recorded at fair value due to an impairment charge. Unobservable inputs used in the models are significant to the fair values of the assets and liabilities.

We measure equity investments without readily determinable fair values on a nonrecurring basis. The fair values of these investments are determined based on valuation techniques using the best information available, and may include quoted market prices, market comparables, and discounted cash flow projections.

Our other current financial assets and current financial liabilities have fair values that approximate their carrying values.

Contract Balances and Other Receivables

As of December 31, 2022 and June 30, 2022, other receivables due from suppliers were \$545 million and \$1.0 billion, respectively, and are included in accounts receivable, net in our consolidated balance sheets.

As of both December 31, 2022 and June 30, 2022, long-term accounts receivable, net of allowance for doubtful accounts, was \$4.2 billion and \$3.8 billion, respectively, and is included in other long-term assets in our consolidated balance sheets.

We record financing receivables when we offer certain of our customers the option to acquire our software products and services offerings through a financing program in a limited number of countries. As of December 31, 2022 and June 30, 2022, our financing receivables, net were \$3.1 billion and \$4.1 billion, respectively, for short-term and long-term financing receivables, which are included in other current assets and other long-term assets in our consolidated balance sheets. We record an allowance to cover expected losses based on troubled accounts, historical experience, and other currently available evidence.

Employee Severance

On January 18, 2023, we announced a decision to reduce our overall workforce by approximately 10,000 jobs through the third quarter of fiscal year 2023. During the three months ended December 31, 2022, we recorded \$800 million of employee severance expenses related to these job eliminations as part of an ongoing employee benefit plan. These employee severance expenses were included in general and administrative expenses in our consolidated income statements and allocated to our segments based on relative gross margin. Refer to Note 17 – Segment Information and Geographic Data for further information.

NOTE 2 — EARNINGS PER SHARE

Basic earnings per share ("EPS") is computed based on the weighted average number of shares of common stock outstanding during the period. Diluted EPS is computed based on the weighted average number of shares of common stock plus the effect of dilutive potential common shares outstanding during the period using the treasury stock method. Dilutive potential common shares include outstanding stock options and stock awards.

The components of basic and diluted EPS were as follows:

(In millions, except earnings per share)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Net income available for common shareholders (A)	\$ 16,425	\$ 18,765	\$ 33,981	\$ 39,270
Weighted average outstanding shares of common stock (B)	7,451	7,505	7,454	7,509
Dilutive effect of stock-based awards	22	50	25	52
Common stock and common stock equivalents (C)	7,473	7,555	7,479	7,561
Earnings Per Share				
Basic (A/B)	\$ 2.20	\$ 2.50	\$ 4.56	\$ 5.23
Diluted (A/C)	\$ 2.20	\$ 2.48	\$ 4.54	\$ 5.19

Anti-dilutive stock-based awards excluded from the calculations of diluted EPS were immaterial during the periods presented.

NOTE 3 — OTHER INCOME (EXPENSE), NET

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

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Interest and dividends income	\$ 700	\$ 503	\$ 1,341	\$ 1,023
Interest expense	(490)	(525)	(990)	(1,064)
Net recognized gains (losses) on investments	(15)	300	(2)	671
Net gains (losses) on derivatives	(199)	7	(190)	0
Net losses on foreign currency remeasurements	(18)	(13)	(96)	(78)
Other, net	(38)	(4)	(69)	2
Total	\$ (60)	\$ 268	\$ (6)	\$ 554

Net Recognized Gains (Losses) on Investments

Net recognized gains (losses) on debt investments were as follows:

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Realized gains from sales of available-for-sale securities	\$ 27	\$ 12	\$ 30	\$ 31
Realized losses from sales of available-for-sale securities	(23)	(6)	(43)	(13)
Impairments and allowance for credit losses	5	(5)	(13)	(8)
Total	\$ 9	\$ 1	\$ (26)	\$ 10

Net recognized gains (losses) on equity investments were as follows:

(In millions)	Three Months Ended December 31,				Six Months Ended December 31,	
	2022	2021	2022	2021		
Net realized gains (losses) on investments sold	\$ (8)	\$ 31	\$ 75	\$ 68		
Net unrealized gains (losses) on investments still held	(7)	268	(35)	593		
Impairments of investments	(9)	0	(16)	0		
Total	\$ (24)	\$ 299	\$ 24	\$ 661		

NOTE 4 — INVESTMENTS

Investment Components

The components of investments were as follows:

(In millions)	Fair Value Level	Adjusted Cost Basis	Unrealized Gains	Unrealized Losses	Recorded Basis	Cash and Cash Equivalents	Short-term Investments	Equity Investments
December 31, 2022								
Changes in Fair Value Recorded in Other Comprehensive Income								
Commercial paper	Level 2	\$ 6,423	\$ 0	\$ 0	\$ 6,423	\$ 3,307	\$ 3,116	\$ 0
Certificates of deposit	Level 2	2,694	0	0	2,694	2,250	444	0
U.S. government securities	Level 1	67,941	0	(3,963)	63,978	1,029	62,949	0
U.S. agency securities	Level 2	5,525	0	(6)	5,519	674	4,845	0
Foreign government bonds	Level 2	491	1	(27)	465	0	465	0
Mortgage- and asset-backed securities	Level 2	883	1	(43)	841	0	841	0
Corporate notes and bonds	Level 2	11,310	8	(676)	10,642	0	10,642	0
Corporate notes and bonds	Level 3	88	1	0	89	0	89	0
Municipal securities	Level 2	370	8	(17)	361	0	361	0
Municipal securities	Level 3	104	0	(7)	97	0	97	0
Total debt investments		\$ 95,829	\$ 19	\$ (4,739)	\$ 91,109	\$ 7,260	\$ 83,849	\$ 0
Changes in Fair Value Recorded in Net Income								
Equity investments	Level 1				\$ 1,521	\$ 1,082	\$ 0	\$ 439
Equity investments	Other				6,658	0	0	6,658
Total equity investments					\$ 8,179	\$ 1,082	\$ 0	\$ 7,097
Cash					\$ 7,304	\$ 7,304	\$ 0	\$ 0
Derivatives, net (a)					13	0	13	0
Total					\$ 106,605	\$ 15,646	\$ 83,862	\$ 7,097

(In millions)	Fair Value Level	Adjusted Cost Basis	Unrealized Gains	Unrealized Losses	Recorded Basis	Cash and Cash Equivalents	Short-term Investments	Equity Investments
June 30, 2022								
Changes in Fair Value Recorded in Other Comprehensive Income								
Commercial paper	Level 2	\$ 2,500	\$ 0	\$ 0	\$ 2,500	\$ 2,498	\$ 2	\$ 0
Certificates of deposit	Level 2	2,071	0	0	2,071	2,032	39	0
U.S. government securities	Level 1	79,696	29	(2,178)	77,547	9	77,538	0
U.S. agency securities	Level 2	419	0	(9)	410	0	410	0
Foreign government bonds	Level 2	506	0	(24)	482	0	482	0
Mortgage- and asset-backed securities	Level 2	727	1	(30)	698	0	698	0
Corporate notes and bonds	Level 2	11,661	4	(554)	11,111	0	11,111	0
Corporate notes and bonds	Level 3	67	0	0	67	0	67	0
Municipal securities	Level 2	368	19	(13)	374	0	374	0
Municipal securities	Level 3	103	0	(6)	97	0	97	0
Total debt investments		\$ 98,118	\$ 53	\$ (2,814)	\$ 95,357	\$ 4,539	\$ 90,818	\$ 0
Changes in Fair Value Recorded in Net Income								
Equity investments	Level 1				\$ 1,590	\$ 1,134	\$ 0	\$ 456
Equity investments	Other				6,435	0	0	6,435
Total equity investments					\$ 8,025	\$ 1,134	\$ 0	\$ 6,891
Cash					\$ 8,258	\$ 8,258	\$ 0	\$ 0
Derivatives, net (a)					8	0	8	0
Total					\$111,648	\$ 13,931	\$ 90,826	\$ 6,891

(a) Refer to Note 5 – Derivatives for further information on the fair value of our derivative instruments.

Equity investments presented as “Other” in the tables above include investments without readily determinable fair values measured using the equity method or measured at cost with adjustments for observable changes in price or impairments, and investments measured at fair value using net asset value as a practical expedient which are not categorized in the fair value hierarchy. As of both December 31, 2022 and June 30, 2022, equity investments without readily determinable fair values measured at cost with adjustments for observable changes in price or impairments were \$3.8 billion.

Unrealized Losses on Debt Investments

Debt investments with continuous unrealized losses for less than 12 months and 12 months or greater and their related fair values were as follows:

(In millions)	Less than 12 Months		12 Months or Greater		Total Fair Value	Total Unrealized Losses
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses		
December 31, 2022						
U.S. government and agency securities	\$ 40,516	\$ (2,586)	\$ 8,890	\$ (1,383)	\$ 49,406	\$ (3,969)
Foreign government bonds	365	(14)	94	(13)	459	(27)
Mortgage- and asset-backed securities	396	(22)	148	(21)	544	(43)
Corporate notes and bonds	6,908	(337)	3,204	(339)	10,112	(676)
Municipal securities	125	(5)	149	(19)	274	(24)
Total	\$ 48,310	\$ (2,964)	\$ 12,485	\$ (1,775)	\$ 60,795	\$ (4,739)

(In millions)	Less than 12 Months		12 Months or Greater		Total Fair Value	Total Unrealized Losses
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses		
June 30, 2022						
U.S. government and agency securities	\$ 59,092	\$ (1,835)	\$ 2,210	\$ (352)	\$ 61,302	\$ (2,187)
Foreign government bonds	418	(18)	27	(6)	445	(24)
Mortgage- and asset-backed securities	510	(26)	41	(4)	551	(30)
Corporate notes and bonds	9,443	(477)	786	(77)	10,229	(554)
Municipal securities	178	(12)	74	(7)	252	(19)
Total	\$ 69,641	\$ (2,368)	\$ 3,138	\$ (446)	\$ 72,779	\$ (2,814)

Unrealized losses from fixed-income securities are primarily attributable to changes in interest rates. Management does not believe any remaining unrealized losses represent impairments based on our evaluation of available evidence.

Debt Investment Maturities

(In millions)	Adjusted Cost Basis	Estimated Fair Value
December 31, 2022		
Due in one year or less	\$ 28,885	\$ 28,758
Due after one year through five years	50,751	48,134
Due after five years through 10 years	14,845	13,012
Due after 10 years	1,348	1,205
Total	\$ 95,829	\$ 91,109

NOTE 5 — DERIVATIVES

We use derivative instruments to manage risks related to foreign currencies, interest rates, equity prices, and credit; to enhance investment returns; and to facilitate portfolio diversification. Our objectives for holding derivatives include reducing, eliminating, and efficiently managing the economic impact of these exposures as effectively as possible. Our derivative programs include strategies that both qualify and do not qualify for hedge accounting treatment.

Foreign Currencies

Certain forecasted transactions, assets, and liabilities are exposed to foreign currency risk. We monitor our foreign currency exposures daily to maximize the economic effectiveness of our foreign currency hedge positions.

Foreign currency risks related to certain non-U.S. dollar-denominated investments are hedged using foreign exchange forward contracts that are designated as fair value hedging instruments. Foreign currency risks related to certain Euro-denominated debt are hedged using foreign exchange forward contracts that are designated as cash flow hedging instruments.

Certain options and forwards not designated as hedging instruments are also used to manage the variability in foreign exchange rates on certain balance sheet amounts and to manage other foreign currency exposures.

Interest Rate

Interest rate risks related to certain fixed-rate debt are hedged using interest rate swaps that are designated as fair value hedging instruments to effectively convert the fixed interest rates to floating interest rates.

Securities held in our fixed-income portfolio are subject to different interest rate risks based on their maturities. We manage the average maturity of our fixed-income portfolio to achieve economic returns that correlate to certain broad-based fixed-income indices using exchange-traded option and futures contracts and over-the-counter swap and option contracts. These contracts are not designated as hedging instruments and are included in "Other contracts" in the tables below.

Equity

Securities held in our equity investments portfolio are subject to market price risk. At times, we may hold options, futures, and swap contracts. These contracts are not designated as hedging instruments and are included in "Other contracts" in the tables below.

Credit

Our fixed-income portfolio is diversified and consists primarily of investment-grade securities. We use credit default swap contracts to manage credit exposures relative to broad-based indices and to facilitate portfolio diversification. These contracts are not designated as hedging instruments and are included in "Other contracts" in the tables below.

Credit-Risk-Related Contingent Features

Certain of our counterparty agreements for derivative instruments contain provisions that require our issued and outstanding long-term unsecured debt to maintain an investment grade credit rating and require us to maintain minimum liquidity of \$1.0 billion. To the extent we fail to meet these requirements, we will be required to post collateral, similar to the standard convention related to over-the-counter derivatives. As of December 31, 2022, our long-term unsecured debt rating was AAA, and cash investments were in excess of \$1.0 billion. As a result, no collateral was required to be posted.

The following table presents the notional amounts of our outstanding derivative instruments measured in U.S. dollar equivalents:

(In millions)	December 31, 2022	June 30, 2022
Designated as Hedging Instruments		
Foreign exchange contracts purchased	\$ 1,492	\$ 635
Interest rate contracts purchased	1,089	1,139
Not Designated as Hedging Instruments		
Foreign exchange contracts purchased	7,042	10,322
Foreign exchange contracts sold	17,653	21,606
Other contracts purchased	4,803	2,773
Other contracts sold	1,023	544

Fair Values of Derivative Instruments

The following table presents our derivative instruments:

(In millions)	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
	December 31, 2022		June 30, 2022	
Designated as Hedging Instruments				
Foreign exchange contracts	\$ 13	\$ (79)	\$ 0	\$ (77)
Interest rate contracts	0	(3)	3	0
Not Designated as Hedging Instruments				
Foreign exchange contracts	195	(599)	333	(362)
Other contracts	41	(305)	20	(112)
Gross amounts of derivatives	249	(986)	356	(551)
Gross amounts of derivatives offset in the balance sheet	(203)	206	(130)	133
Cash collateral received	0	(12)	0	(75)
Net amounts of derivatives	\$ 46	\$ (792)	\$ 226	\$ (493)
Reported as				
Short-term investments	\$ 13	\$ 0	\$ 8	\$ 0
Other current assets	27	0	218	0
Other long-term assets	6	0	0	0
Other current liabilities	0	(607)	0	(298)
Other long-term liabilities	0	(185)	0	(195)
Total	\$ 46	\$ (792)	\$ 226	\$ (493)

Gross derivative assets and liabilities subject to legally enforceable master netting agreements for which we have elected to offset were \$239 million and \$793 million, respectively, as of December 31, 2022, and \$343 million and \$550 million, respectively, as of June 30, 2022.

The following table presents the fair value of our derivatives instruments on a gross basis:

(In millions)	Level 1	Level 2	Level 3	Total
December 31, 2022				
Derivative assets	\$ 0	\$ 241	\$ 8	\$ 249
Derivative liabilities	0	(986)	0	(986)
June 30, 2022				
Derivative assets	1	349	6	356
Derivative liabilities	0	(551)	0	(551)

Gains (losses) on derivative instruments recognized in other income (expense), net were as follows:

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Designated as Fair Value Hedging Instruments				
Foreign exchange contracts				
Derivatives	\$ 0	\$ 46	\$ 0	\$ 49
Hedged items	0	(45)	0	(50)
Excluded from effectiveness assessment	0	0	0	4
Interest rate contracts				
Derivatives	5	(11)	(38)	(14)
Hedged items	(8)	15	35	22
Designated as Cash Flow Hedging Instruments				
Foreign exchange contracts				
Amount reclassified from accumulated other comprehensive income (loss)	103	(14)	44	(29)
Not Designated as Hedging Instruments				
Foreign exchange contracts	(250)	96	(10)	273
Other contracts	(206)	6	(204)	(12)

Losses, net of tax, on derivative instruments recognized in our consolidated comprehensive income statements were as follows:

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Designated as Cash Flow Hedging Instruments				
Foreign exchange contracts				
Included in effectiveness assessment	\$ 49	\$ (11)	\$ 9	\$ (21)

NOTE 6 — INVENTORIES

The components of inventories were as follows:

(In millions)	December 31, 2022		June 30, 2022	
	\$		\$	
Raw materials	\$ 1,060		\$ 1,144	
Work in process	38		82	
Finished goods	1,882		2,516	
Total	\$ 2,980		\$ 3,742	

NOTE 7 — BUSINESS COMBINATIONS

Nuance Communications, Inc.

On March 4, 2022, we completed our acquisition of Nuance Communications, Inc. (“Nuance”) for a total purchase price of \$18.8 billion, consisting primarily of cash. Nuance is a cloud and artificial intelligence (“AI”) software provider with healthcare and enterprise AI experience, and the acquisition will build on our industry-specific cloud offerings. The financial results of Nuance have been included in our consolidated financial statements since the date of the acquisition. Nuance is reported as part of our Intelligent Cloud segment.

The allocation of the purchase price to goodwill was completed as of December 31, 2022. The major classes of assets and liabilities to which we have allocated the purchase price were as follows:

(In millions)

Goodwill (a)	\$	16,326
Intangible assets		4,365
Other assets		42
Other liabilities (b)		(1,972)
Total	\$	18,761

- (a) Goodwill was assigned to our Intelligent Cloud segment and was primarily attributed to increased synergies that are expected to be achieved from the integration of Nuance. None of the goodwill is expected to be deductible for income tax purposes.
- (b) Includes \$986 million of convertible senior notes issued by Nuance in 2015 and 2017, substantially all of which have been redeemed.

Following are the details of the purchase price allocated to the intangible assets acquired:

(In millions, except average life)	Amount	Weighted Average Life
Customer-related	\$ 2,610	9 years
Technology-based	1,540	5 years
Marketing-related	215	4 years
Total	\$ 4,365	7 years

Activision Blizzard, Inc.

