UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q
QUARTERLY REPORT PURSUANT TO SECTION 13 or 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE QUARTER ENDED SEPTEMBER 30, 2022

1-2360
(Commission file number)

INTERNATIONAL BUSINESS MACHINES CORPORATION
(Exact name of registrant as specified in its charter)

New York	**13-0871985**
(State of incorporation)	(IRS employer identification number)
One New Orchard Road **Armonk, New York**	**10504**
(Address of principal executive offices)	(Zip Code)

914-499-1900
(Registrant's telephone number)

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

Title of each class	**Trading symbol(s)**	**Name of each exchange on which registered**
Capital stock, par value $.20 per share	IBM	New York Stock Exchange NYSE Chicago
1.250% Notes due 2023	IBM 23A	New York Stock Exchange
0.375% Notes due 2023	IBM 23B	New York Stock Exchange
1.125% Notes due 2024	IBM 24A	New York Stock Exchange
2.875% Notes due 2025	IBM 25A	New York Stock Exchange
0.950% Notes due 2025	IBM 25B	New York Stock Exchange
0.875% Notes due 2025	IBM 25C	New York Stock Exchange
0.300% Notes due 2026	IBM 26B	New York Stock Exchange
1.250% Notes due 2027	IBM 27B	New York Stock Exchange
0.300% Notes due 2028	IBM 28B	New York Stock Exchange
1.750% Notes due 2028	IBM 28A	New York Stock Exchange
1.500% Notes due 2029	IBM 29	New York Stock Exchange
0.875% Notes due 2030	IBM 30	New York Stock Exchange
1.750% Notes due 2031	IBM 31	New York Stock Exchange
0.650% Notes due 2032	IBM 32A	New York Stock Exchange
1.250% Notes due 2034	IBM 34	New York Stock Exchange
1.200% Notes due 2040	IBM 40	New York Stock Exchange
7.00% Debentures due 2025	IBM 25	New York Stock Exchange
6.22% Debentures due 2027	IBM 27	New York Stock Exchange
6.50% Debentures due 2028	IBM 28	New York Stock Exchange
5.875% Debentures due 2032	IBM 32D	New York Stock Exchange
7.00% Debentures due 2045	IBM 45	New York Stock Exchange
7.125% Debentures due 2096	IBM 96	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section l3 or l5(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

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

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

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

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

The registrant had 904,126,363 shares of common stock outstanding at September 30, 2022.

Index

	Page
Part I - Financial Information:	
Item 1. Consolidated Financial Statements (Unaudited):	
Consolidated Income Statement for the three and nine months ended September 30, 2022 and 2021	3
Consolidated Statement of Comprehensive Income for the three and nine months ended September 30, 2022 and 2021	4
Consolidated Balance Sheet at September 30, 2022 and December 31, 2021	5
Consolidated Statement of Cash Flows for the nine months ended September 30, 2022 and 2021	7
Consolidated Statement of Equity for the three and nine months ended September 30, 2022 and 2021	8
Notes to Consolidated Financial Statements	10
Item 2. Management's Discussion and Analysis of Results of Operations and Financial Condition	54
Item 4. Controls and Procedures	97
Part II - Other Information:	
Item 1. Legal Proceedings	98
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds and Issuer Repurchases of Equity Securities	98
Item 6. Exhibits	99

Part I - Financial Information

Item 1. Consolidated Financial Statements:

INTERNATIONAL BUSINESS MACHINES CORPORATION
AND SUBSIDIARY COMPANIES
CONSOLIDATED INCOME STATEMENT
(UNAUDITED)

(Dollars in millions except per share amounts)	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021*	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021*
Revenue:				
Services	$ 7,365	$ 7,251	$ 22,708	$ 21,549
Sales	6,565	5,814 **	20,652	18,502 **
Financing	176	186 **	479	606 **
Total revenue	14,107	13,251	43,840	40,656
Cost:				
Services	5,168	4,650	15,915	14,014
Sales	1,389	1,363 **	4,555	4,241 **
Financing	120	132 **	314	416 **
Total cost	6,677	6,145	20,784	18,670
Gross profit	7,430	7,106	23,055	21,985
Expense and other (income):				
Selling, general and administrative	4,391	4,306	13,843	13,842
Research, development and engineering	1,611	1,606	4,963	4,863
Intellectual property and custom development income	(121)	(153)	(418)	(431)
Other (income) and expense	5,755	244	5,921	891
Interest expense	295	290	903	852
Total expense and other (income)	11,931	6,293	25,212	20,017
Income/(loss) from continuing operations before income taxes	(4,501)	813	(2,156)	1,968
Provision for/(benefit from) income taxes	(1,287)	(224)	(1,070)	(282)
Income/(loss) from continuing operations	$ (3,214)	$ 1,037	$ (1,087)	$ 2,250
Income from discontinued operations, net of tax	18	93	16	1,160
Net income/(loss)	$ (3,196) +	$ 1,130	$ (1,071) +	$ 3,410
Earnings/(loss) per share of common stock:				
Assuming dilution:				
Continuing operations	$ (3.55)	$ 1.14	$ (1.21)	$ 2.49
Discontinued operations	0.02	0.10	0.02	1.28
Total	$ (3.54)	$ 1.25	$ (1.19)	$ 3.77
Basic:				
Continuing operations	$ (3.55)	$ 1.16	$ (1.21)	$ 2.51
Discontinued operations	0.02	0.10	0.02	1.30
Total	$ (3.54)	$ 1.26	$ (1.19)	$ 3.81
Weighted-average number of common shares outstanding: (millions)				
Assuming dilution	904.1	906.0	901.6	904.0
Basic	904.1	897.1	901.6	895.3