On January 18, 2022, we entered into a definitive agreement to acquire Activision Blizzard, Inc. ("Activision Blizzard") for \$95.00 per share in an all-cash transaction valued at \$68.7 billion, inclusive of Activision Blizzard's net cash. Activision Blizzard is a leader in game development and an interactive entertainment content publisher. The acquisition will accelerate the growth in our gaming business across mobile, PC, console, and cloud gaming. The acquisition has been approved by Activision Blizzard's shareholders. We are continuing to engage with regulators reviewing the transaction and are working toward closing it in fiscal year 2023, subject to obtaining required regulatory approvals and satisfaction of other customary closing conditions.

NOTE 8 — GOODWILL

Changes in the carrying amount of goodwill were as follows:

(In millions)	June 30, 2022	Acquisitions	Other	December 31, 2022
Productivity and Business Processes	\$ 24,811	\$ 11	\$ (15)	\$ 24,807
Intelligent Cloud	30,182	183	87	30,452
More Personal Computing	12,531	0	115	12,646
Total	\$ 67,524	\$ 194	\$ 187	\$ 67,905

The measurement periods for the valuation of assets acquired and liabilities assumed end as soon as information on the facts and circumstances that existed as of the acquisition dates becomes available, but do not exceed 12 months. Adjustments in purchase price allocations may require a change in the amounts allocated to goodwill during the periods in which the adjustments are determined.

Any change in the goodwill amounts resulting from foreign currency translations and purchase accounting adjustments are presented as "Other" in the table above. Also included in "Other" are business dispositions and transfers between segments due to reorganizations, as applicable.

NOTE 9 — INTANGIBLE ASSETS

The components of intangible assets, all of which are finite-lived, were as follows:

(In millions)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	December 31, 2022					
Technology-based	\$ 11,093	\$ (7,073)	\$ 4,020	\$ 11,277	\$ (6,958)	\$ 4,319
Customer-related	7,352	(3,646)	3,706	7,342	(3,171)	4,171
Marketing-related	4,942	(2,324)	2,618	4,942	(2,143)	2,799
Contract-based	21	(11)	10	16	(7)	9
Total	\$ 23,408	\$ (13,054)	\$ 10,354	\$ 23,577	\$ (12,279)	\$ 11,298

Intangible assets amortization expense was \$632 million and \$1.3 billion for the three and six months ended December 31, 2022, respectively, and \$446 million and \$885 million for the three and six months ended December 31, 2021, respectively.

The following table outlines the estimated future amortization expense related to intangible assets held as of December 31, 2022:

(In millions)	
Year Ending June 30,	
2023 (excluding the six months ended December 31, 2022)	\$ 1,256
2024	2,377
2025	1,826
2026	1,309
2027	874
Thereafter	2,712
Total	\$ 10,354

NOTE 10 — DEBT

The components of debt were as follows:

(In millions, issuance by calendar year)	Maturities (calendar year)	Stated Interest Rate	Effective Interest Rate	December 31, 2022	June 30, 2022
2009 issuance of \$3.8 billion	2039	5.20%	5.24%	\$ 520	\$ 520
2010 issuance of \$4.8 billion	2040	4.50%	4.57%	486	486
2011 issuance of \$2.3 billion	2041	5.30%	5.36%	718	718
2012 issuance of \$2.3 billion	2022–2042	2.13%–3.50%	2.24%–3.57%	454	1,204
2013 issuance of \$5.2 billion	2023–2043	2.38%–4.88%	2.47%–4.92%	2,814	2,814
2013 issuance of €4.1 billion	2028–2033	2.63%–3.13%	2.69%–3.22%	2,455	2,404
2015 issuance of \$23.8 billion	2025–2055	2.70%–4.75%	2.77%–4.78%	9,805	10,805
2016 issuance of \$19.8 billion	2023–2056	2.00%–3.95%	2.10%–4.03%	9,430	9,430
2017 issuance of \$17.0 billion	2024–2057	2.88%–4.50%	3.04%–4.53%	8,945	8,945
2020 issuance of \$10.0 billion	2050–2060	2.53%–2.68%	2.53%–2.68%	10,000	10,000
2021 issuance of \$8.2 billion	2052–2062	2.92%–3.04%	2.92%–3.04%	8,185	8,185
Total face value				53,812	55,511
Unamortized discount and issuance costs				(455)	(471)
Hedge fair value adjustments (a)				(103)	(68)
Premium on debt exchange				(5,138)	(5,191)
Total debt				48,116	49,781
Current portion of long-term debt				(3,997)	(2,749)
Long-term debt				\$ 44,119	\$ 47,032

(a) Refer to Note 5 – Derivatives for further information on the interest rate swaps related to fixed-rate debt.

As of December 31, 2022 and June 30, 2022, the estimated fair value of long-term debt, including the current portion, was \$46.4 billion and \$50.9 billion, respectively. The estimated fair values are based on Level 2 inputs.

Debt in the table above is comprised of senior unsecured obligations and ranks equally with our other outstanding obligations. Interest is paid semi-annually, except for the Euro-denominated debt, which is paid annually.

The following table outlines maturities of our long-term debt, including the current portion, as of December 31, 2022:

(In millions)	
Year Ending June 30,	
2023 (excluding the six months ended December 31, 2022)	\$ 1,000
2024	5,250
2025	2,250
2026	3,000
2027	8,000
Thereafter	34,312
Total	\$ 53,812

NOTE 11 — INCOME TAXES

Effective Tax Rate

Our effective tax rate was 19% and 17% for the three months ended December 31, 2022 and 2021, respectively, and 19% and 9% for the six months ended December 31, 2022 and 2021, respectively. The increase in our effective tax rate for the three months ended December 31, 2022 compared to the prior year was primarily due to a decrease in tax benefits relating to stock-based compensation. The increase in our effective tax rate for the six months ended December 31, 2022 compared to the prior year was primarily due to a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022 related to the transfer of intangible properties and a decrease in tax benefits relating to stock-based compensation.

In the first quarter of fiscal year 2022, we transferred certain intangible properties from our Puerto Rico subsidiary to the U.S. The transfer of intangible properties resulted in a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022, as the value of future U.S. tax deductions exceeded the current tax liability from the U.S. global intangible low-taxed income tax.

Our effective tax rate was lower than the U.S. federal statutory rate for the three and six months ended December 31, 2022, primarily due to earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations center in Ireland.

Uncertain Tax Positions

As of December 31, 2022 and June 30, 2022, unrecognized tax benefits and other income tax liabilities were \$17.1 billion and \$16.3 billion, respectively, and are included in long-term income taxes in our consolidated balance sheets.

We settled a portion of the Internal Revenue Service ("IRS") audit for tax years 2004 to 2006 in fiscal year 2011. In February 2012, the IRS withdrew its 2011 Revenue Agents Report related to unresolved issues for tax years 2004 to 2006 and reopened the audit phase of the examination. We also settled a portion of the IRS audit for tax years 2007 to 2009 in fiscal year 2016, and a portion of the IRS audit for tax years 2010 to 2013 in fiscal year 2018. In the second quarter of fiscal year 2021, we settled an additional portion of the IRS audits for tax years 2004 to 2013 and made a payment of \$1.7 billion, including tax and interest. We remain under audit for tax years 2004 to 2017.

As of December 31, 2022, the primary unresolved issues for the IRS audits relate to transfer pricing, which could have a material impact in our consolidated financial statements when the matters are resolved. We believe our allowances for income tax contingencies are adequate. We have not received a proposed assessment for the unresolved key transfer pricing issues and do not expect a final resolution of these issues in the next 12 months. Based on the information currently available, we do not anticipate a significant increase or decrease to our tax contingencies for these issues within the next 12 months.

We are subject to income tax in many jurisdictions outside the U.S. Our operations in certain jurisdictions remain subject to examination for tax years 1996 to 2022, some of which are currently under audit by local tax authorities. The resolution of each of these audits is not expected to be material to our consolidated financial statements.

NOTE 12 — UNEARNED REVENUE

Unearned revenue by segment was as follows:

(In millions)

	December 31, 2022	June 30, 2022
Productivity and Business Processes	\$ 20,120	\$ 24,558
Intelligent Cloud	15,822	19,371
More Personal Computing	3,684	4,479
Total	\$ 39,626	\$ 48,408

Changes in unearned revenue were as follows:

(In millions)		
Six Months Ended December 31, 2022		
Balance, beginning of period	\$	48,408
Deferral of revenue		48,188
Recognition of unearned revenue		(56,970)
Balance, end of period	\$	39,626

Revenue allocated to remaining performance obligations, which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods, was \$193 billion as of December 31, 2022, of which \$189 billion is related to the commercial portion of revenue. We expect to recognize approximately 45% of this revenue over the next 12 months and the remainder thereafter.

NOTE 13 — LEASES

We have operating and finance leases for datacenters, corporate offices, research and development facilities, Microsoft Experience Centers, and certain equipment. Our leases have remaining lease terms of less than 1 year to 19 years, some of which include options to extend the leases for up to 5 years, and some of which include options to terminate the leases within 1 year.

The components of lease expense were as follows:

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Operating lease cost	\$ 684	\$ 469	\$ 1,346	\$ 1,057
Finance lease cost:				
Amortization of right-of-use assets	\$ 457	\$ 264	\$ 646	\$ 490
Interest on lease liabilities	119	107	232	211
Total finance lease cost	\$ 576	\$ 371	\$ 878	\$ 701

Supplemental cash flow information related to leases was as follows:

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	\$ 645	\$ 441	\$ 1,299	\$ 1,007
Operating cash flows from finance leases	119	107	232	211
Financing cash flows from finance leases	262	222	518	422
Right-of-use assets obtained in exchange for lease obligations:				
Operating leases	525	1,559	1,714	2,730
Finance leases	598	985	1,209	2,374

Supplemental balance sheet information related to leases was as follows:

(In millions, except lease term and discount rate)

	December 31, 2022	June 30, 2022
Operating Leases		
Operating lease right-of-use assets	<u>\$ 13,624</u>	\$ 13,148
Other current liabilities	<u>\$ 2,287</u>	\$ 2,228
Operating lease liabilities	<u>\$ 11,998</u>	\$ 11,489
Total operating lease liabilities	<u>\$ 14,285</u>	\$ 13,717
Finance Leases		
Property and equipment, at cost	<u>\$ 18,514</u>	\$ 17,388
Accumulated depreciation	<u>(3,920)</u>	(3,285)
Property and equipment, net	<u>\$ 14,594</u>	\$ 14,103
Other current liabilities	<u>\$ 1,105</u>	\$ 1,060
Other long-term liabilities	<u>\$ 14,479</u>	\$ 13,842
Total finance lease liabilities	<u>\$ 15,584</u>	\$ 14,902
Weighted Average Remaining Lease Term		
Operating leases	8 years	8 years
Finance leases	11 years	12 years
Weighted Average Discount Rate		
Operating leases	2.5%	2.1%
Finance leases	3.2%	3.1%

The following table outlines maturities of our lease liabilities as of December 31, 2022:

(In millions)

Year Ending June 30,	Operating Leases	Finance Leases
2023 (excluding the six months ended December 31, 2022)	<u>\$ 1,320</u>	\$ 790
2024	<u>2,498</u>	1,598
2025	<u>2,217</u>	1,912
2026	<u>1,847</u>	1,595
2027	<u>1,533</u>	1,603
Thereafter	<u>6,528</u>	11,196
Total lease payments	<u>15,943</u>	18,694
Less imputed interest	<u>(1,658)</u>	(3,110)
Total	<u>\$ 14,285</u>	\$ 15,584

As of December 31, 2022, we have additional operating and finance leases, primarily for datacenters, that have not yet commenced of \$6.3 billion and \$19.7 billion, respectively. These operating and finance leases will commence between fiscal year 2023 and fiscal year 2028 with lease terms of less than 1 year to 18 years.

NOTE 14 — CONTINGENCIES

U.S. Cell Phone Litigation

Microsoft Mobile Oy, a subsidiary of Microsoft, along with other handset manufacturers and network operators, is a defendant in 46 lawsuits, including 45 lawsuits filed in the Superior Court for the District of Columbia by individual plaintiffs who allege that radio emissions from cellular handsets caused their brain tumors and other adverse health effects. We assumed responsibility for these claims in our agreement to acquire Nokia's Devices and Services business and have been substituted for the Nokia defendants. Nine of these cases were filed in 2002 and are consolidated for certain pre-trial proceedings; the remaining cases are stayed. In a separate 2009 decision, the Court of Appeals for the District of Columbia held that adverse health effect claims arising from the use of cellular handsets that operate within the U.S. Federal Communications Commission radio frequency emission guidelines ("FCC Guidelines") are pre-empted by federal law. The plaintiffs allege that their handsets either operated outside the FCC Guidelines or were manufactured before the FCC Guidelines went into effect. The lawsuits also allege an industry-wide conspiracy to manipulate the science and testing around emission guidelines.

In 2013, the defendants in the consolidated cases moved to exclude the plaintiffs' expert evidence of general causation on the basis of flawed scientific methodologies. In 2014, the trial court granted in part and denied in part the defendants' motion to exclude the plaintiffs' general causation experts. The defendants filed an interlocutory appeal to the District of Columbia Court of Appeals challenging the standard for evaluating expert scientific evidence. In October 2016, the Court of Appeals issued its decision adopting the standard advocated by the defendants and remanding the cases to the trial court for further proceedings under that standard. The plaintiffs have filed supplemental expert evidence, portions of which were stricken by the court. A hearing on general causation took place in September of 2022.

Other Contingencies

We also are subject to a variety of other claims and suits that arise from time to time in the ordinary course of our business. Although management currently believes that resolving claims against us, individually or in aggregate, will not have a material adverse impact in our consolidated financial statements, these matters are subject to inherent uncertainties and management's view of these matters may change in the future.

As of December 31, 2022, we accrued aggregate legal liabilities of \$181 million. While we intend to defend these matters vigorously, adverse outcomes that we estimate could reach approximately \$500 million in aggregate beyond recorded amounts are reasonably possible. Were unfavorable final outcomes to occur, there exists the possibility of a material adverse impact in our consolidated financial statements for the period in which the effects become reasonably estimable.

NOTE 15 — STOCKHOLDERS' EQUITY

Share Repurchases

On September 18, 2019, our Board of Directors approved a share repurchase program authorizing up to \$40.0 billion in share repurchases. This share repurchase program commenced in February 2020 and was completed in November 2021.

On September 14, 2021, our Board of Directors approved a share repurchase program authorizing up to \$60.0 billion in share repurchases. This share repurchase program commenced in November 2021, following completion of the program approved on September 18, 2019, has no expiration date, and may be terminated at any time. As of December 31, 2022, \$31.5 billion remained of this \$60.0 billion share repurchase program.

We repurchased the following shares of common stock under the share repurchase programs:

(In millions)	Shares	Amount	Shares	Amount
Fiscal Year		2023		2022
First Quarter	17	\$ 4,600	21	\$ 6,200
Second Quarter	20	4,600	20	6,233
Total	37	\$ 9,200	41	\$ 12,433

All repurchases were made using cash resources. Shares repurchased during fiscal year 2023 were under the share repurchase program approved on September 14, 2021. Shares repurchased during the second quarter of fiscal year 2022 were under the share repurchase programs approved on both September 14, 2021 and September 18, 2019. Shares repurchased during the first quarter of fiscal year 2022 were under the share repurchase program approved on September 18, 2019. The above table excludes shares repurchased to settle employee tax withholding related to the vesting of stock awards of \$859 million and \$1.8 billion for the three and six months ended December 31, 2022, respectively, and \$1.2 billion and \$2.7 billion for the three and six months ended December 31, 2021, respectively.

Dividends

Our Board of Directors declared the following dividends:

Declaration Date	Record Date	Payment Date	Dividend Per Share	Amount
Fiscal Year 2023				
September 20, 2022	November 17, 2022	December 8, 2022	\$ 0.68	\$ 5,066
November 29, 2022	February 16, 2023	March 9, 2023	0.68	5,064
Total			\$ 1.36	\$ 10,130
Fiscal Year 2022				
September 14, 2021	November 18, 2021	December 9, 2021	\$ 0.62	\$ 4,652
December 7, 2021	February 17, 2022	March 10, 2022	0.62	4,645
Total			\$ 1.24	\$ 9,297

The dividend declared on November 29, 2022 was included in other current liabilities as of December 31, 2022.

NOTE 16 — ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The following table summarizes the changes in accumulated other comprehensive income (loss) by component:

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Derivatives				
Balance, beginning of period	\$ (6)	\$ (17)	\$ (13)	\$ (19)
Unrealized gains (losses), net of tax of \$13, \$(3), \$2, and \$(6)	49	(11)	9	(21)
Reclassification adjustments for (gains) losses included in other income (expense), net	(103)	14	(44)	29
Tax expense (benefit) included in provision for income taxes	22	(3)	10	(6)
Amounts reclassified from accumulated other comprehensive income (loss)	(81)	11	(34)	23
Net change related to derivatives, net of tax of \$(9), \$0, \$(8), and \$0	(32)	0	(25)	2
Balance, end of period	\$ (38)	\$ (17)	\$ (38)	\$ (17)
Investments				
Balance, beginning of period	\$ (4,035)	\$ 2,800	\$ (2,138)	\$ 3,222
Unrealized gains (losses), net of tax of \$89, \$(197), \$(421), and \$(307)	340	(742)	(1,585)	(1,157)
Reclassification adjustments for (gains) losses included in other income (expense), net	10	(1)	45	(10)
Tax expense (benefit) included in provision for income taxes	(2)	0	(9)	2
Amounts reclassified from accumulated other comprehensive income (loss)	8	(1)	36	(8)
Net change related to investments, net of tax of \$91, \$(197), \$(412), and \$(309)	348	(743)	(1,549)	(1,165)
Balance, end of period	\$ (3,687)	\$ 2,057	\$ (3,687)	\$ 2,057
Translation Adjustments and Other				
Balance, beginning of period	\$ (3,302)	\$ (1,500)	\$ (2,527)	\$ (1,381)
Translation adjustments and other, net of tax of \$0, \$0, \$0, and \$0	570	(103)	(205)	(222)
Balance, end of period	\$ (2,732)	\$ (1,603)	\$ (2,732)	\$ (1,603)
Accumulated other comprehensive income (loss), end of period	\$ (6,457)	\$ 437	\$ (6,457)	\$ 437

NOTE 17 — SEGMENT INFORMATION AND GEOGRAPHIC DATA

In its operation of the business, management, including our chief operating decision maker, who is also our Chief Executive Officer, reviews certain financial information, including segmented internal profit and loss statements prepared on a basis not consistent with GAAP. During the periods presented, we reported our financial performance based on the following segments: Productivity and Business Processes, Intelligent Cloud, and More Personal Computing.

We have recast certain prior period amounts to conform to the way we internally manage and monitor our business.

Our reportable segments are described below.

Productivity and Business Processes

Our Productivity and Business Processes segment consists of products and services in our portfolio of productivity, communication, and information services, spanning a variety of devices and platforms. This segment primarily comprises:

- Office Commercial (Office 365 subscriptions, the Office 365 portion of Microsoft 365 Commercial subscriptions, and Office licensed on-premises), comprising Office, Exchange, SharePoint, Microsoft Teams, Office 365 Security and Compliance, and Microsoft Viva.
- Office Consumer, including Microsoft 365 Consumer subscriptions, Office licensed on-premises, and other Office services.
- LinkedIn, including Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions.
- Dynamics business solutions, including Dynamics 365, comprising a set of intelligent, cloud-based applications across ERP, CRM, Customer Insights, Power Apps, and Power Automate; and on-premises ERP and CRM applications.

Intelligent Cloud

Our Intelligent Cloud segment consists of our public, private, and hybrid server products and cloud services that can power modern business and developers. This segment primarily comprises:

- Server products and cloud services, including Azure and other cloud services; SQL Server, Windows Server, Visual Studio, System Center, and related Client Access Licenses ("CALs"); and Nuance and GitHub.
- Enterprise Services, including Enterprise Support Services, Microsoft Consulting Services, and Nuance professional services.

More Personal Computing

Our More Personal Computing segment consists of products and services that put customers at the center of the experience with our technology. This segment primarily comprises:

- Windows, including Windows original equipment manufacturer ("OEM") licensing and other non-volume licensing of the Windows operating system; Windows Commercial, comprising volume licensing of the Windows operating system, Windows cloud services, and other Windows commercial offerings; patent licensing; and Windows Internet of Things.
- Devices, including Surface, HoloLens, and PC accessories.
- Gaming, including Xbox hardware and Xbox content and services, comprising first- and third-party content (including games and in-game content), Xbox Game Pass and other subscriptions, Xbox Cloud Gaming, third-party disc royalties, advertising, and other cloud services.
- Search and news advertising.

Revenue and costs are generally directly attributed to our segments. However, due to the integrated structure of our business, certain revenue recognized and costs incurred by one segment may benefit other segments. Revenue from certain contracts is allocated among the segments based on the relative value of the underlying products and services, which can include allocation based on actual prices charged, prices when sold separately, or estimated costs plus a profit margin. Cost of revenue is allocated in certain cases based on a relative revenue methodology. Operating expenses that are allocated primarily include those relating to marketing of products and services from which multiple segments benefit and are generally allocated based on relative gross margin.

In addition, certain costs incurred at a corporate level that benefit our segments are allocated to them. These allocated costs include legal, including settlements and fines, information technology, human resources, finance, excise taxes, field selling, shared facilities services, customer service and support, and severance. Each allocation is measured differently based on the specific facts and circumstances of the costs being allocated and is generally based on relative gross margin or relative headcount.

Segment revenue and operating income were as follows during the periods presented:

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Revenue				
Productivity and Business Processes	\$ 17,002	\$ 15,936	\$ 33,467	\$ 30,975
Intelligent Cloud	21,508	18,262	41,833	35,174
More Personal Computing	14,237	17,530	27,569	30,896
Total	\$ 52,747	\$ 51,728	\$ 102,869	\$ 97,045
Operating Income				
Productivity and Business Processes	\$ 8,175	\$ 7,688	\$ 16,498	\$ 15,269
Intelligent Cloud	8,904	8,323	17,882	16,004
More Personal Computing	3,320	6,236	7,537	11,212
Total	\$ 20,399	\$ 22,247	\$ 41,917	\$ 42,485

No sales to an individual customer or country other than the United States accounted for more than 10% of revenue for the three or six months ended December 31, 2022 or 2021. Revenue, classified by the major geographic areas in which our customers were located, was as follows:

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
United States (a)	\$ 26,976	\$ 26,463	\$ 52,843	\$ 49,293
Other countries	25,771	25,265	50,026	47,752
Total	\$ 52,747	\$ 51,728	\$ 102,869	\$ 97,045

- (a) *Includes billings to OEMs and certain multinational organizations because of the nature of these businesses and the impracticability of determining the geographic source of the revenue.*

Revenue, classified by significant product and service offerings, was as follows:

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Server products and cloud services	\$ 19,594	\$ 16,382	\$ 37,982	\$ 31,452
Office products and cloud services	11,837	11,251	23,385	22,059
Windows	4,808	6,594	10,121	12,268
Gaming	4,758	5,442	8,368	9,035
LinkedIn	3,876	3,531	7,539	6,667
Search and news advertising	3,223	3,064	6,151	5,720
Enterprise Services	1,862	1,823	3,738	3,614
Devices	1,430	2,357	2,878	3,771
Other	1,359	1,284	2,707	2,459
Total	\$ 52,747	\$ 51,728	\$ 102,869	\$ 97,045

Our Microsoft Cloud revenue, which includes Azure and other cloud services, Office 365 Commercial, the commercial portion of LinkedIn, Dynamics 365, and other commercial cloud properties, was \$27.1 billion and \$52.8 billion for the three and six months ended December 31, 2022, respectively, and \$22.2 billion and \$42.9 billion for the three and six months ended December 31, 2021, respectively. These amounts are primarily included in Server products and cloud services, Office products and cloud services, and LinkedIn in the table above.

Assets are not allocated to segments for internal reporting presentations. A portion of amortization and depreciation is included with various other costs in an overhead allocation to each segment. It is impracticable for us to separately identify the amount of amortization and depreciation by segment that is included in the measure of segment profit or loss.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Microsoft Corporation

Results of Review of Interim Financial Information

We have reviewed the accompanying consolidated balance sheet of Microsoft Corporation and subsidiaries (the "Company") as of December 31, 2022, the related consolidated statements of income, comprehensive income, cash flows, and stockholders' equity for the three-month and six-month periods ended December 31, 2022 and 2021, and the related notes (collectively referred to as the "interim financial information"). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial information for it to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company as of June 30, 2022, and the related consolidated statements of income, comprehensive income, cash flows, and stockholders' equity for the year then ended (not presented herein); and in our report dated July 28, 2022, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated balance sheet as of June 30, 2022, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Basis for Review Results

This interim financial information is the responsibility of the Company's management. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our reviews in accordance with standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ DELOITTE & TOUCHE LLP

Seattle, Washington
January 24, 2023

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

Note About Forward-Looking Statements

This report includes estimates, projections, statements relating to our business plans, objectives, and expected operating results that are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements may appear throughout this report, including the following sections: "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors" (Part II, Item 1A of this Form 10-Q). These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions. Forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties that may cause actual results to differ materially. We describe risks and uncertainties that could cause actual results and events to differ materially in "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Quantitative and Qualitative Disclosures about Market Risk" (Part I, Item 3 of this Form 10-Q), and "Risk Factors". We undertake no obligation to update or revise publicly any forward-looking statements, whether because of new information, future events, or otherwise.

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to help the reader understand the results of operations and financial condition of Microsoft Corporation. MD&A is provided as a supplement to, and should be read in conjunction with, our Annual Report on Form 10-K for the year ended June 30, 2022, and our financial statements and the accompanying Notes to Financial Statements (Part I, Item 1 of this Form 10-Q).

OVERVIEW

Microsoft is a technology company whose mission is to empower every person and every organization on the planet to achieve more. We strive to create local opportunity, growth, and impact in every country around the world. Our platforms and tools help drive small business productivity, large business competitiveness, and public-sector efficiency. We are creating the platforms and tools that deliver better, faster, and more effective solutions to support new startups, improve educational and health outcomes, and empower human ingenuity.

We generate revenue by offering a wide range of cloud-based and other services to people and businesses; licensing and supporting an array of software products; designing, manufacturing, and selling devices; and delivering relevant online advertising to a global audience. Our most significant expenses are related to compensating employees; designing, manufacturing, marketing, and selling our products and services; datacenter costs in support of our cloud-based services; and income taxes.

Highlights from the second quarter of fiscal year 2023 compared with the second quarter of fiscal year 2022 included:

- Microsoft Cloud revenue increased 22% to \$27.1 billion.
- Office Commercial products and cloud services revenue increased 7% driven by Office 365 Commercial growth of 11%.
- Office Consumer products and cloud services revenue decreased 2% and Microsoft 365 Consumer subscribers increased to 63.2 million.
- LinkedIn revenue increased 10%.
- Dynamics products and cloud services revenue increased 13% driven by Dynamics 365 growth of 21%.
- Server products and cloud services revenue increased 20% driven by Azure and other cloud services growth of 31%.
- Windows original equipment manufacturer licensing ("Windows OEM") revenue decreased 39%.
- Windows Commercial products and cloud services revenue decreased 3%.
- Xbox content and services revenue decreased 12%.
- Search and news advertising revenue excluding traffic acquisition costs increased 10%.
- Devices revenue decreased 39%.

Industry Trends

Our industry is dynamic and highly competitive, with frequent changes in both technologies and business models. Each industry shift is an opportunity to conceive new products, new technologies, or new ideas that can further transform the industry and our business. At Microsoft, we push the boundaries of what is possible through a broad range of research and development activities that seek to identify and address the changing demands of customers and users, industry trends, and competitive forces.

Economic Conditions, Challenges, and Risks

The markets for software, devices, and cloud-based services are dynamic and highly competitive. Our competitors are developing new software and devices, while also deploying competing cloud-based services for consumers and businesses. The devices and form factors customers prefer evolve rapidly, and influence how users access services in the cloud, and in some cases, the user's choice of which suite of cloud-based services to use. We must continue to evolve and adapt over an extended time in pace with this changing environment. The investments we are making in infrastructure and devices will continue to increase our operating costs and may decrease our operating margins.

Our success is highly dependent on our ability to attract and retain qualified employees. We hire a mix of university and industry talent worldwide. We compete for talented individuals globally by offering an exceptional working environment, broad customer reach, scale in resources, the ability to grow one's career across many different products and businesses, and competitive compensation and benefits. Aggregate demand for our software, services, and devices is correlated to global macroeconomic and geopolitical factors, which remain dynamic.

Our devices are primarily manufactured by third-party contract manufacturers, some of which contain certain components for which there are very few qualified suppliers. For these components, we have limited near-term flexibility to use other manufacturers if a current vendor becomes unavailable or is unable to meet our requirements. Extended disruptions at these suppliers and/or manufacturers could lead to a similar disruption in our ability to manufacture devices on time to meet consumer demand.

Our international operations provide a significant portion of our total revenue and expenses. Many of these revenue and expenses are denominated in currencies other than the U.S. dollar. As a result, changes in foreign exchange rates may significantly affect revenue and expenses. Fluctuations in the U.S. dollar relative to certain foreign currencies reduced reported revenue and expenses from our international operations for the three and six months ended December 31, 2022.

On January 18, 2023, we announced decisions we made to align our cost structure with our revenue and customer demand, prioritize our investments in strategic areas, and consolidate office space. As a result, we recorded a \$1.2 billion charge in the second quarter of fiscal year 2023 ("Q2 charge"), which included employee severance expenses of \$800 million, impairment charges resulting from changes to our hardware portfolio, and costs related to lease consolidation activities. First, we are reducing our overall workforce by approximately 10,000 jobs through the third quarter of fiscal year 2023, which represents less than 5% of our total employee base. While we are eliminating roles in some areas, we will continue to hire in key strategic areas. Second, we are allocating both our capital and talent to areas of secular growth and long-term competitiveness, while divesting in other areas. Third, we are consolidating our leases to create higher density across our workspaces, which will also impact our financial results through the remainder of fiscal year 2023, and we may make similar decisions in future periods as we continue to evaluate our real estate needs.

Refer to Risk Factors (Part II, Item 1A of this Form 10-Q) for a discussion of these factors and other risks.

Seasonality

Our revenue fluctuates quarterly and is generally higher in the second and fourth quarters of our fiscal year. Second quarter revenue is driven by corporate year-end spending trends in our major markets and holiday season spending by consumers, and fourth quarter revenue is driven by the volume of multi-year on-premises contracts executed during the period.

Change in Accounting Estimate

In July 2022, we completed an assessment of the useful lives of our server and network equipment. Due to investments in software that increased efficiencies in how we operate our server and network equipment, as well as advances in technology, we determined we should increase the estimated useful lives of both server and network equipment from four years to six years. This change in accounting estimate was effective beginning fiscal year 2023. Based on the carrying amount of server and network equipment included in property and equipment, net as of June 30, 2022, the effect of this change in estimate for the three months ended December 31, 2022 was an increase in operating income of \$945 million and net income of \$768 million, or \$0.10 per both basic and diluted share. The effect of this change for the six months ended December 31, 2022 was an increase in operating income of \$2.0 billion and net income of \$1.6 billion, or \$0.22 per both basic and diluted share. It is estimated this change will increase our fiscal year 2023 annual operating income by \$3.7 billion.

Reportable Segments

We report our financial performance based on the following segments: Productivity and Business Processes, Intelligent Cloud, and More Personal Computing. The segment amounts included in MD&A are presented on a basis consistent with our internal management reporting. We have recast certain prior period amounts to conform to the way we internally manage and monitor our business.

Additional information on our reportable segments is contained in Note 17 – Segment Information and Geographic Data of the Notes to Financial Statements (Part I, Item 1 of this Form 10-Q).

Metrics

We use metrics in assessing the performance of our business and to make informed decisions regarding the allocation of resources. We disclose metrics to enable investors to evaluate progress against our ambitions, provide transparency into performance trends, and reflect the continued evolution of our products and services. Our commercial and other business metrics are fundamentally connected based on how customers use our products and services. The metrics are disclosed in the MD&A or the Notes to Financial Statements (Part I, Item 1 of this Form 10-Q). Financial metrics are calculated based on financial results prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"), and growth comparisons relate to the corresponding period of last fiscal year.

In the first quarter of fiscal year 2023, we made updates to the presentation and method of calculation for certain metrics, most notably expanding our Surface metric into a broader Devices metric to incorporate additional revenue streams, along with other minor changes to align with how we manage our businesses.

Commercial

Our commercial business primarily consists of Server products and cloud services, Office Commercial, Windows Commercial, the commercial portion of LinkedIn, Enterprise Services, and Dynamics. Our commercial metrics allow management and investors to assess the overall health of our commercial business and include leading indicators of future performance.

Commercial remaining performance obligation	Commercial portion of revenue allocated to remaining performance obligations, which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods
Microsoft Cloud revenue	Revenue from Azure and other cloud services, Office 365 Commercial, the commercial portion of LinkedIn, Dynamics 365, and other commercial cloud properties
Microsoft Cloud gross margin percentage	Gross margin percentage for our Microsoft Cloud business

Productivity and Business Processes and Intelligent Cloud

Metrics related to our Productivity and Business Processes and Intelligent Cloud segments assess the health of our core businesses within these segments. The metrics reflect our cloud and on-premises product strategies and trends.

Office Commercial products and cloud services revenue growth	Revenue from Office Commercial products and cloud services (Office 365 subscriptions, the Office 365 portion of Microsoft 365 Commercial subscriptions, and Office licensed on-premises), comprising Office, Exchange, SharePoint, Microsoft Teams, Office 365 Security and Compliance, and Microsoft Viva
Office Consumer products and cloud services revenue growth	Revenue from Office Consumer products and cloud services, including Microsoft 365 Consumer subscriptions, Office licensed on-premises, and other Office services
Office 365 Commercial seat growth	The number of Office 365 Commercial seats at end of period where seats are paid users covered by an Office 365 Commercial subscription
Microsoft 365 Consumer subscribers	The number of Microsoft 365 Consumer subscribers at end of period
Dynamics products and cloud services revenue growth	Revenue from Dynamics products and cloud services, including Dynamics 365, comprising a set of intelligent, cloud-based applications across ERP, CRM, Customer Insights, Power Apps, and Power Automate; and on-premises ERP and CRM applications
LinkedIn revenue growth	Revenue from LinkedIn, including Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions
Server products and cloud services revenue growth	Revenue from Server products and cloud services, including Azure and other cloud services; SQL Server, Windows Server, Visual Studio, System Center, and related Client Access Licenses ("CALs"); and Nuance and GitHub

More Personal Computing

Metrics related to our More Personal Computing segment assess the performance of key lines of business within this segment. These metrics provide strategic product insights which allow us to assess the performance across our commercial and consumer businesses. As we have diversity of target audiences and sales motions within the Windows business, we monitor metrics that are reflective of those varying motions.

Windows OEM revenue growth	Revenue from sales of Windows Pro and non-Pro licenses sold through the OEM channel
Windows Commercial products and cloud services revenue growth	Revenue from Windows Commercial products and cloud services, comprising volume licensing of the Windows operating system, Windows cloud services, and other Windows commercial offerings
Devices revenue growth	Revenue from Devices, including Surface, HoloLens, and PC accessories
Xbox content and services revenue growth	Revenue from Xbox content and services, comprising first- and third-party content (including games and in-game content), Xbox Game Pass and other subscriptions, Xbox Cloud Gaming, third-party disc royalties, advertising, and other cloud services
Search and news advertising revenue (ex TAC) growth	Revenue from search and news advertising excluding traffic acquisition costs ("TAC") paid to Bing Ads network publishers and news partners



SUMMARY RESULTS OF OPERATIONS

(In millions, except percentages and per share amounts)	Three Months Ended December 31,		Percentage Change	Six Months Ended December 31,		Percentage Change
	2022	2021		2022	2021	
Revenue	\$ 52,747	\$ 51,728	2%	\$ 102,869	\$ 97,045	6%
Gross margin	35,259	34,768	1%	69,929	66,439	5%
Operating income	20,399	22,247	(8)%	41,917	42,485	(1)%
Net income	16,425	18,765	(12)%	33,981	39,270	(13)%
Diluted earnings per share	2.20	2.48	(11)%	4.54	5.19	(13)%
Adjusted gross margin (non-GAAP)	35,411	34,768	2%	70,081	66,439	5%
Adjusted operating income (non-GAAP)	21,570	22,247	(3)%	43,088	42,485	1%
Adjusted net income (non-GAAP)	17,371	18,765	(7)%	34,927	35,979	(3)%
Adjusted diluted earnings per share (non-GAAP)	2.32	2.48	(6)%	4.67	4.76	(2)%

Adjusted gross margin, operating income, net income, and diluted earnings per share ("EPS") are non-GAAP financial measures. Current year non-GAAP financial measures exclude the impact of the Q2 charge, which includes employee severance expenses, impairment charges resulting from changes to our hardware portfolio, and costs related to lease consolidation activities. Prior year non-GAAP financial measures exclude the net income tax benefit related to transfer of intangible properties in the first quarter of fiscal year 2022. Refer to Note 11 – Income Taxes of the Notes to Financial Statements (Part I, Item 1 of this Form 10-Q) for further discussion. Refer to the Non-GAAP Financial Measures section below for a reconciliation of our financial results reported in accordance with GAAP to non-GAAP financial results.