* Reclassified to reflect discontinued operations presentation.
** Reclassified to conform to current year presentation.
\+ Includes the impact of a one-time, non-cash pension settlement charge. Refer to note 18, "Retirement-Related Benefits," for additional information.

(Amounts may not add due to rounding.)
(The accompanying notes are an integral part of the financial statements.)

INTERNATIONAL BUSINESS MACHINES CORPORATION
AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
(UNAUDITED)

(Dollars in millions)	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021*	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021*
Net income/(loss)	$ (3,196)	$ 1,130	$ (1,071)	$ 3,410
Other comprehensive income/(loss), before tax:				
Foreign currency translation adjustments	143	(114)	799	463
Net changes related to available-for-sale securities:				
Unrealized gains/(losses) arising during the period	0	0	(1)	0
Reclassification of (gains)/losses to net income	—	—	—	—
Total net changes related to available-for-sale securities	0	0	(1)	0
Unrealized gains/(losses) on cash flow hedges:				
Unrealized gains/(losses) arising during the period	189	109	449	262
Reclassification of (gains)/losses to net income	(12)	32	4	282
Total unrealized gains/(losses) on cash flow hedges	178	141	453	545
Retirement-related benefit plans:				
Prior service costs/(credits)	412	0	408	0
Net (losses)/gains arising during the period	53	1	63	23
Curtailments and settlements	5,913	13	5,931	46
Amortization of prior service (credits)/costs	3	3	16	8
Amortization of net (gains)/losses	388	638	1,305	1,929
Total retirement-related benefit plans	6,768	656	7,722	2,006
Other comprehensive income/(loss), before tax	7,089	683	8,973	3,014
Income tax (expense)/benefit related to items of other comprehensive income	(2,058)	(333)	(2,877)	(978)
Other comprehensive income/(loss), net of tax	5,030	350	6,096	2,035
Total comprehensive income	$ 1,834	$ 1,480	$ 5,025	$ 5,446

* Amounts presented have not been recast to exclude discontinued operations.

(Amounts may not add due to rounding.)
(The accompanying notes are an integral part of the financial statements.)

INTERNATIONAL BUSINESS MACHINES CORPORATION
AND SUBSIDIARY COMPANIES
CONSOLIDATED BALANCE SHEET
(UNAUDITED)

ASSETS

(Dollars in millions)	At September 30, 2022	At December 31, 2021
Assets:		
Current assets:		
Cash and cash equivalents	$ 7,816	$ 6,650
Restricted cash	159	307
Marketable securities	1,753	600
Notes and accounts receivable — trade (net of allowances of $214 in 2022 and $218 in 2021)	5,526	6,754
Short-term financing receivables:		
Held for investment (net of allowances of $139 in 2022 and $176 in 2021)	6,280	7,221
Held for sale	395	793
Other accounts receivable (net of allowances of $48 in 2022 and $24 in 2021)	902	1,002
Inventory, at lower of average cost or net realizable value:		
Finished goods	209	208
Work in process and raw materials	1,585	1,442
Total inventory	1,794	1,649
Deferred costs	921	1,097
Prepaid expenses and other current assets	3,452	3,466
Total current assets	28,999	29,539
Property, plant and equipment	18,675	20,085
Less: Accumulated depreciation	13,525	14,390
Property, plant and equipment — net	5,150	5,694
Operating right-of-use assets — net	2,740	3,222
Long-term financing receivables (net of allowances of $20 in 2022 and $25 in 2021)	4,781	5,425
Prepaid pension assets	9,695	9,850
Deferred costs	818	924
Deferred taxes	6,868	7,370
Goodwill	54,218	55,643
Intangible assets — net	10,967	12,511
Investments and sundry assets	1,614	1,823
Total assets	$ 125,850	$ 132,001

(Amounts may not add due to rounding.)
(The accompanying notes are an integral part of the financial statements.)

INTERNATIONAL BUSINESS MACHINES CORPORATION
AND SUBSIDIARY COMPANIES
CONSOLIDATED BALANCE SHEET – (CONTINUED)
(UNAUDITED)

LIABILITIES AND EQUITY

(Dollars in millions except per share amounts)	At September 30, 2022	At December 31, 2021
Liabilities:		
Current liabilities:		
Taxes	$ 1,667	$ 2,289
Short-term debt	5,937	6,787
Accounts payable	3,806	3,955
Compensation and benefits	3,369	3,204
Deferred income	11,139	12,518
Operating lease liabilities	844	974
Other accrued expenses and liabilities	3,702	3,892
Total current liabilities	30,466	33,619
Long-term debt	44,942	44,917
Retirement and nonpension postretirement benefit obligations	11,760	14,435
Deferred income	3,018	3,577
Operating lease liabilities	2,103	2,462
Other liabilities	13,413	13,996
Total liabilities	105,703	113,005
Equity:		
IBM stockholders' equity:		
Common stock, par value $0.20 per share, and additional paid-in capital Shares authorized: 4,687,500,000 Shares issued: 2022 - 2,255,410,248 2021 - 2,248,577,848	58,117	57,319
Retained earnings	148,611	154,209
Treasury stock - at cost Shares: 2022 - 1,351,283,886 2021 - 1,350,509,249	(169,514)	(169,392)
Accumulated other comprehensive income/(loss)	(17,138)	(23,234)
Total IBM stockholders' equity	20,076	18,901
Noncontrolling interests	71	95
Total equity	20,147	18,996
Total liabilities and equity	$ 125,850	$ 132,001

(Amounts may not add due to rounding.)
(The accompanying notes are an integral part of the financial statements.)

INTERNATIONAL BUSINESS MACHINES CORPORATION
AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENT OF CASH FLOWS
(UNAUDITED)

(Dollars in millions)	Nine Months Ended September 30, 2022	2021
Cash flows from operating activities:		
Net income/(loss)	$ (1,071)	$ 3,410
Adjustments to reconcile net income/(loss) to cash provided by operating activities:		
Pension settlement charge	5,894	—
Depreciation	1,837	3,139
Amortization of intangibles	1,828	1,897
Stock-based compensation	739	719
Net (gain)/loss on asset sales and other	(60)	(150)
Changes in operating assets and liabilities, net of acquisitions/divestitures	(2,695)	1,238
Net cash provided by operating activities	6,470	10,252
Cash flows from investing activities:		
Payments for property, plant and equipment	(937)	(1,612)
Proceeds from disposition of property, plant and equipment	98	312
Investment in software	(479)	(555)
Acquisition of businesses, net of cash acquired	(1,020)	(3,018)
Divestitures of businesses, net of cash transferred	1,271	26
Purchases of marketable securities and other investments	(4,474)	(2,655)
Proceeds from disposition of marketable securities and other investments	2,655	2,202
Net cash provided by/(used in) investing activities	(2,883)	(5,300)
Cash flows from financing activities:		
Proceeds from new debt	7,797	394
Payments to settle debt	(5,446)	(7,321)
Short-term borrowings/(repayments) less than 90 days — net	221	840
Common stock repurchases for tax withholdings	(329)	(252)
Financing — other	106	71
Cash dividends paid	(4,454)	(4,395)
Net cash provided by/(used in) financing activities	(2,106)	(10,662)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(463)	(159)
Net change in cash, cash equivalents and restricted cash	1,018	(5,868)
Cash, cash equivalents and restricted cash at January 1	6,957	13,675
Cash, cash equivalents and restricted cash at September 30	$ 7,975	$ 7,806

Cash flows are presented on an IBM consolidated basis. Refer to note 3, "Separation of Kyndryl," for additional information related to cash flows from Kyndryl discontinued operations.

(Amounts may not add due to rounding.)
(The accompanying notes are an integral part of the financial statements.)

INTERNATIONAL BUSINESS MACHINES CORPORATION
AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENT OF EQUITY
(UNAUDITED)

(Dollars in millions except per share amounts)	Common Stock and Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income/(Loss)	Total IBM Stockholders' Equity	Non-Controlling Interests	Total Equity
Equity - July 1, 2022	$ 57,802	$ 153,298	$ (169,522)	$ (22,169)	$ 19,409	$ 67	$ 19,476
Net income/(loss) plus other comprehensive income/(loss):							
Net income/(loss)		(3,196)			(3,196)		(3,196)
Other comprehensive income/(loss)				5,030	5,030		5,030
Total comprehensive income/(loss)					$ 1,834		$ 1,834
Cash dividends paid — common stock ($1.65 per share)		(1,491)			(1,491)		(1,491)
Common stock issued under employee plans (871,676 shares)	315				315		315
Purchases (103,736 shares) and sales (178,069 shares) of treasury stock under employee plans — net		0	8		8		8
Changes in noncontrolling interests						4	4
Equity – September 30, 2022	$ 58,117	$ 148,611	$ (169,514)	$ (17,138)	$ 20,076	$ 71	$ 20,147