Three Months Ended December 31, 2022 Compared with Three Months Ended December 31, 2021

Revenue increased \$1.0 billion or 2% driven by growth in Intelligent Cloud and Productivity and Business Processes, offset in part by a decline in More Personal Computing. Intelligent Cloud revenue increased driven by Azure and other cloud services. Productivity and Business Processes revenue increased driven by Office 365 Commercial. More Personal Computing revenue decreased driven by declines in Windows, Devices, and Gaming.

Cost of revenue increased \$528 million or 3% driven by growth in Microsoft Cloud, offset in part by a reduction in depreciation expense due to the change in accounting estimate for the useful lives of our server and network equipment.

Gross margin increased \$491 million or 1% driven by growth in Intelligent Cloud and Productivity and Business Processes and the change in accounting estimate, offset in part by a decline in More Personal Computing.

- Gross margin percentage decreased slightly. Excluding the impact of the change in accounting estimate, gross margin percentage decreased 2 points driven by reductions in More Personal Computing and Intelligent Cloud, offset in part by sales mix shift.
- Microsoft Cloud gross margin percentage increased 2 points to 72%. Excluding the impact of the change in accounting estimate, Microsoft Cloud gross margin percentage decreased 1 point driven by sales mix shift to Azure and other cloud services and higher energy costs.

Operating expenses increased \$2.3 billion or 19% driven by employee severance expenses, investments in cloud engineering, the Nuance acquisition, and LinkedIn.

Key changes in operating expenses were:

- Research and development expenses increased \$1.1 billion or 19% driven by investments in cloud engineering, impairment charges resulting from changes to our hardware portfolio, and LinkedIn. Research and development included a favorable foreign currency impact of 2%.
- Sales and marketing expenses increased \$300 million or 6% driven by the Nuance acquisition and investments in commercial sales. Sales and marketing included a favorable foreign currency impact of 3%.
- General and administrative expenses increased \$953 million or 69% driven by employee severance expenses. General and administrative included a favorable foreign currency impact of 2%.

Operating income decreased \$1.8 billion or 8% driven by a decline in More Personal Computing, offset in part by the change in accounting estimate.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 5%, 7%, and 8%, respectively. Cost of revenue and operating expenses both included a favorable foreign currency impact of 2%.

Current year gross margin, operating income, net income, and diluted EPS were negatively impacted by the Q2 charge, which resulted in decreases of \$152 million, \$1.2 billion, \$946 million, and \$0.12, respectively.

Six Months Ended December 31, 2022 Compared with Six Months Ended December 31, 2021

Revenue increased \$5.8 billion or 6% driven by growth in Intelligent Cloud and Productivity and Business Processes, offset in part by a decline in More Personal Computing. Intelligent Cloud revenue increased driven by Azure and other cloud services. Productivity and Business Processes revenue increased driven by Office 365 Commercial and LinkedIn. More Personal Computing revenue decreased driven by declines in Windows, Devices, and Gaming, offset in part by growth in Search and news advertising.

Cost of revenue increased \$2.3 billion or 8% driven by growth in Microsoft Cloud, offset in part by the change in accounting estimate.

Gross margin increased \$3.5 billion or 5% driven by growth in Intelligent Cloud and Productivity and Business Processes and the change in accounting estimate, offset in part by a decline in More Personal Computing.

- Gross margin percentage decreased slightly. Excluding the impact of the change in accounting estimate, gross margin percentage decreased 2 points driven by reductions in More Personal Computing and Intelligent Cloud, offset in part by sales mix shift.
- Microsoft Cloud gross margin percentage increased 2 points to 72%. Excluding the impact of the change in accounting estimate, Microsoft Cloud gross margin percentage decreased 1 point driven by sales mix shift to Azure and other cloud services and higher energy costs.

Operating expenses increased \$4.1 billion or 17% driven by investment in cloud engineering, employee severance expenses, LinkedIn, the Nuance acquisition, and commercial sales.

Key changes in operating expenses were:

- Research and development expenses increased \$2.1 billion or 19% driven by investments in cloud engineering and LinkedIn.
- Sales and marketing expenses increased \$879 million or 9% driven by investments in commercial sales and the Nuance acquisition. Sales and marketing included a favorable foreign currency impact of 4%.
- General and administrative expenses increased \$1.1 billion or 40% driven by employee severance expenses. General and administrative included a favorable foreign currency impact of 3%.

Operating income decreased \$568 million or 1% driven by a decline in More Personal Computing, offset in part by the change in accounting estimate and growth in Productivity and Business Processes and Intelligent Cloud.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 5%, 7%, and 8%, respectively. Cost of revenue and operating expenses included a favorable foreign currency impact of 2% and 3%, respectively.

Current year gross margin, operating income, net income, and diluted EPS were negatively impacted by the Q2 charge, which resulted in decreases of \$152 million, \$1.2 billion, \$946 million, and \$0.13, respectively. Prior year net income and diluted EPS were positively impacted by the net tax benefit related to the transfer of intangible properties, which resulted in an increase to net income and diluted EPS of \$3.3 billion and \$0.43, respectively.

SEGMENT RESULTS OF OPERATIONS

(In millions, except percentages)	Three Months Ended December 31,		Percentage Change	Six Months Ended December 31,		Percentage Change
	2022	2021		2022	2021	
Revenue						
Productivity and Business Processes	\$ 17,002	\$ 15,936	7%	\$ 33,467	\$ 30,975	8%
Intelligent Cloud	21,508	18,262	18%	41,833	35,174	19%
More Personal Computing	14,237	17,530	(19)%	27,569	30,896	(11)%
Total	\$ 52,747	\$ 51,728	2%	\$ 102,869	\$ 97,045	6%
Operating Income						
Productivity and Business Processes	\$ 8,175	\$ 7,688	6%	\$ 16,498	\$ 15,269	8%
Intelligent Cloud	8,904	8,323	7%	17,882	16,004	12%
More Personal Computing	3,320	6,236	(47)%	7,537	11,212	(33)%
Total	\$ 20,399	\$ 22,247	(8)%	\$ 41,917	\$ 42,485	(1)%

Reportable Segments

Three Months Ended December 31, 2022 Compared with Three Months Ended December 31, 2021

Productivity and Business Processes

Revenue increased \$1.1 billion or 7%.

- Office Commercial products and cloud services revenue increased \$627 million or 7%. Office 365 Commercial revenue grew 11% with seat growth of 12%, driven by small and medium business and frontline worker offerings, as well as growth in revenue per user. Office Commercial products revenue declined 30% driven by continued customer shift to cloud offerings.
- Office Consumer products and cloud services revenue decreased \$39 million or 2%. Microsoft 365 Consumer subscribers grew 12% to 63.2 million.
- LinkedIn revenue increased \$345 million or 10% driven by Talent Solutions.
- Dynamics products and cloud services revenue increased 13% driven by Dynamics 365 growth of 21%.

Operating income increased \$487 million or 6%.

- Gross margin increased \$1.0 billion or 8% driven by growth in Office 365 Commercial. Gross margin percentage increased. Excluding the impact of the change in accounting estimate, gross margin percentage decreased slightly driven by sales mix shift to cloud offerings.
- Operating expenses increased \$554 million or 12% driven by investment in LinkedIn and employee severance expenses.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 6%, 8%, and 11%, respectively. Operating expenses included a favorable foreign currency impact of 2%.

Intelligent Cloud

Revenue increased \$3.2 billion or 18%.

- Server products and cloud services revenue increased \$3.2 billion or 20% driven by Azure and other cloud services. Azure and other cloud services revenue grew 31% driven by growth in our consumption-based services. Server products revenue decreased 2%.
- Enterprise Services revenue increased \$39 million or 2% driven by growth in Enterprise Support Services, offset by a decline in Microsoft Consulting Services.

Operating income increased \$581 million or 7%.

- Gross margin increased \$2.2 billion or 17% driven by growth in Azure and other cloud services and the change in accounting estimate. Gross margin percentage decreased slightly. Excluding the impact of the change in accounting estimate, gross margin percentage decreased 3 points driven by sales mix shift to Azure and other cloud services and higher energy costs.
- Operating expenses increased \$1.6 billion or 34% driven by employee severance expenses, investments in Azure, and the Nuance acquisition.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 6%, 6%, and 8%, respectively. Operating expenses included a favorable foreign currency impact of 3%.

More Personal Computing

Revenue decreased \$3.3 billion or 19%.

- Windows revenue decreased \$1.8 billion or 27% driven by a decrease in Windows OEM. Windows OEM revenue decreased 39% on a strong prior year comparable, driven by continued PC market weakness and 3 points of negative impact from the prior year Windows 11 revenue deferral. Windows Commercial products and cloud services revenue decreased 3% driven by a decline in standalone product sales.
- Devices revenue decreased \$927 million or 39% driven by continued PC market weakness and execution challenges on new product launches.
- Gaming revenue decreased \$684 million or 13% driven by declines in Xbox content and services and Xbox hardware. Xbox content and services revenue decreased 12% on a strong prior year comparable impacted by first-party game launches, driven by declines in first-party content and a lower rate of monetization in third-party content, offset in part by growth in Xbox Game Pass subscriptions. Xbox hardware revenue decreased 13% driven by lower price and volume of consoles sold.
- Search and news advertising revenue increased \$159 million or 5%. Search and news advertising revenue excluding traffic acquisition costs increased 10% driven by higher search volume and the Xandr acquisition, offset in part by lower revenue per search.

Operating income decreased \$2.9 billion or 47%.

- Gross margin decreased \$2.7 billion or 29% driven by declines in Windows and Devices. Gross margin percentage decreased driven by reductions in Devices, including the impact of impairment charges resulting from changes to our hardware portfolio, and sales mix shift to lower margin businesses.
- Operating expenses increased \$198 million or 6% driven by employee severance expenses and investments in Search and news advertising, offset in part by a decline in Devices.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 3%, 5%, and 7%, respectively. Operating expenses included a favorable foreign currency impact of 3%.

Six Months Ended December 31, 2022 Compared with Six Months Ended December 31, 2021

Productivity and Business Processes

Revenue increased \$2.5 billion or 8%.

- Office Commercial products and cloud services revenue increased \$1.3 billion or 7%. Office 365 Commercial revenue grew 11% with seat growth of 12%, driven by small and medium business and frontline worker offerings, as well as growth in revenue per user. Office Commercial products revenue declined 29% driven by continued customer shift to cloud offerings.
- Office Consumer products and cloud services revenue increased \$66 million or 2% with continued growth in Microsoft 365 Consumer subscription revenue.
- LinkedIn revenue increased \$872 million or 13% driven by Talent Solutions.
- Dynamics products and cloud services revenue increased 14% driven by Dynamics 365 growth of 23%.

Operating income increased \$1.2 billion or 8%.

- Gross margin increased \$2.4 billion or 10% driven by growth in Office 365 Commercial and LinkedIn. Gross margin percentage increased. Excluding the impact of the change in accounting estimate, gross margin percentage decreased slightly driven by sales mix shift to cloud offerings.
- Operating expenses increased \$1.1 billion or 12% driven by investments in LinkedIn and cloud engineering, as well as employee severance expenses.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 6%, 7%, and 10%, respectively. Operating expenses included a favorable foreign currency impact of 3%.

Intelligent Cloud

Revenue increased \$6.7 billion or 19%.

- Server products and cloud services revenue increased \$6.5 billion or 21% driven by Azure and other cloud services. Azure and other cloud services revenue grew 33% driven by growth in our consumption-based services. Server products revenue decreased 1%.
- Enterprise Services revenue increased \$124 million or 3% driven by growth in Enterprise Support Services, offset in part by a decline in Microsoft Consulting Services.

Operating income increased \$1.9 billion or 12%.

- Gross margin increased \$4.5 billion or 18% driven by growth in Azure and other cloud services and the change in accounting estimate. Gross margin percentage decreased slightly. Excluding the impact of the change in accounting estimate, gross margin percentage decreased 3 points driven by sales mix shift to Azure and other cloud services and higher energy costs.
- Operating expenses increased \$2.7 billion or 30% driven by investments in Azure, the Nuance acquisition, and employee severance expenses.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 6%, 7%, and 8%, respectively. Operating expenses included a favorable foreign currency impact of 3%.

More Personal Computing

Revenue decreased \$3.3 billion 11%.

- Windows revenue decreased \$2.1 billion or 18% driven by a decrease in Windows OEM. Windows OEM revenue decreased 28% driven by continued PC market weakness. Windows Commercial products and cloud services revenue increased 2% driven by demand for Microsoft 365, offset in part by a decline in standalone product sales.
- Devices revenue decreased \$893 million or 24% driven by continued PC market weakness and execution challenges on new product launches.
- Gaming revenue decreased \$667 million or 7% driven by declines in Xbox content and services and Xbox hardware. Xbox content and services revenue decreased 8% driven by declines in first-party content and in third-party content, with lower rate of monetization and engagement hours, offset in part by growth in Xbox Game Pass subscriptions. Xbox hardware revenue decreased 5% driven by lower price of consoles sold.
- Search and news advertising revenue increased \$431 million or 8%. Search and news advertising revenue excluding traffic acquisition costs increased 13% driven by higher search volume and the Xandr acquisition, offset in part by lower revenue per search.

Operating income decreased \$3.7 billion or 33%.

- Gross margin decreased \$3.4 billion or 20% driven by declines in Windows, Devices, and Gaming. Gross margin percentage decreased driven by reductions in Devices, including the impact of impairment charges resulting from changes to our hardware portfolio, and sales mix shift to lower margin businesses.
- Operating expenses increased \$269 million or 4% driven by investment in Search and news advertising and employee severance expenses, offset in part by a decline in Devices.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 3%, 5%, and 7%, respectively. Operating expenses included a favorable foreign currency impact of 3%.

OPERATING EXPENSES

Research and Development

(In millions, except percentages)	Three Months Ended December 31,		Percentage Change	Six Months Ended December 31,		Percentage Change
	2022	2021		2022	2021	
Research and development	\$ 6,844	\$ 5,758	19%	\$ 13,472	\$ 11,357	19%
As a percent of revenue	13%	11%	2ppt	13%	12%	1ppt

Research and development expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with product development. Research and development expenses also include third-party development and programming costs, localization costs incurred to translate software for international markets, and the amortization of purchased software code and services content.

Three Months Ended December 31, 2022 Compared with Three Months Ended December 31, 2021

Research and development expenses increased \$1.1 billion or 19% driven by investments in cloud engineering, impairment charges resulting from changes to our hardware portfolio, and LinkedIn. Research and development included a favorable foreign currency impact of 2%.

Six Months Ended December 31, 2022 Compared with Six Months Ended December 31, 2021

Research and development expenses increased \$2.1 billion or 19% driven by investments in cloud engineering and LinkedIn.

Sales and Marketing

(In millions, except percentages)	Three Months Ended December 31,		Percentage Change	Six Months Ended December 31,		Percentage Change
	2022	2021		2022	2021	
Sales and marketing	\$ 5,679	\$ 5,379	6%	\$ 10,805	\$ 9,926	9%
As a percent of revenue	11%	10%	1ppt	11%	10%	1ppt

Sales and marketing expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with sales and marketing personnel, and the costs of advertising, promotions, trade shows, seminars, and other programs.

Three Months Ended December 31, 2022 Compared with Three Months Ended December 31, 2021

Sales and marketing expenses increased \$300 million or 6% driven by the Nuance acquisition and investments in commercial sales. Sales and marketing included a favorable foreign currency impact of 3%.

Six Months Ended December 31, 2022 Compared with Six Months Ended December 31, 2021

Sales and marketing expenses increased \$879 million or 9% driven by investments in commercial sales and the Nuance acquisition. Sales and marketing included a favorable foreign currency impact of 4%.

General and Administrative

(In millions, except percentages)	Three Months Ended December 31,		Percentage Change	Six Months Ended December 31,		Percentage Change
	2022	2021		2022	2021	
General and administrative	\$ 2,337	\$ 1,384	69%	\$ 3,735	\$ 2,671	40%
As a percent of revenue	4%	3%	1ppt	4%	3%	1ppt

General and administrative expenses include payroll, employee benefits, stock-based compensation expense, employee severance expense, and other headcount-related expenses associated with finance, legal, facilities, certain human resources and other administrative personnel, certain taxes, and legal and other administrative fees.

Three Months Ended December 31, 2022 Compared with Three Months Ended December 31, 2021

General and administrative expenses increased \$953 million or 69% driven by employee severance expenses. General and administrative included a favorable foreign currency impact of 2%.

Six Months Ended December 31, 2022 Compared with Six Months Ended December 31, 2021

General and administrative expenses increased \$1.1 billion or 40% driven by employee severance expenses. General and administrative included a favorable foreign currency impact of 3%.

OTHER INCOME (EXPENSE), NET

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

(In millions)	Three Months Ended December 31,		Six Months Ended December 31,	
	2022	2021	2022	2021
Interest and dividends income	\$ 700	\$ 503	\$ 1,341	\$ 1,023
Interest expense	(490)	(525)	(990)	(1,064)
Net recognized gains (losses) on investments	(15)	300	(2)	671
Net gains (losses) on derivatives	(199)	7	(190)	0
Net losses on foreign currency remeasurements	(18)	(13)	(96)	(78)
Other, net	(38)	(4)	(69)	2
Total	\$ (60)	\$ 268	\$ (6)	\$ 554

We use derivative instruments to manage risks related to foreign currencies, equity prices, interest rates, and credit; enhance investment returns; and facilitate portfolio diversification. Gains and losses from changes in fair values of derivatives that are not designated as hedging instruments are primarily recognized in other income (expense), net.

Three Months Ended December 31, 2022 Compared with Three Months Ended December 31, 2021

Interest and dividends income increased due to higher yields, offset in part by lower portfolio balances. Interest expense decreased due to a decrease in outstanding long-term debt due to debt maturities. Net recognized losses on investments increased due to losses on equity securities in the current period compared to gains in the prior period. Net losses on derivatives increased due to losses on a forward purchase agreement for shares of the London Stock Exchange Group.

Six Months Ended December 31, 2022 Compared with Six Months Ended December 31, 2021

Interest and dividends income increased due to higher yields, offset in part by lower portfolio balances. Interest expense decreased due to a decrease in outstanding long-term debt due to debt maturities. Net recognized losses on investments increased due to losses on fixed income securities in the current period compared to gains in the prior period, and lower gains on equity securities in the current period. Net losses on derivatives increased due to losses on a forward purchase agreement for shares of the London Stock Exchange Group.

INCOME TAXES

Effective Tax Rate

Our effective tax rate was 19% and 17% for the three months ended December 31, 2022 and 2021, respectively, and 19% and 9% for the six months ended December 31, 2022 and 2021, respectively. The increase in our effective tax rate for the three months ended December 31, 2022 compared to the prior year was primarily due to a decrease in tax benefits relating to stock-based compensation. The increase in our effective tax rate for the six months ended December 31, 2022 compared to the prior year was primarily due to a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022 related to the transfer of intangible properties and a decrease in tax benefits relating to stock-based compensation.

In the first quarter of fiscal year 2022, we transferred certain intangible properties from our Puerto Rico subsidiary to the U.S. The transfer of intangible properties resulted in a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022, as the value of future U.S. tax deductions exceeded the current tax liability from the U.S. global intangible low-taxed income tax.

Our effective tax rate was lower than the U.S. federal statutory rate for the three and six months ended December 31, 2022, primarily due to earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations center in Ireland.

Uncertain Tax Positions

We settled a portion of the Internal Revenue Service (“IRS”) audit for tax years 2004 to 2006 in fiscal year 2011. In February 2012, the IRS withdrew its 2011 Revenue Agents Report related to unresolved issues for tax years 2004 to 2006 and reopened the audit phase of the examination. We also settled a portion of the IRS audit for tax years 2007 to 2009 in fiscal year 2016, and a portion of the IRS audit for tax years 2010 to 2013 in fiscal year 2018. In the second quarter of fiscal year 2021, we settled an additional portion of the IRS audits for tax years 2004 to 2013 and made a payment of \$1.7 billion, including tax and interest. We remain under audit for tax years 2004 to 2017.

As of December 31, 2022, the primary unresolved issues for the IRS audits relate to transfer pricing, which could have a material impact in our consolidated financial statements when the matters are resolved. We believe our allowances for income tax contingencies are adequate. We have not received a proposed assessment for the unresolved key transfer pricing issues and do not expect a final resolution of these issues in the next 12 months. Based on the information currently available, we do not anticipate a significant increase or decrease to our tax contingencies for these issues within the next 12 months.

We are subject to income tax in many jurisdictions outside the U.S. Our operations in certain jurisdictions remain subject to examination for tax years 1996 to 2022, some of which are currently under audit by local tax authorities. The resolution of each of these audits is not expected to be material to our consolidated financial statements.

NON-GAAP FINANCIAL MEASURES

Adjusted gross margin, operating income, net income, and diluted EPS are non-GAAP financial measures. Current year non-GAAP financial measures exclude the impact of the Q2 charge, which includes employee severance expenses, impairment charges resulting from changes to our hardware portfolio, and costs related to lease consolidation activities. Prior year non-GAAP financial measures exclude the net income tax benefit related to transfer of intangible properties in the first quarter of fiscal year 2022. We believe these non-GAAP measures aid investors by providing additional insight into our operational performance and help clarify trends affecting our business. For comparability of reporting, management considers non-GAAP measures in conjunction with GAAP financial results in evaluating business performance. These non-GAAP financial measures presented should not be considered a substitute for, or superior to, the measures of financial performance prepared in accordance with GAAP.

The following table reconciles our financial results reported in accordance with GAAP to non-GAAP financial results:

(In millions, except percentages and per share amounts)	Three Months Ended December 31,		Percentage Change	Six Months Ended December 31,		Percentage Change
	2022	2021		2022	2021	
Gross margin	\$ 35,259	\$ 34,768	1%	\$ 69,929	\$ 66,439	5%
Severance, hardware-related impairment, and lease consolidation costs	152	0	*	152	0	*
Adjusted gross margin (non-GAAP)	\$ 35,411	\$ 34,768	2%	\$ 70,081	\$ 66,439	5%
Operating income	\$ 20,399	\$ 22,247	(8)%	\$ 41,917	\$ 42,485	(1)%
Severance, hardware-related impairment, and lease consolidation costs	1,171	0	*	1,171	0	*
Adjusted operating income (non-GAAP)	\$ 21,570	\$ 22,247	(3)%	\$ 43,088	\$ 42,485	1%
Net income	\$ 16,425	\$ 18,765	(12)%	\$ 33,981	\$ 39,270	(13)%
Severance, hardware-related impairment, and lease consolidation costs	946	0	*	946	0	*
Net income tax benefit related to transfer of intangible properties	0	0	*	0	(3,291)	*
Adjusted net income (non-GAAP)	\$ 17,371	\$ 18,765	(7)%	\$ 34,927	\$ 35,979	(3)%
Diluted earnings per share	\$ 2.20	\$ 2.48	(11)%	\$ 4.54	\$ 5.19	(13)%
Severance, hardware-related impairment, and lease consolidation costs	0.12	0	*	0.13	0	*
Net income tax benefit related to transfer of intangible properties	0	0	*	0	(0.43)	*
Adjusted diluted earnings per share (non-GAAP)	\$ 2.32	\$ 2.48	(6)%	\$ 4.67	\$ 4.76	(2)%

* Not meaningful.

LIQUIDITY AND CAPITAL RESOURCES

We expect existing cash, cash equivalents, short-term investments, cash flows from operations, and access to capital markets to continue to be sufficient to fund our operating activities and cash commitments for investing and financing activities, such as dividends, share repurchases, debt maturities, material capital expenditures, and the transition tax related to the Tax Cuts and Jobs Act (“TCJA”), for at least the next 12 months and thereafter for the foreseeable future.

Cash, Cash Equivalents, and Investments

Cash, cash equivalents, and short-term investments totaled \$99.5 billion and \$104.8 billion as of December 31, 2022 and June 30, 2022, respectively. Equity investments were \$7.1 billion and \$6.9 billion as of December 31, 2022 and June 30, 2022, respectively. Our short-term investments are primarily intended to facilitate liquidity and capital preservation. They consist predominantly of highly liquid investment-grade fixed-income securities, diversified among industries and individual issuers. The investments are predominantly U.S. dollar-denominated securities, but also include foreign currency-denominated securities to diversify risk. Our fixed-income investments are exposed to interest rate risk and credit risk. The credit risk and average maturity of our fixed-income portfolio are managed to achieve economic returns that correlate to certain fixed-income indices. The settlement risk related to these investments is insignificant given that the short-term investments held are primarily highly liquid investment-grade fixed-income securities.

Valuation

In general, and where applicable, we use quoted prices in active markets for identical assets or liabilities to determine the fair value of our financial instruments. This pricing methodology applies to our Level 1 investments, such as U.S. government securities, common and preferred stock, and mutual funds. If quoted prices in active markets for identical assets or liabilities are not available to determine fair value, then we use quoted prices for similar assets and liabilities or inputs other than the quoted prices that are observable either directly or indirectly. This pricing methodology applies to our Level 2 investments, such as commercial paper, certificates of deposit, U.S. agency securities, foreign government bonds, mortgage- and asset-backed securities, corporate notes and bonds, and municipal securities. Level 3 investments are valued using internally-developed models with unobservable inputs. Assets and liabilities measured at fair value on a recurring basis using unobservable inputs are an immaterial portion of our portfolio.

A majority of our investments are priced by pricing vendors and are generally Level 1 or Level 2 investments as these vendors either provide a quoted market price in an active market or use observable inputs for their pricing without applying significant adjustments. Broker pricing is used mainly when a quoted price is not available, the investment is not priced by our pricing vendors, or when a broker price is more reflective of fair values in the market in which the investment trades. Our broker-priced investments are generally classified as Level 2 investments because the broker prices these investments based on similar assets without applying significant adjustments. In addition, all our broker-priced investments have a sufficient level of trading volume to demonstrate that the fair values used are appropriate for these investments. Our fair value processes include controls that are designed to ensure appropriate fair values are recorded. These controls include model validation, review of key model inputs, analysis of period-over-period fluctuations, and independent recalculation of prices where appropriate.

Cash Flows

Cash from operations decreased \$4.7 billion to \$34.4 billion for the six months ended December 31, 2022, mainly due to an increase in cash paid to employees and suppliers and cash used to pay income taxes, offset in part by an increase in cash received from customers. Cash used in financing decreased \$6.0 billion to \$22.2 billion for the six months ended December 31, 2022, mainly due to a \$4.1 billion decrease in common stock repurchases and a \$3.1 billion decrease in repayments of debt. Cash used in investing increased \$5.9 billion to \$10.3 billion for the six months ended December 31, 2022, due to a \$5.4 billion decrease in cash from net investment purchases, sales, and maturities, an \$882 million increase in additions to property and equipment, and a \$655 million increase in other investing to facilitate the purchase of components, offset in part by a \$1.0 billion decrease in cash used for acquisitions of companies, net of cash acquired, and purchases of intangible and other assets.

Debt Proceeds

We issue debt to take advantage of favorable pricing and liquidity in the debt markets, reflecting our credit rating and the low interest rate environment. The proceeds of these issuances were or will be used for general corporate purposes, which may include, among other things, funding for working capital, capital expenditures, repurchases of capital stock, acquisitions, and repayment of existing debt. Refer to Note 10 – Debt of the Notes to Financial Statements (Part I, Item 1 of this Form 10-Q) for further discussion.

Unearned Revenue

Unearned revenue comprises mainly unearned revenue related to volume licensing programs, which may include Software Assurance (“SA”) and cloud services. Unearned revenue is generally invoiced annually at the beginning of each contract period for multi-year agreements and recognized ratably over the coverage period. Unearned revenue also includes payments for other offerings for which we have been paid in advance and earn the revenue when we transfer control of the product or service.

The following table outlines the expected future recognition of unearned revenue as of December 31, 2022:

(In millions)

Three Months Ending	
March 31, 2023	\$ 18,324
June 30, 2023	11,215
September 30, 2023	4,888
December 31, 2023	2,555
Thereafter	2,644
Total	\$ 39,626

If our customers choose to license cloud-based versions of our products and services rather than licensing transaction-based products and services, the associated revenue will shift from being recognized at the time of the transaction to being recognized over the subscription period or upon consumption, as applicable. Refer to Note 12 – Unearned Revenue of the Notes to Financial Statements (Part I, Item 1 of this Form 10-Q) for further discussion.

Material Cash Requirements and Other Obligations

Income Taxes

As a result of the TCJA, we are required to pay a one-time transition tax on deferred foreign income not previously subject to U.S. income tax. Under the TCJA, the transition tax is payable in interest-free installments over eight years, with 8% due in each of the first five years, 15% in year six, 20% in year seven, and 25% in year eight. We have paid transition tax of \$7.7 billion, which included \$1.5 billion during the six months ended December 31, 2022. The remaining transition tax of \$10.5 billion is payable over the next three years, with \$2.5 billion payable within 12 months.

Provisions enacted in the TCJA related to the capitalization for tax purposes of research and experimental expenditures became effective on July 1, 2022. These provisions require us to capitalize research and experimental expenditures and amortize them on the U.S. tax return over five or fifteen years, depending on where research is conducted. The final foreign tax credit regulations, also effective on July 1, 2022, introduced significant changes to foreign tax credit calculations in the U.S. tax return. While these provisions are not expected to have a material impact on our fiscal year 2023 effective tax rate on a net basis, our cash paid for taxes would increase unless these provisions are postponed or modified through legislative processes.

Share Repurchases

For the six months ended December 31, 2022 and 2021, we repurchased 37 million shares and 41 million shares of our common stock for \$9.2 billion and \$12.4 billion, respectively, through our share repurchase programs. All repurchases were made using cash resources. As of December 31, 2022, \$31.5 billion remained of our \$60 billion share repurchase program. Refer to Note 15 – Stockholders’ Equity of the Notes to Financial Statements (Part I, Item 1 of this Form 10-Q) for further discussion.

Dividends

For the six months ended December 31, 2022 and 2021, our Board of Directors declared quarterly dividends of \$0.68 per share and \$0.62 per share, respectively. We intend to continue returning capital to shareholders in the form of dividends, subject to declaration by our Board of Directors. Refer to Note 15 – Stockholders’ Equity of the Notes to Financial Statements (Part I, Item 1 of this Form 10-Q) for further discussion.

Other Planned Uses of Capital

On January 18, 2022, we entered into a definitive agreement to acquire Activision Blizzard, Inc. (“Activision Blizzard”) for \$95.00 per share in an all-cash transaction valued at \$68.7 billion, inclusive of Activision Blizzard’s net cash. The acquisition has been approved by Activision Blizzard’s shareholders. We are continuing to engage with regulators reviewing the transaction and are working toward closing it in fiscal year 2023, subject to obtaining required regulatory approvals and satisfaction of other customary closing conditions.

We will continue to invest in sales, marketing, product support infrastructure, and existing and advanced areas of technology, as well as continue making acquisitions that align with our business strategy. Additions to property and equipment will continue, including new facilities, datacenters, and computer systems for research and development, sales and marketing, support, and administrative staff. We expect capital expenditures to increase in coming years to support growth in our cloud offerings. We have operating and finance leases for datacenters, corporate offices, research and development facilities, Microsoft Experience Centers, and certain equipment. We have not engaged in any related party transactions or arrangements with unconsolidated entities or other persons that are reasonably likely to materially affect liquidity or the availability of capital resources.

CRITICAL ACCOUNTING ESTIMATES

Our consolidated financial statements and accompanying notes are prepared in accordance with GAAP. Preparing consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. Critical accounting estimates are those estimates that involve a significant level of estimation uncertainty and could have a material impact on our financial condition or results of operations. We have critical accounting estimates in the areas of revenue recognition, impairment of investment securities, goodwill, research and development costs, legal and other contingencies, income taxes, and inventories.

Revenue Recognition

Our contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. When a cloud-based service includes both on-premises software licenses and cloud services, judgment is required to determine whether the software license is considered distinct and accounted for separately, or not distinct and accounted for together with the cloud service and recognized over time. Certain cloud services, primarily Office 365, depend on a significant level of integration, interdependency, and interrelation between the desktop applications and cloud services, and are accounted for together as one performance obligation. Revenue from Office 365 is recognized ratably over the period in which the cloud services are provided.

Judgment is required to determine the stand-alone selling price ("SSP") for each distinct performance obligation. We use a single amount to estimate SSP for items that are not sold separately, including on-premises licenses sold with SA or software updates provided at no additional charge. We use a range of amounts to estimate SSP when we sell each of the products and services separately and need to determine whether there is a discount to be allocated based on the relative SSP of the various products and services.

In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we may use information such as the size of the customer and geographic region in determining the SSP.

Due to the various benefits from and the nature of our SA program, judgment is required to assess the pattern of delivery, including the exercise pattern of certain benefits across our portfolio of customers.

Our products are generally sold with a right of return, we may provide other credits or incentives, and in certain instances we estimate customer usage of our products and services, which are accounted for as variable consideration when determining the amount of revenue to recognize. Returns and credits are estimated at contract inception and updated at the end of each reporting period if additional information becomes available. Changes to our estimated variable consideration were not material for the periods presented.

Impairment of Investment Securities

We review debt investments quarterly for credit losses and impairment. If the cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, credit quality of debt instrument issuers, and the extent to which the fair value is less than cost. This determination requires significant judgment. In making this judgment, we employ a systematic methodology that considers available quantitative and qualitative evidence in evaluating potential impairment of our investments. In addition, we consider specific adverse conditions related to the financial health of, and business outlook for, the investee. If we have plans to sell the security or it is more likely than not that we will be required to sell the security before recovery, then a decline in fair value below cost is recorded as an impairment charge in other income (expense), net and a new cost basis in the investment is established. If market, industry, and/or investee conditions deteriorate, we may incur future impairments.

Equity investments without readily determinable fair values are written down to fair value if a qualitative assessment indicates that the investment is impaired and the fair value of the investment is less than carrying value. We perform a qualitative assessment on a periodic basis. We are required to estimate the fair value of the investment to determine the amount of the impairment loss. Once an investment is determined to be impaired, an impairment charge is recorded in other income (expense), net.

Goodwill

We allocate goodwill to reporting units based on the reporting unit expected to benefit from the business combination. We evaluate our reporting units on an annual basis and, if necessary, reassign goodwill using a relative fair value allocation approach. Goodwill is tested for impairment at the reporting unit level (operating segment or one level below an operating segment) on an annual basis (May 1 for us) and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. These events or circumstances could include a significant change in the business climate, legal factors, operating performance indicators, competition, or sale or disposition of a significant portion of a reporting unit.

Application of the goodwill impairment test requires judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, assignment of goodwill to reporting units, and determination of the fair value of each reporting unit. The fair value of each reporting unit is estimated primarily through the use of a discounted cash flow methodology. This analysis requires significant judgments, including estimation of future cash flows, which is dependent on internal forecasts, estimation of the long-term rate of growth for our business, estimation of the useful life over which cash flows will occur, and determination of our weighted average cost of capital.