(Dollars in millions except per share amounts)	Common Stock and Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income/(Loss)	Total IBM Stockholders' Equity	Non-Controlling Interests	Total Equity
Equity - July 1, 2021	$ 56,912	$ 162,086	$ (169,404)	$ (27,652)	$ 21,942	$ 125	$ 22,067
Net income plus other comprehensive income/(loss):							
Net income		1,130			1,130		1,130
Other comprehensive income/(loss)				350	350		350
Total comprehensive income/(loss)					$ 1,480		$ 1,480
Cash dividends paid — common stock ($1.64 per share)		(1,471)			(1,471)		(1,471)
Common stock issued under employee plans (482,632 shares)	277				277		277
Purchases (124,146 shares) and sales (121,792 shares) of treasury stock under employee plans — net		1	(2)		0		0
Changes in noncontrolling interests						4	4
Equity - September 30, 2021	$ 57,189	$ 161,747	$ (169,406)	$ (27,302)	$ 22,228	$ 129	$ 22,357

(Amounts may not add due to rounding.)
(The accompanying notes are an integral part of the financial statements.)

INTERNATIONAL BUSINESS MACHINES CORPORATION
AND SUBSIDIARY COMPANIES
CONSOLIDATED STATEMENT OF EQUITY – (CONTINUED)
(UNAUDITED)

(Dollars in millions except per share amounts)	Common Stock and Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income/(Loss)	Total IBM Stockholders' Equity	Non-Controlling Interests	Total Equity
Equity - January 1, 2022	$ 57,319	$ 154,209	$ (169,392)	$ (23,234)	$ 18,901	$ 95	$ 18,996
Net income/(loss) plus other comprehensive income/(loss):							
Net income/(loss)		(1,071)			(1,071)		(1,071)
Other comprehensive income/(loss)				6,096	6,096		6,096
Total comprehensive income/(loss)					$ 5,025		$ 5,025
Cash dividends paid — common stock ($4.94 per share)		(4,454)			(4,454)		(4,454)
Common stock issued under employee plans (6,832,400 shares)	736				736		736
Purchases (2,423,220 shares) and sales (1,648,583 shares) of treasury stock under employee plans — net		(10)	(122)		(133)		(133)
Other equity	63	(63)			0		0
Changes in noncontrolling interests						(23)	(23)
Equity - September 30, 2022	$ 58,117	$ 148,611	$ (169,514)	$ (17,138)	$ 20,076	$ 71	$ 20,147

(Dollars in millions except per share amounts)	Common Stock and Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income/(Loss)	Total IBM Stockholders' Equity	Non-Controlling Interests	Total Equity
Equity - January 1, 2021	$ 56,556	$ 162,717	$ (169,339)	$ (29,337)	$ 20,597	$ 129	$ 20,727
Net income plus other comprehensive income/(loss):							
Net income		3,410			3,410		3,410
Other comprehensive income/(loss)				2,035	2,035		2,035
Total comprehensive income/(loss)					$ 5,446		$ 5,446
Cash dividends paid — common stock ($4.91 per share)		(4,395)			(4,395)		(4,395)
Common stock issued under employee plans (4,496,470 shares)	632				632		632
Purchases (1,797,733 shares) and sales (1,448,189 shares) of treasury stock under employee plans — net		15	(66)		(52)		(52)
Changes in noncontrolling interests						(1)	(1)
Equity - September 30, 2021	$ 57,189	$ 161,747	$ (169,406)	$ (27,302)	$ 22,228	$ 129	$ 22,357

(Amounts may not add due to rounding.)
(The accompanying notes are an integral part of the financial statements.)

Notes to Consolidated Financial Statements

1. Basis of Presentation:

The accompanying Consolidated Financial Statements and footnotes of the International Business Machines Corporation (IBM or the company) have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The financial statements and footnotes are unaudited. In the opinion of the company's management, these statements include all adjustments, which are only of a normal recurring nature, necessary to present a fair statement of the company's results of operations, financial position and cash flows.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amount of assets, liabilities, revenue, costs, expenses and other comprehensive income/(loss) that are reported in the Consolidated Financial Statements and accompanying disclosures. These estimates are based on management's best knowledge of current events, historical experience, actions that the company may undertake in the future and on various other assumptions that are believed to be reasonable under the circumstances. As a result, actual results may be different from these estimates.

On November 3, 2021, the company completed the separation of its managed infrastructure services unit into a new public company with the distribution of 80.1 percent of the outstanding common stock of Kyndryl Holdings, Inc. (Kyndryl) to IBM stockholders on a pro rata basis. To effect the separation, IBM stockholders received one share of Kyndryl common stock for every five shares of IBM common stock held at the close of business on October 25, 2021, the record date for the distribution. The company retained 19.9 percent of the shares of Kyndryl common stock immediately following the separation with the intent to dispose of such shares within twelve months after the distribution. The company accounts for the retained Kyndryl common stock as a fair value equity investment included within prepaid expenses and other current assets in the Consolidated Balance Sheet with subsequent fair value changes included in other (income) and expense in the Consolidated Income Statement. As of September 30, 2022, the company transferred all of its 19.9 percent retained interest in Kyndryl common stock pursuant to exchange agreements with a third-party financial institution. Refer to note 8, "Financial Assets & Liabilities," for additional information.

The accounting requirements for reporting the separation of Kyndryl as a discontinued operation were met when the separation was completed. Accordingly, the historical results of Kyndryl are presented as discontinued operations and, as such, have been excluded from continuing operations and segment results for all periods presented. Refer to note 3, "Separation of Kyndryl," for additional information.

In the first quarter of 2022, the company realigned its management structure to reflect the planned divestiture of its healthcare software assets which was completed in the second quarter of 2022. This change impacted the company's Software segment and Other–divested businesses category. In the fourth quarter of 2021, immediately prior to the separation of Kyndryl, the company made a number of changes to its organizational structure and management system. These changes impacted the company's reportable segments but did not impact the Consolidated Financial Statements. Refer to note 5, "Segments," for additional information on the company's reportable segments. The segments are reported on a comparable basis for all periods.

In September 2022, the IBM Qualified Personal Pension Plan (Qualified PPP) purchased two separate nonparticipating single premium group annuity contracts from The Prudential Insurance Company of America and Metropolitan Life Insurance Company (collectively, the Insurers) and irrevocably transferred to the Insurers approximately $16 billion of the Qualified PPP's defined benefit pension obligations and related plan assets, thereby reducing the company's pension obligations and assets by the same amount. The group annuity contracts were purchased using assets of the Qualified PPP and no additional funding contribution was required from the company. As a result of this transaction the company recognized a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion net of tax) in the third quarter of 2022, primarily related to the accelerated recognition of accumulated actuarial losses of the Qualified PPP. Refer to note 18, "Retirement-Related Benefits," for additional information.

For the three and nine months ended September 30, 2022, the company reported a benefit from income taxes of $1,287 million and $1,070 million, respectively. The tax benefits were primarily due to the transfer of a portion of the

Qualified PPP's defined benefit pension obligations and related plan assets, as described above. For the three and nine months ended September 30, 2021, the company reported a benefit from income taxes of $224 million and $282 million, respectively. The tax benefits were primarily driven by the resolution of certain tax audits in the first quarter of 2021 as well as third-quarter 2021 events that resulted in additional anticipated utilization of U.S. foreign tax credits.

Noncontrolling interest amounts of $3.7 million and $5.5 million, net of tax, for the three months ended September 30, 2022 and 2021, respectively, and $14.2 million and $14.5 million, net of tax, for the nine months ended September 30, 2022 and 2021, respectively, are included as a reduction within other (income) and expense in the Consolidated Income Statement.

Interim results are not necessarily indicative of financial results for a full year. The information included in this Form 10-Q should be read in conjunction with the company's 2021 Annual Report.

Within the financial statements and tables presented, certain columns and rows may not add due to the use of rounded numbers for disclosure purposes. Percentages presented are calculated from the underlying whole-dollar amounts. Certain prior-period amounts have been reclassified to conform to the current-period presentation. This is annotated where applicable. In addition, in the first quarter of 2022, an adjustment of $63 million was recorded between common stock and retained earnings related to the issuance of treasury stock in connection with certain previously issued stock-based compensation awards and is reflected in the Consolidated Balance Sheet and Consolidated Statement of Equity at September 30, 2022.

2. Accounting Changes:

New Standards to be Implemented

Disclosures of Supplier Finance Program Obligations

Standard/Description–Issuance date: September 2022. This guidance requires an entity to provide certain interim and annual disclosures about the use of supplier finance programs in connection with the purchase of goods or services.

Effective Date and Adoption Considerations–The guidance is effective January 1, 2023 with certain annual disclosures required beginning in 2024 and early adoption is permitted. The company will adopt the guidance as of the effective date.

Effect on Financial Statements or Other Significant Matters–As the guidance is a change to disclosures only, the company does not expect it to have a material impact in the consolidated financial results. The company's use of supplier finance programs as of September 30, 2022 was not material.

Disclosures about Government Assistance

Standard/Description–Issuance date: November 2021. This guidance requires an entity to provide certain annual disclosures about government assistance received and accounted for by applying a grant or contribution accounting model by analogy.

Effective Date and Adoption Considerations–The guidance is effective for annual disclosures beginning in 2022 and early adoption was permitted. The company will adopt the guidance as of the effective date.

Effect on Financial Statements or Other Significant Matters–As the guidance is a change to disclosures only, the company does not expect it to have a material impact in the consolidated financial results.