The estimates used to calculate the fair value of a reporting unit change from year to year based on operating results, market conditions, and other factors. Changes in these estimates and assumptions could materially affect the determination of fair value and goodwill impairment for each reporting unit.

Research and Development Costs

Costs incurred internally in researching and developing a computer software product are charged to expense until technological feasibility has been established for the product. Once technological feasibility is established, software costs are capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a product is established. We have determined that technological feasibility for our software products is reached after all high-risk development issues have been resolved through coding and testing. Generally, this occurs shortly before the products are released to production. The amortization of these costs is included in cost of revenue over the estimated life of the products.

Legal and Other Contingencies

The outcomes of legal proceedings and claims brought against us are subject to significant uncertainty. An estimated loss from a loss contingency such as a legal proceeding or claim is accrued by a charge to income if it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated. In determining whether a loss should be accrued we evaluate, among other factors, the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. Changes in these factors could materially impact our consolidated financial statements.

Income Taxes

The objectives of accounting for income taxes are to recognize the amount of taxes payable or refundable for the current year, and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in an entity's financial statements or tax returns. We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Accounting literature also provides guidance on derecognition of income tax assets and liabilities, classification of deferred income tax assets and liabilities, accounting for interest and penalties associated with tax positions, and income tax disclosures. Judgment is required in assessing the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. Variations in the actual outcome of these future tax consequences could materially impact our consolidated financial statements.

Inventories

Inventories are stated at average cost, subject to the lower of cost or net realizable value. Cost includes materials, labor, and manufacturing overhead related to the purchase and production of inventories. Net realizable value is the estimated selling price less estimated costs of completion, disposal, and transportation. We regularly review inventory quantities on hand, future purchase commitments with our suppliers, and the estimated utility of our inventory. These reviews include analysis of demand forecasts, product life cycle status, product development plans, current sales levels, pricing strategy, and component cost trends. If our review indicates a reduction in utility below carrying value, we reduce our inventory to a new cost basis through a charge to cost of revenue.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

RISKS

We are exposed to economic risk from foreign exchange rates, interest rates, credit risk, and equity prices. We use derivatives instruments to manage these risks, however, they may still impact our consolidated financial statements.

Foreign Currencies

Certain forecasted transactions, assets, and liabilities are exposed to foreign currency risk. We monitor our foreign currency exposures daily to maximize the economic effectiveness of our foreign currency positions, including hedges. Principal currency exposures include the Euro, Japanese yen, British pound, Canadian dollar, and Australian dollar.

Interest Rate

Securities held in our fixed-income portfolio are subject to different interest rate risks based on their maturities. We manage the average maturity of the fixed-income portfolio to achieve economic returns that correlate to certain global fixed-income indices.

Credit

Our fixed-income portfolio is diversified and consists primarily of investment-grade securities. We manage credit exposures relative to broad-based indices to facilitate portfolio diversification.

Equity

Securities held in our equity investments portfolio are subject to price risk.

SENSITIVITY ANALYSIS

The following table sets forth the potential loss in future earnings or fair values, including associated derivatives, resulting from hypothetical changes in relevant market rates or prices:

(In millions)

Risk Categories	Hypothetical Change	December 31, 2022	Impact
Foreign currency – Revenue	10% decrease in foreign exchange rates	\$ (7,837)	Earnings
Foreign currency – Investments	10% decrease in foreign exchange rates	(153)	Fair Value
Interest rate	100 basis point increase in U.S. treasury interest rates	(2,109)	Fair Value
Credit	100 basis point increase in credit spreads	(293)	Fair Value
Equity	10% decrease in equity market prices	(813)	Earnings

ITEM 4. CONTROLS AND PROCEDURES

Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness of our disclosure controls and procedures as required by Exchange Act Rule 13a-15(b) as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that these disclosure controls and procedures are effective. There were no changes in our internal control over financial reporting during the quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Refer to Note 14 – Contingencies of the Notes to Financial Statements (Part I, Item 1 of this Form 10-Q) for information regarding legal proceedings in which we are involved.

ITEM 1A. RISK FACTORS

Our operations and financial results are subject to various risks and uncertainties, including those described below, that could adversely affect our business, financial condition, results of operations, cash flows, and the trading price of our common stock.

STRATEGIC AND COMPETITIVE RISKS

We face intense competition across all markets for our products and services, which may lead to lower revenue or operating margins.

Competition in the technology sector

Our competitors range in size from diversified global companies with significant research and development resources to small, specialized firms whose narrower product lines may let them be more effective in deploying technical, marketing, and financial resources. Barriers to entry in many of our businesses are low and many of the areas in which we compete evolve rapidly with changing and disruptive technologies, shifting user needs, and frequent introductions of new products and services. Our ability to remain competitive depends on our success in making innovative products, devices, and services that appeal to businesses and consumers.

Competition among platform-based ecosystems

An important element of our business model has been to create platform-based ecosystems on which many participants can build diverse solutions. A well-established ecosystem creates beneficial network effects among users, application developers, and the platform provider that can accelerate growth. Establishing significant scale in the marketplace is necessary to achieve and maintain attractive margins. We face significant competition from firms that provide competing platforms.

- A competing vertically-integrated model, in which a single firm controls the software and hardware elements of a product and related services, has succeeded with some consumer products such as personal computers, tablets, phones, gaming consoles, wearables, and other endpoint devices. Competitors pursuing this model also earn revenue from services integrated with the hardware and software platform, including applications and content sold through their integrated marketplaces. They may also be able to claim security and performance benefits from their vertically integrated offer. We also offer some vertically-integrated hardware and software products and services. To the extent we shift a portion of our business to a vertically integrated model we increase our cost of revenue and reduce our operating margins.
- We derive substantial revenue from licenses of Windows operating systems on PCs. We face significant competition from competing platforms developed for new devices and form factors such as smartphones and tablet computers. These devices compete on multiple bases including price and the perceived utility of the device and its platform. Users are increasingly turning to these devices to perform functions that in the past were performed by personal computers. Even if many users view these devices as complementary to a personal computer, the prevalence of these devices may make it more difficult to attract application developers to our PC operating system platforms. Competing with operating systems licensed at low or no cost may decrease our PC operating system margins. Popular products or services offered on competing platforms could increase their competitive strength. In addition, some of our devices compete with products made by our original equipment manufacturer ("OEM") partners, which may affect their commitment to our platform.

- Competing platforms have content and application marketplaces with scale and significant installed bases. The variety and utility of content and applications available on a platform are important to device purchasing decisions. Users may incur costs to move data and buy new content and applications when switching platforms. To compete, we must successfully enlist developers to write applications for our platform and ensure that these applications have high quality, security, customer appeal, and value. Efforts to compete with competitors' content and application marketplaces may increase our cost of revenue and lower our operating margins. Competitors' rules governing their content and applications marketplaces may restrict our ability to distribute products and services through them in accordance with our technical and business model objectives.

Business model competition

Companies compete with us based on a growing variety of business models.

- Even as we transition more of our business to infrastructure-, platform-, and software-as-a-service business model, the license-based proprietary software model generates a substantial portion of our software revenue. We bear the costs of converting original ideas into software products through investments in research and development, offsetting these costs with the revenue received from licensing our products. Many of our competitors also develop and sell software to businesses and consumers under this model.
- Other competitors develop and offer free applications, online services, and content, and make money by selling third-party advertising. Advertising revenue funds development of products and services these competitors provide to users at no or little cost, competing directly with our revenue-generating products.
- Some companies compete with us by modifying and then distributing open source software at little or no cost to end users, and earning revenue on advertising or integrated products and services. These firms do not bear the full costs of research and development for the open source software. Some open source software mimics the features and functionality of our products.

The competitive pressures described above may cause decreased sales volumes, price reductions, and/or increased operating costs, such as for research and development, marketing, and sales incentives. This may lead to lower revenue, gross margins, and operating income.

Our increasing focus on cloud-based services presents execution and competitive risks. A growing part of our business involves cloud-based services available across the spectrum of computing devices. Our strategic vision is to compete and grow by building best-in-class platforms and productivity services for an intelligent cloud and an intelligent edge infused with artificial intelligence ("AI"). At the same time, our competitors are rapidly developing and deploying cloud-based services for consumers and business customers. Pricing and delivery models are evolving. Devices and form factors influence how users access services in the cloud and sometimes the user's choice of which cloud-based services to use. We are devoting significant resources to develop and deploy our cloud-based strategies. The Windows ecosystem must continue to evolve with this changing environment. We embrace cultural and organizational changes to drive accountability and eliminate obstacles to innovation. Our intelligent cloud and intelligent edge worldview is connected with the growth of the Internet of Things ("IoT"), a network of distributed and interconnected devices employing sensors, data, and computing capabilities, including AI. Our success in the IoT will depend on the level of adoption of our offerings such as Azure, Azure Stack, Azure IoT Edge, and Azure Sphere. We may not establish market share sufficient to achieve scale necessary to meet our business objectives.

Besides software development costs, we are incurring costs to build and maintain infrastructure to support cloud computing services. These costs will reduce the operating margins we have previously achieved. Whether we succeed in cloud-based services depends on our execution in several areas, including:

- Continuing to bring to market compelling cloud-based experiences that generate increasing traffic and market share.
- Maintaining the utility, compatibility, and performance of our cloud-based services on the growing array of computing devices, including PCs, smartphones, tablets, gaming consoles, and other devices, as well as sensors and other IoT endpoints.

- Continuing to enhance the attractiveness of our cloud platforms to third-party developers.
- Ensuring our cloud-based services meet the reliability expectations of our customers and maintain the security of their data as well as help them meet their own compliance needs.
- Making our suite of cloud-based services platform-agnostic, available on a wide range of devices and ecosystems, including those of our competitors.

It is uncertain whether our strategies will attract the users or generate the revenue required to succeed. If we are not effective in executing organizational and technical changes to increase efficiency and accelerate innovation, or if we fail to generate sufficient usage of our new products and services, we may not grow revenue in line with the infrastructure and development investments described above. This may negatively impact gross margins and operating income.

Some users may engage in fraudulent or abusive activities through our cloud-based services. These include unauthorized use of accounts through stolen credentials, use of stolen credit cards or other payment vehicles, failure to pay for services accessed, or other activities that violate our terms of service such as cryptocurrency mining or launching cyberattacks. If our efforts to detect such violations or our actions to control these types of fraud and abuse are not effective, we may experience adverse impacts to our revenue or incur reputational damage.

RISKS RELATING TO THE EVOLUTION OF OUR BUSINESS

We make significant investments in products and services that may not achieve expected returns. We will continue to make significant investments in research, development, and marketing for existing products, services, and technologies, including the Windows operating system, Microsoft 365, Bing, SQL Server, Windows Server, Azure, Office 365, Xbox, LinkedIn, and other products and services. We also invest in the development and acquisition of a variety of hardware for productivity, communication, and entertainment, including PCs, tablets, gaming devices, and HoloLens. Investments in new technology are speculative. Commercial success depends on many factors, including innovativeness, developer support, and effective distribution and marketing. If customers do not perceive our latest offerings as providing significant new functionality or other value, they may reduce their purchases of new software and hardware products or upgrades, unfavorably affecting revenue. We may not achieve significant revenue from new product, service, and distribution channel investments for several years, if at all. New products and services may not be profitable, and even if they are profitable, operating margins for some new products and businesses will not be as high as the margins we have experienced historically. We may not get engagement in certain features, like Edge and Bing, that drive post-sale monetization opportunities. Our data handling practices across our products and services will continue to be under scrutiny. Perceptions of mismanagement, driven by regulatory activity or negative public reaction to our practices or product experiences, could negatively impact product and feature adoption, product design, and product quality.

Developing new technologies is complex. It can require long development and testing periods. Significant delays in new releases or significant problems in creating new products or services could adversely affect our revenue.

Acquisitions, joint ventures, and strategic alliances may have an adverse effect on our business. We expect to continue making acquisitions and entering into joint ventures and strategic alliances as part of our long-term business strategy. For example, in March 2021 we completed our acquisition of ZeniMax Media Inc. for \$8.1 billion, and in March 2022 we completed our acquisition of Nuance Communications, Inc. for \$18.8 billion. In January 2022 we announced a definitive agreement to acquire Activision Blizzard, Inc. for \$68.7 billion. These acquisitions and other transactions and arrangements involve significant challenges and risks, including that they do not advance our business strategy, that we get an unsatisfactory return on our investment, that they raise new compliance-related obligations and challenges, that we have difficulty integrating and retaining new employees, business systems, and technology, that they distract management from our other businesses, or that announced transactions may not be completed. If an arrangement fails to adequately anticipate changing circumstances and interests of a party, it may result in early termination or renegotiation of the arrangement. The success of these transactions and arrangements will depend in part on our ability to leverage them to enhance our existing products and services or develop compelling new ones, as well as acquired companies' ability to meet our policies and processes in areas such as data governance, privacy, and cybersecurity. It may take longer than expected to realize the full benefits from these transactions and arrangements such as increased revenue or enhanced efficiencies, or the benefits may ultimately be smaller than we expected. These events could adversely affect our consolidated financial statements.

If our goodwill or amortizable intangible assets become impaired, we may be required to record a significant charge to earnings. We acquire other companies and intangible assets and may not realize all the economic benefit from those acquisitions, which could cause an impairment of goodwill or intangibles. We review our amortizable intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. We test goodwill for impairment at least annually. Factors that may be a change in circumstances, indicating that the carrying value of our goodwill or amortizable intangible assets may not be recoverable, include a decline in our stock price and market capitalization, reduced future cash flow estimates, and slower growth rates in industry segments in which we participate. We have in the past recorded, and may in the future be required to record, a significant charge in our consolidated financial statements during the period in which any impairment of our goodwill or amortizable intangible assets is determined, negatively affecting our results of operations.

CYBERSECURITY, DATA PRIVACY, AND PLATFORM ABUSE RISKS

Cyberattacks and security vulnerabilities could lead to reduced revenue, increased costs, liability claims, or harm to our reputation or competitive position.

Security of our information technology

Threats to IT security can take a variety of forms. Individual and groups of hackers and sophisticated organizations, including state-sponsored organizations or nation-states, continuously undertake attacks that pose threats to our customers and our IT. These actors may use a wide variety of methods, which may include developing and deploying malicious software or exploiting vulnerabilities or intentionally designed processes in hardware, software, or other infrastructure in order to attack our products and services or gain access to our networks and datacenters, using social engineering techniques to induce our employees, users, partners, or customers to disclose passwords or other sensitive information or take other actions to gain access to our data or our users' or customers' data, or acting in a coordinated manner to launch distributed denial of service or other coordinated attacks. Nation-state and state-sponsored actors can deploy significant resources to plan and carry out attacks. Nation-state attacks against us, our customers, or our partners may intensify during periods of intense diplomatic or armed conflict, such as the ongoing conflict in Ukraine. Inadequate account security or organizational security practices may also result in unauthorized access to confidential data. For example, system administrators may fail to timely remove employee account access when no longer appropriate. Employees or third parties may intentionally compromise our or our users' security or systems or reveal confidential information. Malicious actors may employ the IT supply chain to introduce malware through software updates or compromised supplier accounts or hardware.

Cyberthreats are constantly evolving and becoming increasingly sophisticated and complex, increasing the difficulty of detecting and successfully defending against them. We may have no current capability to detect certain vulnerabilities or new attack methods, which may allow them to persist in the environment over long periods of time. Cyberthreats can have cascading impacts that unfold with increasing speed across our internal networks and systems and those of our partners and customers. Breaches of our facilities, network, or data security could disrupt the security of our systems and business applications, impair our ability to provide services to our customers and protect the privacy of their data, result in product development delays, compromise confidential or technical business information harming our reputation or competitive position, result in theft or misuse of our intellectual property or other assets, subject us to ransomware attacks, require us to allocate more resources to improve technologies or remediate the impacts of attacks, or otherwise adversely affect our business.

The cyberattacks uncovered in late 2020 known as "Solorigate" or "Nobelium" are an example of a supply chain attack where malware was introduced to a software provider's customers, including us, through software updates. The attackers were later able to create false credentials that appeared legitimate to certain customers' systems. We may be targets of further attacks similar to Solorigate/Nobelium as both a supplier and consumer of IT. With long-term attacks like these, customers may lack the log data necessary to investigate this type of activity, adding to the complexity of response and mitigating any impact.

In addition, our internal IT environment continues to evolve. Often, we are early adopters of new devices and technologies. We embrace new ways of sharing data and communicating internally and with partners and customers using methods such as social networking and other consumer-oriented technologies. Our business policies and internal security controls may not keep pace with these changes as new threats emerge, or emerging cybersecurity regulations in jurisdictions worldwide.

Security of our products, services, devices, and customers' data

The security of our products and services is important in our customers' decisions to purchase or use our products or services across cloud and on-premises environments. Security threats are a significant challenge to companies like us whose business is providing technology products and services to others. Threats to our own IT infrastructure can also affect our customers. Customers using our cloud-based services rely on the security of our infrastructure, including hardware and other elements provided by third parties, to ensure the reliability of our services and the protection of their data. Adversaries tend to focus their efforts on the most popular operating systems, programs, and services, including many of ours, and we expect that to continue. In addition, adversaries can attack our customers' on-premises or cloud environments, sometimes exploiting previously unknown ("zero day") vulnerabilities, such as occurred in early calendar year 2021 with several of our Exchange Server on-premises products. Vulnerabilities in these or any product can persist even after we have issued security patches if customers have not installed the most recent updates, or if the attackers exploited the vulnerabilities before patching to install additional malware to further compromise customers' systems. Adversaries will continue to attack customers using our cloud services as customers embrace digital transformation. Adversaries that acquire user account information can use that information to compromise our users' accounts, including where accounts share the same attributes such as passwords. Inadequate account security practices may also result in unauthorized access, and user activity may result in ransomware or other malicious software impacting a customer's use of our products or services. We are increasingly incorporating open source software into our products. There may be vulnerabilities in open source software that may make our products susceptible to cyberattacks.