Troubled Debt Restructurings and Vintage Disclosures

Standard/Description–Issuance date: March 2022. This eliminates the accounting guidance for troubled debt restructurings and requires an entity to apply the general loan modification guidance to all loan modifications, including those made to customers experiencing financial difficulty, to determine whether the modification results in a new loan or

a continuation of an existing loan. The guidance also requires presenting current period gross write-offs by year of origination for financing receivables and net investment in leases.

Effective Date and Adoption Considerations–The amendment is effective January 1, 2023 and early adoption is permitted. The company will adopt the guidance as of the effective date.

Effect on Financial Statements or Other Significant Matters–The guidance is not expected to have a material impact in the consolidated financial results.

Standards Implemented

Lessors–Certain Leases with Variable Lease Payments

Standard/Description–Issuance date: July 2021. This guidance modifies a lessor's accounting for certain leases with variable lease payments that resulted in the recognition of a day-one loss even if the lessor expected the arrangement to be profitable overall. The amendment requires these types of lease contracts to be classified as operating leases which eliminates any recognition of a day-one loss.

Effective Date and Adoption Considerations–The amendment was effective January 1, 2022 and early adoption was permitted. The company adopted the guidance on a prospective basis as of the effective date.

Effect on Financial Statements or Other Significant Matters–The guidance did not have a material impact in the consolidated financial results.

Revenue Contracts with Customers Acquired in a Business Combination

Standard/Description–Issuance date: October 2021. This guidance requires that an acquirer recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with revenue guidance, as if it had originated the contracts. Deferred revenue acquired in a business combination is no longer required to be measured at its fair value, but rather will generally be recognized at the same basis as the acquiree.

Effective Date and Adoption Considerations–The amendment is effective January 1, 2023 and early adoption is permitted including adoption in an interim period. The company adopted the guidance as of October 1, 2021 using the retrospective transition method whereby the new guidance was applied to all business combinations that occurred on or after January 1, 2021.

Effect on Financial Statements or Other Significant Matters–The guidance did not have a material impact in the consolidated financial results. The impact of the guidance in IBM's future financial results will be dependent on the nature and size of its acquisitions.

Simplifying the Accounting for Income Taxes

Standard/Description–Issuance date: December 2019. This guidance simplifies various aspects of income tax accounting by removing certain exceptions to the general principle of the guidance and also clarifies and amends existing guidance to improve consistency in application.

Effective Date and Adoption Considerations–The guidance was effective January 1, 2021 and early adoption was permitted. The company adopted the guidance on a prospective basis as of the effective date.

Effect on Financial Statements or Other Significant Matters–The guidance did not have a material impact in the consolidated financial results.

3. Separation of Kyndryl:

On November 3, 2021, the company completed the separation of its managed infrastructure services unit into a new public company with the distribution of 80.1 percent of the outstanding shares of Kyndryl to IBM stockholders on a pro rata basis. The company retained 19.9 percent of the shares of Kyndryl common stock. As of September 30, 2022, the

company transferred all of its 19.9 percent retained interest in Kyndryl common stock pursuant to exchange agreements with a third-party financial institution. Refer to note 8, "Financial Assets & Liabilities," for additional information.

The historical results of Kyndryl have been presented as discontinued operations and, as such, have been excluded from continuing operations and segment results for all periods presented. The company's presentation of discontinued operations excludes general corporate overhead costs which were historically allocated to Kyndryl, consistent with the company's management system, that did not meet the requirements to be presented in discontinued operations in 2021. Such allocations include labor and non-labor expenses related to IBM's corporate support functions (e.g., finance, accounting, tax, treasury, IT, HR, legal, among others) that historically provided support to Kyndryl and transferred to Kyndryl at separation. In addition, discontinued operations excludes the historical intercompany purchases and sales between IBM and Kyndryl that were eliminated in consolidation.

IBM will provide transition services to Kyndryl predominantly consisting of information technology services for a period no longer than two years after the separation. The impact of these transition services on the company's Consolidated Financial Statements for the three and nine months ended September 30, 2022 was not material.

IBM and Kyndryl entered into various commercial agreements pursuant to which Kyndryl will purchase hardware, software and services from IBM and under which IBM will receive hosting and information infrastructure services from Kyndryl. As part of the separation, IBM has also committed to provide upgraded hardware at no cost to Kyndryl over a two-year period after the separation. An estimate of the remaining obligation under the agreement is recorded in other accrued expenses and liabilities in the Consolidated Balance Sheet.

The following table presents the major categories of income/(loss) from discontinued operations, net of tax.

	Three Months Ended September 30,		Nine Months Ended September 30,	
(Dollars in millions)	2022	2021*	2022	2021*
Revenue	$ 1	$ 4,367	$ 7	$ 13,437
Cost of sales	2	3,303	19	10,043
Selling, general and administrative expense	(24)	554	42	1,527
RD&E and Other (income) and expense	0	4	(70)	59
Income from discontinued operations before income taxes	$ 24	$ 506	$ 16	$ 1,807
Provision for income taxes	6	413	1	648
Income from discontinued operations, net of tax	$ 18	$ 93	$ 16	$ 1,160

* Excludes intercompany transactions between IBM and Kyndryl and general corporate overhead costs transferred to Kyndryl as discussed above.

Income from discontinued operations, net of tax, for the three months ended September 30, 2022 primarily reflects the net impact of changes in separation-related estimates and the settlement of assets and liabilities in accordance with the separation and distribution agreement. Income from discontinued operations, net of tax, for the nine months ended September 30, 2022 reflects the same drivers as above and also includes a joint venture historically managed by Kyndryl, which did not transfer at separation due to the transfer being subject to regulatory approval. Upon receiving regulatory approval in the first quarter of 2022, the company sold its majority shares in the joint venture to Kyndryl, resulting in a pre-tax gain on sale of $68 million.

The company did not incur any separation costs during the three months ended September 30, 2022. Separation costs of $543 million incurred during the three months ended September 30, 2021, and $5 million and $739 million incurred during the nine months ended September 30, 2022 and 2021, respectively, are included in income/(loss) from discontinued operations, net of tax, in the Consolidated Income Statement. These charges primarily relate to transaction and third-party support costs, business separation and applicable employee retention fees, pension settlement charges and related tax charges.

The following table presents selected financial information related to cash flows from discontinued operations.

(Dollars in millions)	Nine Months Ended September 30, 2022	2021
Net cash provided by/(used in) operating activities	$ —	$ 2,167 *
Net cash provided by/(used in) investing activities	$ 48	$ (363)

* Excludes intercompany transactions between IBM and Kyndryl and general corporate overhead costs transferred to Kyndryl as discussed above.

4. Revenue Recognition:

Disaggregation of Revenue

The following tables provide details of revenue by major products/service offerings, hybrid cloud revenue, and revenue by geography.

Revenue by Major Products/Service Offerings

(Dollars in millions)	Three Months Ended September 30, 2022	2021*	Nine Months Ended September 30, 2022	2021*
Hybrid Platform & Solutions	$ 4,172	$ 4,074	$ 12,641	$ 12,082
Transaction Processing	1,640	1,332	5,107	4,257
Total Software	$ 5,811	$ 5,406	$ 17,749	$ 16,339
Business Transformation	2,165	2,068	6,646	6,070
Application Operations	1,593	1,501	4,865	4,489
Technology Consulting	943	889	2,826	2,538
Total Consulting	$ 4,700	$ 4,457	$ 14,337	$ 13,098
Hybrid Infrastructure	1,931	1,453	6,392	5,294
Infrastructure Support	1,421	1,468	4,413	4,480
Total Infrastructure	$ 3,352	$ 2,921	$ 10,805	$ 9,774
Financing**	174	184	474	601
Other	70	282	475	844
Total revenue	$ 14,107	$ 13,251	$ 43,840	$ 40,656

* Recast to reflect segment changes.
** Contains lease and loan/working capital financing arrangements which are not subject to the guidance on revenue from contracts with customers.

Hybrid Cloud Revenue by Segment

(Dollars in millions)	Three Months Ended September 30, 2022	2021*	Nine Months Ended September 30, 2022	2021*
Software	$ 2,186	$ 2,038	$ 6,604	$ 5,797
Consulting	2,221	1,982	6,642	5,605
Infrastructure	768	558	2,661	2,376
Other	2	77	143	246
Total	$ 5,176	$ 4,655	$ 16,049	$ 14,024

* Recast to reflect segment changes.

Revenue by Geography

(Dollars in millions)	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
Americas	$ 7,416	$ 6,579	$ 22,614	$ 20,178
Europe/Middle East/Africa	3,959	3,939	12,716	12,181
Asia Pacific	2,732	2,734	8,509	8,297
Total	$ 14,107	$ 13,251	$ 43,840	$ 40,656

Remaining Performance Obligations

The remaining performance obligation (RPO) disclosure provides the aggregate amount of the transaction price yet to be recognized as of the end of the reporting period and an explanation as to when the company expects to recognize these amounts in revenue. It is intended to be a statement of overall work under contract that has not yet been performed and does not include contracts in which the customer is not committed, such as certain as-a-Service, governmental, term software license and services offerings. The customer is not considered committed when they are able to terminate for convenience without payment of a substantive penalty. The disclosure includes estimates of variable consideration, except when the variable consideration is a sales-based or usage-based royalty promised in exchange for a license of intellectual property. Additionally, as a practical expedient, the company does not include contracts that have an original duration of one year or less. RPO estimates are subject to change and are affected by several factors, including terminations, changes in the scope of contracts, periodic revalidations, adjustment for revenue that has not materialized and adjustments for currency.