Our customers operate complex IT systems with third-party hardware and software from multiple vendors that may include systems acquired over many years. They expect our products and services to support all these systems and products, including those that no longer incorporate the strongest current security advances or standards. As a result, we may not be able to discontinue support in our services for a product, service, standard, or feature solely because a more secure alternative is available. Failure to utilize the most current security advances and standards can increase our customers' vulnerability to attack. Further, customers of widely varied size and technical sophistication use our technology, and consequently may have limited capabilities and resources to help them adopt and implement state of the art cybersecurity practices and technologies. In addition, we must account for this wide variation of technical sophistication when defining default settings for our products and services, including security default settings, as these settings may limit or otherwise impact other aspects of IT operations and some customers may have limited capability to review and reset these defaults.

Cyberattacks such as Solarigate/Nobelium may adversely impact our customers even if our production services are not directly compromised. We are committed to notifying our customers whose systems have been impacted as we become aware and have actionable information for customers to help protect themselves. We are also committed to providing guidance and support on detection, tracking, and remediation. We may not be able to detect the existence or extent of these attacks for all of our customers or have information on how to detect or track an attack, especially where an attack involves on-premises software such as Exchange Server where we may have no or limited visibility into our customers' computing environments.

Development and deployment of defensive measures

To defend against security threats to our internal IT systems, our cloud-based services, and our customers' systems, we must continuously engineer more secure products and services, enhance security and reliability features, improve the deployment of software updates to address security vulnerabilities in our own products as well as those provided by others, develop mitigation technologies that help to secure customers from attacks even when software updates are not deployed, maintain the digital security infrastructure that protects the integrity of our network, products, and services, and provide security tools such as firewalls, anti-virus software, and advanced security and information about the need to deploy security measures and the impact of doing so. Customers in certain industries such as financial services, health care, and government may have enhanced or specialized requirements to which we must engineer our products and services.

The cost of measures to protect products and customer-facing services could reduce our operating margins. If we fail to do these things well, actual or perceived security vulnerabilities in our products and services, data corruption issues, or reduced performance could harm our reputation and lead customers to reduce or delay future purchases of products or subscriptions to services, or to use competing products or services. Customers may also spend more on protecting their existing computer systems from attack, which could delay adoption of additional products or services. Customers, and third parties granted access to their systems, may fail to update their systems, continue to run software or operating systems we no longer support, or may fail timely to install or enable security patches, or may otherwise fail to adopt adequate security practices. Any of these could adversely affect our reputation and revenue. Actual or perceived vulnerabilities may lead to claims against us. Our license agreements typically contain provisions that eliminate or limit our exposure to liability, but there is no assurance these provisions will withstand legal challenges. At times, to achieve commercial objectives, we may enter into agreements with larger liability exposure to customers.

Our products operate in conjunction with and are dependent on products and components across a broad ecosystem of third parties. If there is a security vulnerability in one of these components, and if there is a security exploit targeting it, we could face increased costs, liability claims, reduced revenue, or harm to our reputation or competitive position.

Disclosure and misuse of personal data could result in liability and harm our reputation. As we continue to grow the number, breadth, and scale of our cloud-based offerings, we store and process increasingly large amounts of personal data of our customers and users. The continued occurrence of high-profile data breaches provides evidence of an external environment increasingly hostile to information security. Despite our efforts to improve the security controls across our business groups and geographies, it is possible our security controls over personal data, our training of employees and third parties on data security, and other practices we follow may not prevent the improper disclosure or misuse of customer or user data we or our vendors store and manage. In addition, third parties who have limited access to our customer or user data may use this data in unauthorized ways. Improper disclosure or misuse could harm our reputation, lead to legal exposure to customers or users, or subject us to liability under laws that protect personal data, resulting in increased costs or loss of revenue. Our software products and services also enable our customers and users to store and process personal data on-premises or, increasingly, in a cloud-based environment we host. Government authorities can sometimes require us to produce customer or user data in response to valid legal orders. In the U.S. and elsewhere, we advocate for transparency concerning these requests and appropriate limitations on government authority to compel disclosure. Despite our efforts to protect customer and user data, perceptions that the collection, use, and retention of personal information is not satisfactorily protected could inhibit sales of our products or services and could limit adoption of our cloud-based solutions by consumers, businesses, and government entities. Additional security measures we may take to address customer or user concerns, or constraints on our flexibility to determine where and how to operate datacenters in response to customer or user expectations or governmental rules or actions, may cause higher operating expenses or hinder growth of our products and services.

We may not be able to protect information in our products and services from use by others. LinkedIn and other Microsoft products and services contain valuable information and content protected by contractual restrictions or technical measures. In certain cases, we have made commitments to our members and users to limit access to or use of this information. Changes in the law or interpretations of the law may weaken our ability to prevent third parties from scraping or gathering information or content through use of bots or other measures and using it for their own benefit, thus diminishing the value of our products and services.

Abuse of our platforms may harm our reputation or user engagement.

Advertising, professional, marketplace, and gaming platform abuses

For platform products and services that provide content or host ads that come from or can be influenced by third parties, including GitHub, LinkedIn, Microsoft Advertising, Microsoft News, Microsoft Store, Bing, and Xbox, our reputation or user engagement may be negatively affected by activity that is hostile or inappropriate. This activity may come from users impersonating other people or organizations, dissemination of information that may be viewed as misleading or intended to manipulate the opinions of our users, or the use of our products or services that violates our terms of service or otherwise for objectionable or illegal ends. Preventing or responding to these actions may require us to make substantial investments in people and technology and these investments may not be successful, adversely affecting our business and consolidated financial statements.

Other digital safety abuses

Our hosted consumer services as well as our enterprise services may be used to disseminate harmful or illegal content in violation of our terms or applicable law. We may not proactively discover such content due to scale, the limitations of existing technologies, and conflicting legal frameworks. When discovered by users, such content may negatively affect our reputation, our brands, and user engagement. Regulations and other initiatives to make platforms responsible for preventing or eliminating harmful content online have been enacted, and we expect this to continue. We may be subject to enhanced regulatory oversight, civil or criminal liability, or reputational damage if we fail to comply with content moderation regulations, adversely affecting our business and consolidated financial statements.

The development of the IoT presents security, privacy, and execution risks. To support the growth of the intelligent cloud and the intelligent edge, we are developing products, services, and technologies to power the IoT. The IoT's great potential also carries substantial risks. IoT products and services may contain defects in design, manufacture, or operation that make them insecure or ineffective for their intended purposes. An IoT solution has multiple layers of hardware, sensors, processors, software, and firmware, several of which we may not develop or control. Each layer, including the weakest layer, can impact the security of the whole system. Many IoT devices have limited interfaces and ability to be updated or patched. IoT solutions may collect large amounts of data, and our handling of IoT data may not satisfy customers or regulatory requirements. IoT scenarios may increasingly affect personal health and safety. If IoT solutions that include our technologies do not work as intended, violate the law, or harm individuals or businesses, we may be subject to legal claims or enforcement actions. These risks, if realized, may increase our costs, damage our reputation or brands, or negatively impact our revenues or margins.

Issues in the development and use of AI may result in reputational harm or liability. We are building AI into many of our offerings, including our productivity services, and we are also making AI available for our customers to use in solutions that they build. This AI may be developed by Microsoft or others. We expect these elements of our business to grow. We envision a future in which AI operating in our devices, applications, and the cloud helps our customers be more productive in their work and personal lives. As with many innovations, AI presents risks and challenges that could affect its adoption, and therefore our business. AI algorithms may be flawed. Datasets may be insufficient or contain biased information. Content generated by AI systems may be offensive, illegal, or otherwise harmful. Ineffective or inadequate AI development or deployment practices by Microsoft or others could result in incidents that impair the acceptance of AI solutions or cause harm to individuals or society. These deficiencies and other failures of AI systems could subject us to competitive harm, regulatory action, legal liability, including under new proposed legislation regulating AI in jurisdictions such as the European Union ("EU"), and brand or reputational harm. Some AI scenarios present ethical issues or may have broad impacts on society. If we enable or offer AI solutions that have unintended consequences or are controversial because of their impact on human rights, privacy, employment, or other social, economic, or political issues, we may experience brand or reputational harm.

OPERATIONAL RISKS

We may have excessive outages, data losses, and disruptions of our online services if we fail to maintain an adequate operations infrastructure. Our increasing user traffic, growth in services, and the complexity of our products and services demand more computing power. We spend substantial amounts to build, purchase, or lease datacenters and equipment and to upgrade our technology and network infrastructure to handle more traffic on our websites and in our datacenters. Our datacenters depend on the availability of permitted and buildable land, predictable energy, and networking supplies, the cost or availability of which could be adversely affected by a variety of factors, including the transition to a clean energy economy, local and regional environmental regulations, and geopolitical disruptions. These demands continue to increase as we introduce new products and services and support the growth of existing services such as Bing, Azure, Microsoft Account services, Microsoft 365, Microsoft Teams, Dynamics 365, OneDrive, SharePoint Online, Skype, Xbox, and Outlook.com. We are rapidly growing our business of providing a platform and back-end hosting for services provided by third parties to their end users. Maintaining, securing, and expanding this infrastructure is expensive and complex, and requires development of principles for datacenter builds in geographies with higher safety and reliability risks. It requires that we maintain an Internet connectivity infrastructure and storage and compute capacity that is robust and reliable within competitive and regulatory constraints that continue to evolve. Inefficiencies or operational failures, including temporary or permanent loss of customer data, insufficient Internet connectivity, insufficient or unavailable power supply, or inadequate storage and compute capacity, could diminish the quality of our products, services, and user experience resulting in contractual liability, claims by customers and other third parties, regulatory actions, damage to our reputation, and loss of current and potential users, subscribers, and advertisers, each of which may adversely impact our consolidated financial statements.

We may experience quality or supply problems. Our hardware products such as Xbox consoles, Surface devices, and other devices we design and market are highly complex and can have defects in design, manufacture, or associated software. We could incur significant expenses, lost revenue, and reputational harm as a result of recalls, safety alerts, or product liability claims if we fail to prevent, detect, or address such issues through design, testing, or warranty repairs.

Our software products and services also may experience quality or reliability problems. The highly sophisticated software we develop may contain bugs and other defects that interfere with their intended operation. Our customers increasingly rely on us for critical business functions and multiple workloads. Many of our products and services are interdependent with one another. Each of these circumstances potentially magnifies the impact of quality or reliability issues. Any defects we do not detect and fix in pre-release testing could cause reduced sales and revenue, damage to our reputation, repair or remediation costs, delays in the release of new products or versions, or legal liability. Although our license agreements typically contain provisions that eliminate or limit our exposure to liability, there is no assurance these provisions will withstand legal challenge.

There are limited suppliers for certain device and datacenter components. Our competitors use some of the same suppliers and their demand for hardware components can affect the capacity available to us. If components are delayed or become unavailable, whether because of supplier capacity constraint, industry shortages, legal or regulatory changes that restrict supply sources, or other reasons, we may not obtain timely replacement supplies, resulting in reduced sales or inadequate datacenter capacity. Component shortages, excess or obsolete inventory, or price reductions resulting in inventory adjustments may increase our cost of revenue. Xbox consoles, Surface devices, datacenter servers, and other hardware are assembled in Asia and other geographies that may be subject to disruptions in the supply chain, resulting in shortages that would affect our revenue and operating margins.

LEGAL, REGULATORY, AND LITIGATION RISKS

Government litigation and regulatory activity relating to competition rules may limit how we design and market our products. As a leading global software and device maker, government agencies closely scrutinize us under U.S. and foreign competition laws. Governments are actively enforcing competition laws and regulations, and this includes scrutiny in potentially large markets such as the EU, the U.S., and China. Some jurisdictions also allow competitors or consumers to assert claims of anti-competitive conduct. U.S. federal and state antitrust authorities have previously brought enforcement actions and continue to scrutinize our business.

The European Commission ("the Commission") closely scrutinizes the design of high-volume Microsoft products and the terms on which we make certain technologies used in these products, such as file formats, programming interfaces, and protocols, available to other companies. Flagship product releases such as Windows can receive significant scrutiny under competition laws. For example, in 2004, the Commission ordered us to create new versions of our Windows operating system that do not include certain multimedia technologies and to provide our competitors with specifications for how to implement certain proprietary Windows communications protocols in their own products. In 2009, the Commission accepted a set of commitments we offered to address the Commission's concerns relating to competition in web browsing software, including an undertaking to address Commission concerns relating to interoperability. The web browsing commitments expired in 2014. The remaining obligations may limit our ability to innovate in Windows or other products in the future, diminish the developer appeal of the Windows platform, and increase our product development costs. The availability of licenses related to protocols and file formats may enable competitors to develop software products that better mimic the functionality of our products, which could hamper sales of our products.

Our portfolio of first-party devices continues to grow; at the same time our OEM partners offer a large variety of devices for our platforms. As a result, increasingly we both cooperate and compete with our OEM partners, creating a risk that we fail to do so in compliance with competition rules. Regulatory scrutiny in this area may increase. Certain foreign governments, particularly in China and other countries in Asia, have advanced arguments under their competition laws that exert downward pressure on royalties for our intellectual property.

Government regulatory actions and court decisions such as these may result in fines or hinder our ability to provide the benefits of our software to consumers and businesses, reducing the attractiveness of our products and the revenue that comes from them. New competition law actions could be initiated, potentially using previous actions as precedent. The outcome of such actions, or steps taken to avoid them, could adversely affect us in a variety of ways, including:

- We may have to choose between withdrawing products from certain geographies to avoid fines or designing and developing alternative versions of those products to comply with government rulings, which may entail a delay in a product release and removing functionality that customers want or on which developers rely.
- We may be required to make available licenses to our proprietary technologies on terms that do not reflect their fair market value or do not protect our associated intellectual property.
- We are subject to a variety of ongoing commitments because of court or administrative orders, consent decrees, or other voluntary actions we have taken. If we fail to comply with these commitments, we may incur litigation costs and be subject to substantial fines or other remedial actions.
- Our ability to realize anticipated Windows post-sale monetization opportunities may be limited.
- Regulatory scrutiny may inhibit our ability to consummate acquisitions or impose conditions that reduce the ultimate value of such transactions.

Our global operations subject us to potential consequences under anti-corruption, trade, and other laws and regulations. The Foreign Corrupt Practices Act (“FCPA”) and other anti-corruption laws and regulations (“Anti-Corruption Laws”) prohibit corrupt payments by our employees, vendors, or agents, and the accounting provisions of the FCPA require us to maintain accurate books and records and adequate internal controls. From time to time, we receive inquiries from authorities in the U.S. and elsewhere which may be based on reports from employees and others about our business activities outside the U.S. and our compliance with Anti-Corruption Laws. Periodically, we receive such reports directly and investigate them, and also cooperate with investigations by U.S. and foreign law enforcement authorities. An example of increasing international regulatory complexity is the EU Whistleblower Directive, initiated in 2021, which may present compliance challenges to the extent it is implemented in different forms by EU member states. Most countries in which we operate also have competition laws that prohibit competitors from colluding or otherwise attempting to reduce competition between themselves. While we devote substantial resources to our U.S. and international compliance programs and have implemented policies, training, and internal controls designed to reduce the risk of corrupt payments and collusive activity, our employees, vendors, or agents may violate our policies. Our failure to comply with Anti-Corruption Laws or competition laws could result in significant fines and penalties, criminal sanctions against us, our officers, or our employees, prohibitions on the conduct of our business, and damage to our reputation.

Increasing trade laws, policies, sanctions, and other regulatory requirements also affect our operations in and outside the U.S. relating to trade and investment. Economic sanctions in the U.S., the EU, and other countries prohibit most business with restricted entities or countries such as Crimea, Cuba, Iran, North Korea, and Syria. U.S. export controls restrict Microsoft from offering many of its products and services to, or making investments in, certain entities in specified countries. U.S. import controls restrict us from integrating certain information and communication technologies into our supply chain and allow for government review of transactions involving information and communications technology from countries determined to be foreign adversaries. Supply chain regulations may impact the availability of goods or result in additional regulatory scrutiny. Periods of intense diplomatic or armed conflict, such as the ongoing conflict in Ukraine, may result in (1) new and rapidly evolving sanctions and trade restrictions, which may impair trade with sanctioned individuals and countries, and (2) negative impacts to regional trade ecosystems among our customers, partners, and us. Non-compliance with sanctions as well as general ecosystem disruptions could result in reputational harm, operational delays, monetary fines, loss of revenues, increased costs, loss of export privileges, or criminal sanctions.

Other regulatory areas that may apply to our products and online services offerings include requirements related to user privacy, telecommunications, data storage and protection, advertising, and online content. For example, some regulators are taking the position that our offerings such as Microsoft Teams and Skype are covered by existing laws regulating telecommunications services, and some new laws, including EU Member State laws under the European Electronic Communications Code, are defining more of our services as regulated telecommunications services. This trend may continue and will result in these offerings being subjected to additional data protection, security, and law enforcement surveillance obligations. Regulators may assert that our collection, use, and management of customer data and other information is inconsistent with their laws and regulations, including laws that apply to the tracking of users via technology such as cookies. Legislative or regulatory action relating to cybersecurity requirements may increase the costs to develop, implement, or secure our products and services. Legislative and regulatory action is emerging in the areas of AI and content moderation, which could increase costs or restrict opportunity. Applying these laws and regulations to our business is often unclear, subject to change over time, and sometimes may conflict from jurisdiction to jurisdiction. Additionally, these laws and governments' approach to their enforcement, and our products and services, are continuing to evolve. Compliance with these types of regulation may involve significant costs or require changes in products or business practices that result in reduced revenue. Noncompliance could result in the imposition of penalties or orders we stop the alleged noncompliant activity.

We strive to empower all people and organizations to achieve more, and accessibility of our products and services is an important aspect of this goal. In addition to existing and upcoming laws requiring digital accessibility for people with disabilities, there is increasing pressure from advocacy groups, regulators, competitors, customers, and other stakeholders to make technology more accessible. If our products do not meet customer expectations or global accessibility requirements, we could lose sales opportunities or face regulatory or legal actions.

Laws and regulations relating to the handling of personal data may impede the adoption of our services or result in increased costs, legal claims, fines against us, or reputational damage.

Cross-border transfer of personal data

The growth of our Internet- and cloud-based services internationally relies increasingly on the movement of data across national boundaries. Legal requirements relating to the collection, storage, handling, and transfer of personal data continue to evolve. For example, in July 2020 the Court of Justice of the EU invalidated a framework called Privacy Shield for companies to transfer data from EU member states to the United States. This ruling continues to generate uncertainty about the legal requirements for data transfers from the EU under other legal mechanisms and has resulted in some EU data protection authorities blocking the use of U.S.-based services that involve the transfer of data to the U.S. The U.S. and the EU in March 2022 agreed in principle on a replacement framework for the Privacy Shield, called the EU-U.S. Data Privacy Framework. In December 2022, the European Commission published a draft "adequacy" determination for this new framework. A failure to finalize implementation of the EU-U.S. Data Privacy Framework, or the framework's invalidation in EU courts, could compound that uncertainty and result in additional blockages of data transfers. In the EU and other markets, potential new rules and restrictions on the flow of data across borders could increase the cost and complexity of delivering our products and services.

Other laws and regulations relating to the handling of personal data

The EU General Data Protection Regulation (“GDPR”), which applies to all of our activities conducted from an establishment in the EU or related to products and services offered in the EU, imposes a range of compliance obligations regarding the handling of personal data. More recently, the EU has been developing new requirements related to the use of data, including in the Digital Markets Act, the Digital Services Act, and the Data Act, that will add additional rules and restriction on the use of data in our products and services. Engineering efforts to build and maintain capabilities to facilitate compliance with these laws involve substantial expense and the diversion of engineering resources from other projects. We might experience reduced demand for our offerings if we are unable to engineer products that meet our legal duties or help our customers meet their obligations under the GDPR and other data regulations, or if our implementation to comply with the GDPR makes our offerings less attractive. Compliance with these obligations depends in part on how particular regulators interpret and apply them. If we fail to comply, or if regulators assert we have failed to comply (including in response to complaints made by customers), it may lead to regulatory enforcement actions, which can result in monetary penalties (of up to 4% of worldwide revenue in the case of GDPR), private lawsuits, reputational damage, blockage of international data transfers, and loss of customers. The highest fines assessed under GDPR have recently been increasing, especially against large technology companies. Jurisdictions around the world, such as China, India, and states in the U.S. have adopted, or are considering adopting or expanding, laws and regulations imposing obligations regarding the collection, handling, and transfer of personal data.

Our investment in gaining insights from data is becoming central to the value of the services we deliver to customers, to our operational efficiency and key opportunities in monetization, customer perceptions of quality, and operational efficiency. Our ability to use data in this way may be constrained by regulatory developments that impede realizing the expected return from this investment. Ongoing legal analyses, reviews, and inquiries by regulators of Microsoft practices, or relevant practices of other organizations, may result in burdensome or inconsistent requirements, including data sovereignty and localization requirements, affecting the location, movement, collection, and use of our customer and internal employee data as well as the management of that data. Compliance with applicable laws and regulations regarding personal data may require changes in services, business practices, or internal systems that result in increased costs, lower revenue, reduced efficiency, or greater difficulty in competing with foreign-based firms. Compliance with data regulations might limit our ability to innovate or offer certain features and functionality in some jurisdictions where we operate. Failure to comply with existing or new rules may result in significant penalties or orders to stop the alleged noncompliant activity, as well as negative publicity and diversion of management time and effort.

We have claims and lawsuits against us that may result in adverse outcomes. We are subject to a variety of claims and lawsuits. These claims may arise from a wide variety of business practices and initiatives, including major new product releases such as Windows, significant business transactions, warranty or product claims, employment practices, and regulation. Adverse outcomes in some or all of these claims may result in significant monetary damages or injunctive relief that could adversely affect our ability to conduct our business. The litigation and other claims are subject to inherent uncertainties and management's view of these matters may change in the future. A material adverse impact in our consolidated financial statements could occur for the period in which the effect of an unfavorable outcome becomes probable and reasonably estimable.

Our business with government customers may present additional uncertainties. We derive substantial revenue from government contracts. Government contracts generally can present risks and challenges not present in private commercial agreements. For instance, we may be subject to government audits and investigations relating to these contracts, we could be suspended or debarred as a governmental contractor, we could incur civil and criminal fines and penalties, and under certain circumstances contracts may be rescinded. Some agreements may allow a government to terminate without cause and provide for higher liability limits for certain losses. Some contracts may be subject to periodic funding approval, reductions, cancellations, or delays which could adversely impact public-sector demand for our products and services. These events could negatively impact our results of operations, financial condition, and reputation.

We may have additional tax liabilities. We are subject to income taxes in the U.S. and many foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. For example, compliance with the 2017 United States Tax Cuts and Jobs Act ("TCJA") and possible future legislative changes may require the collection of information not regularly produced within the Company, the use of estimates in our consolidated financial statements, and the exercise of significant judgment in accounting for its provisions. As regulations and guidance evolve with respect to the TCJA or possible future legislative changes, and as we gather more information and perform more analysis, our results may differ from previous estimates and may materially affect our consolidated financial statements.

We are regularly under audit by tax authorities in different jurisdictions. Although we believe that our provision for income taxes and our tax estimates are reasonable, tax authorities may disagree with certain positions we have taken. In addition, economic and political pressures to increase tax revenue in various jurisdictions may make resolving tax disputes favorably more difficult. We are currently under Internal Revenue Service audit for prior tax years, with the primary unresolved issues relating to transfer pricing. The final resolution of those audits, and other audits or litigation, may differ from the amounts recorded in our consolidated financial statements and may materially affect our consolidated financial statements in the period or periods in which that determination is made.

We earn a significant amount of our operating income outside the U.S. A change in the mix of earnings and losses in countries with differing statutory tax rates, changes in our business or structure, or the expiration of or disputes about certain tax agreements in a particular country may result in higher effective tax rates for the Company. In addition, changes in U.S. federal and state or international tax laws applicable to corporate multinationals, other fundamental law changes currently being considered by many countries, including in the U.S., and changes in taxing jurisdictions' administrative interpretations, decisions, policies, and positions may materially adversely impact our consolidated financial statements.

INTELLECTUAL PROPERTY RISKS

We may not be able to protect our source code from copying if there is an unauthorized disclosure. Source code, the detailed program commands for our operating systems and other software programs, is critical to our business. Although we license portions of our application and operating system source code to several licensees, we take significant measures to protect the secrecy of large portions of our source code. If our source code leaks, we might lose future trade secret protection for that code. It may then become easier for third parties to compete with our products by copying functionality, which could adversely affect our revenue and operating margins. Unauthorized disclosure of source code also could increase the security risks described elsewhere in these risk factors.

Legal changes, our evolving business model, piracy, and other factors may decrease the value of our intellectual property. Protecting our intellectual property rights and combating unlicensed copying and use of our software and other intellectual property on a global basis is difficult. While piracy adversely affects U.S. revenue, the impact on revenue from outside the U.S. is more significant, particularly countries in which the legal system provides less protection for intellectual property rights. Our revenue in these markets may grow more slowly than the underlying device market. Similarly, the absence of harmonized patent laws makes it more difficult to ensure consistent respect for patent rights. Throughout the world, we educate users about the benefits of licensing genuine products and obtaining indemnification benefits for intellectual property risks, and we educate lawmakers about the advantages of a business climate where intellectual property rights are protected. Reductions in the legal protection for software intellectual property rights could adversely affect revenue.

We expend significant resources to patent the intellectual property we create with the expectation that we will generate revenues by incorporating that intellectual property in our products or services or, in some instances, by licensing or cross-licensing our patents to others in return for a royalty and/or increased freedom to operate. Changes in the law may continue to weaken our ability to prevent the use of patented technology or collect revenue for licensing our patents. These include legislative changes and regulatory actions that make it more difficult to obtain injunctions, and the increasing use of legal process to challenge issued patents. Similarly, licensees of our patents may fail to satisfy their obligations to pay us royalties or may contest the scope and extent of their obligations. The royalties we can obtain to monetize our intellectual property may decline because of the evolution of technology, price changes in products using licensed patents, greater value from cross-licensing, or the difficulty of discovering infringements. Finally, our increasing engagement with open source software will also cause us to license our intellectual property rights broadly in certain situations and may negatively impact revenue.

Third parties may claim we infringe their intellectual property rights. From time to time, others claim we infringe their intellectual property rights. The number of these claims may grow because of constant technological change in the markets in which we compete, the extensive patent coverage of existing technologies, the rapid rate of issuance of new patents, and our offering of first-party devices, such as Surface. To resolve these claims, we may enter into royalty and licensing agreements on terms that are less favorable than currently available, stop selling or redesign affected products or services, or pay damages to satisfy indemnification commitments with our customers. These outcomes may cause operating margins to decline. Besides money damages, in some jurisdictions plaintiffs can seek injunctive relief that may limit or prevent importing, marketing, and selling our products or services that have infringing technologies. In some countries, such as Germany, an injunction can be issued before the parties have fully litigated the validity of the underlying patents. We have paid significant amounts to settle claims related to the use of technology and intellectual property rights and to procure intellectual property rights as part of our strategy to manage this risk, and may continue to do so.

GENERAL RISKS

If our reputation or our brands are damaged, our business and operating results may be harmed. Our reputation and brands are globally recognized and are important to our business. Our reputation and brands affect our ability to attract and retain consumer, business, and public-sector customers. There are numerous ways our reputation or brands could be damaged. These include product safety or quality issues, our environmental impact and sustainability, supply chain practices, or human rights record. We may experience backlash from customers, government entities, advocacy groups, employees, and other stakeholders that disagree with our product offering decisions or public policy positions. Damage to our reputation or our brands may occur from, among other things:

- The introduction of new features, products, services, or terms of service that customers, users, or partners do not like.
- Public scrutiny of our decisions regarding user privacy, data practices, or content.
- Data security breaches, compliance failures, or actions of partners or individual employees.

The proliferation of social media may increase the likelihood, speed, and magnitude of negative brand events. If our brands or reputation are damaged, it could negatively impact our revenues or margins, or ability to attract the most highly qualified employees.

Adverse economic or market conditions may harm our business. Worsening economic conditions, including inflation, recession, pandemic, or other changes in economic conditions, may cause lower IT spending and adversely affect our revenue. If demand for PCs, servers, and other computing devices declines, or consumer or business spending for those products declines, our revenue will be adversely affected.

Our product distribution system relies on an extensive partner and retail network. OEMs building devices that run our software have also been a significant means of distribution. The impact of economic conditions on our partners, such as the bankruptcy of a major distributor, OEM, or retailer, could cause sales channel disruption.

Challenging economic conditions also may impair the ability of our customers to pay for products and services they have purchased. As a result, allowances for doubtful accounts and write-offs of accounts receivable may increase.

We maintain an investment portfolio of various holdings, types, and maturities. These investments are subject to general credit, liquidity, market, and interest rate risks, which may be exacerbated by market downturns or events that affect global financial markets. A significant part of our investment portfolio comprises U.S. government securities. If global financial markets decline for long periods, or if there is a downgrade of the U.S. government credit rating due to an actual or threatened default on government debt, our investment portfolio may be adversely affected and we could determine that more of our investments have experienced a decline in fair value, requiring impairment charges that could adversely affect our consolidated financial statements.

Catastrophic events or geopolitical conditions may disrupt our business. A disruption or failure of our systems or operations because of a major earthquake, weather event, cyberattack, terrorist attack, pandemic, or other catastrophic event could cause delays in completing sales, providing services, or performing other critical functions. Our corporate headquarters, a significant portion of our research and development activities, and certain other essential business operations are in the Seattle, Washington area, and we have other business operations in the Silicon Valley area of California, both of which are seismically active regions. A catastrophic event that results in the destruction or disruption of any of our critical business or IT systems, or the infrastructure or systems they rely on, such as power grids, could harm our ability to conduct normal business operations. Providing our customers with more services and solutions in the cloud puts a premium on the resilience of our systems and strength of our business continuity management plans and magnifies the potential impact of prolonged service outages in our consolidated financial statements.

Abrupt political change, terrorist activity, and armed conflict, such as the ongoing conflict in Ukraine, pose a risk of general economic disruption in affected countries, which may increase our operating costs and negatively impact our ability to sell to and collect from customers in affected markets. These conditions also may add uncertainty to the timing and budget for technology investment decisions by our customers and may cause supply chain disruptions for hardware manufacturers. Geopolitical change may result in changing regulatory systems and requirements and market interventions that could impact our operating strategies, access to national, regional, and global markets, hiring, and profitability. Geopolitical instability may lead to sanctions and impact our ability to do business in some markets or with some public-sector customers. Any of these changes may negatively impact our revenues.

The occurrence of regional epidemics or a global pandemic, such as COVID-19, may adversely affect our operations, financial condition, and results of operations. The COVID-19 pandemic has had widespread, rapidly evolving, and unpredictable impacts on global society, economies, financial markets, and business practices. The extent to which global pandemics impact our business going forward will depend on factors such as the duration and scope of the pandemic; governmental, business, and individuals' actions in response to the pandemic; and the impact on economic activity, including the possibility of recession or financial market instability.

Measures to contain a global pandemic may intensify other risks described in these Risk Factors. Any of these measures may adversely impact our ability to:

- Maintain our operations infrastructure, including the reliability and adequate capacity of cloud services.
- Satisfy our contractual and regulatory compliance obligations as we adapt to changing usage patterns, such as through datacenter load balancing.
- Ensure a high-quality and consistent supply chain and manufacturing operations for our hardware devices and datacenter operations.
- Effectively manage our international operations through changes in trade practices and policies.
- Hire and deploy people where we most need them.
- Sustain the effectiveness and productivity of our operations, including our sales, marketing, engineering, and distribution functions.

We may incur increased costs to effectively manage these aspects of our business. If we are unsuccessful, it may adversely impact our revenues, cash flows, market share growth, and reputation.

The long-term effects of climate change on the global economy and the IT industry in particular are unclear. Environmental regulations or changes in the supply, demand, or available sources of energy or other resources may affect the availability or cost of goods and services, including natural resources, necessary to run our business. Changes in climate where we operate may increase the costs of powering and cooling computer hardware we use to develop software and provide cloud-based services.

Our global business exposes us to operational and economic risks. Our customers are located throughout the world and a significant part of our revenue comes from international sales. The global nature of our business creates operational, economic, and geopolitical risks. Our results of operations may be affected by global, regional, and local economic developments, monetary policy, inflation, and recession, as well as political and military disputes. In addition, our international growth strategy includes certain markets, the developing nature of which presents several risks, including deterioration of social, political, labor, or economic conditions in a country or region, and difficulties in staffing and managing foreign operations. Emerging nationalist and protectionist trends and concerns about human rights, the environment, and political expression in specific countries may significantly alter the trade and commercial environments. Changes to trade policy or agreements as a result of populism, protectionism, or economic nationalism may result in higher tariffs, local sourcing initiatives, and non-local sourcing restrictions, export controls, investment restrictions, or other developments that make it more difficult to sell our products in foreign countries. Disruptions of these kinds in developed or emerging markets could negatively impact demand for our products and services, impair our ability to operate in certain regions, or increase operating costs. Although we hedge a portion of our international currency exposure, significant fluctuations in foreign exchange rates between the U.S. dollar and foreign currencies may adversely affect our results of operations.

Our business depends on our ability to attract and retain talented employees. Our business is based on successfully attracting and retaining talented employees representing diverse backgrounds, experiences, and skill sets. The market for highly skilled workers and leaders in our industry is extremely competitive. Maintaining our brand and reputation, as well as a diverse and inclusive work environment that enables all our employees to thrive, are important to our ability to recruit and retain employees. We are also limited in our ability to recruit internationally by restrictive domestic immigration laws. Changes to U.S. immigration policies that restrain the flow of technical and professional talent may inhibit our ability to adequately staff our research and development efforts. If we are less successful in our recruiting efforts, or if we cannot retain highly skilled workers and key leaders, our ability to develop and deliver successful products and services may be adversely affected. Effective succession planning is also important to our long-term success. Failure to ensure effective transfer of knowledge and smooth transitions involving key employees could hinder our strategic planning and execution. How employment-related laws are interpreted and applied to our workforce practices may result in increased operating costs and less flexibility in how we meet our workforce needs. Our global workforce is predominantly non-unionized, although we do have some employees in the U.S. and internationally who are represented by unions or works councils. In the U.S., there has been a general increase in workers exercising their right to form or join a union. The unionization of significant employee populations could result in higher costs and other operational changes necessary to respond to changing conditions and to establish new relationships with worker representatives.

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

SHARE REPURCHASES AND DIVIDENDS

Following are our monthly share repurchases for the second quarter of fiscal year 2023:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
(In millions)				
October 1, 2022 – October 31, 2022	6,496,123	\$ 236.37	6,496,123	\$ 34,574
November 1, 2022 – November 30, 2022	6,637,411	236.49	6,637,411	33,004
December 1, 2022 – December 31, 2022	6,080,667	245.83	6,080,667	31,509
	19,214,201		19,214,201	

All share repurchases were made using cash resources. Our share repurchases may occur through open market purchases or pursuant to a Rule 10b5-1 trading plan. The above table excludes shares repurchased to settle employee tax withholding related to the vesting of stock awards.

Our Board of Directors declared the following dividends during the second quarter of fiscal year 2023:

Declaration Date	Record Date	Payment Date	Dividend Per Share	Amount
(In millions)				
November 29, 2022	February 16, 2023	March 9, 2023	\$ 0.68	\$ 5,064

We returned \$9.7 billion to shareholders in the form of share repurchases and dividends in the second quarter of fiscal year 2023. Refer to Note 15 – Stockholders' Equity of the Notes to Financial Statements (Part I, Item 1 of this Form 10-Q) for further discussion regarding share repurchases and dividends.

ITEM 6. EXHIBITS

15.1	Letter regarding unaudited interim financial information
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Certification of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance Document—the instance document does not appear in the Interactive Data File as its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover page formatted as Inline XBRL and contained in Exhibit 101

* *Furnished, not filed.*

Items 3, 4, and 5 are not applicable and have been omitted.

SIGNATURE

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

MICROSOFT CORPORATION

/s/ ALICE L. JOLLA

Alice L. Jolla
Corporate Vice President and Chief Accounting Officer (Duly Authorized Officer)

January 24, 2023