At September 30, 2022, the aggregate amount of the transaction price allocated to RPO related to customer contracts that are unsatisfied or partially unsatisfied was $53 billion. Approximately 73 percent of the amount is expected to be recognized as revenue in the subsequent two years, approximately 25 percent in the subsequent three to five years and the balance thereafter.

Revenue Recognized for Performance Obligations Satisfied (or Partially Satisfied) in Prior Periods

For the three and nine months ended September 30, 2022, revenue was reduced by $36 million and $60 million, respectively, for performance obligations satisfied (or partially satisfied) in previous periods mainly due to changes in estimates on contracts with cost-to-cost measures of progress.

Reconciliation of Contract Balances

The following table provides information about notes and accounts receivable–trade, contract assets and deferred income balances.

(Dollars in millions)	At September 30, 2022	At December 31, 2021
Notes and accounts receivable — trade (net of allowances of $214 in 2022 and $218 in 2021)	$ 5,526	$ 6,754
Contract assets*	$ 522	$ 471
Deferred income (current)	$ 11,139	$ 12,518
Deferred income (noncurrent)	$ 3,018	$ 3,577

* Included within prepaid expenses and other current assets in the Consolidated Balance Sheet.

The amount of revenue recognized during the three and nine months ended September 30, 2022 that was included within the deferred income balance at June 30, 2022 and December 31, 2021 was $4.3 billion and $8.8 billion, respectively, and was primarily related to services and software.

The following table provides roll forwards of the notes and accounts receivable–trade allowance for expected credit losses for the nine months ended September 30, 2022 and the year ended December 31, 2021.

(Dollars in millions) January 1, 2022	Additions / (Releases)	Write-offs	Foreign currency and other	September 30, 2022
$ 218	$ 43	$ (28)	$ (19)	$ 214

January 1, 2021	Additions / (Releases)	Write-offs	Foreign currency and other	December 31, 2021
$ 260	$ (15)	$ (28)	$ 1	$ 218

The contract assets allowance for expected credit losses was not material in any of the periods presented.

5. Segments:

In January 2022, IBM announced the divestiture of its healthcare software assets which closed in the second quarter of 2022. Refer to note 6, "Acquisitions & Divestitures," for additional information. The company re-aligned its management structure to manage these assets outside of the Software segment prior to the divestiture. Beginning in the first quarter of 2022, the financial results of these assets are presented in Other–divested businesses. In the fourth quarter of 2021, immediately prior to the separation of Kyndryl, the company made a number of changes to its organizational structure and management system to align the company's operating model to its platform-centric approach to hybrid cloud and AI. With these changes, the company revised its reportable segments, but did not impact its Consolidated Financial Statements.

The following tables reflect the results of continuing operations of the company's segments consistent with the management and measurement system utilized within the company, and the prior-year periods have been recast to reflect the company's segment changes in the first quarter of 2022 and the fourth quarter of 2021 described above. Performance measurement is based on pre-tax income from continuing operations. These results are used by the chief operating decision maker, both in evaluating the performance of, and in allocating resources to, each of the segments.

SEGMENT INFORMATION

(Dollars in millions)	Software	Consulting	Infrastructure	Financing	Total Segments
For the three months ended September 30, 2022:					
Revenue	$ 5,811	$ 4,700	$ 3,352	$ 174	$ 14,037
Pre-tax income from continuing operations	$ 1,306	$ 462	$ 280	$ 79	$ 2,128
Revenue year-to-year change	7.5 %	5.4 %	14.8 %	(5.7)%	8.2 %
Pre-tax income year-to-year change	31.9 %	(0.8)%	34.1 %	(40.4)%	18.4 %
Pre-tax income margin	22.5 %	9.8 %	8.3 %	45.4 %	15.2 %
For the three months ended September 30, 2021*:					
Revenue	$ 5,406	$ 4,457	$ 2,921	$ 184	$ 12,969
Pre-tax income from continuing operations	$ 990	$ 466	$ 209	$ 132	$ 1,797
Pre-tax income margin	18.3 %	10.5 %	7.1 %	71.7 %	13.9 %

Reconciliations to IBM as Reported:

(Dollars in millions) For the three months ended September 30:	2022	2021*
Revenue:		
Total reportable segments	$ 14,037	$ 12,969
Other–divested businesses	3	189
Other revenue	68	93
Total consolidated revenue	$ 14,107	$ 13,251
Pre-tax income/(loss) from continuing operations:		
Total reportable segments	$ 2,128	$ 1,797
Amortization of acquired intangible assets	(417)	(469)
Acquisition-related (charges)/income	(1)	(4)
Non-operating retirement-related (costs)/income	(6,062)**	(318)
Kyndryl-related impacts+	14	—
Eliminations of internal transactions	0	1
Other–divested businesses	0	(41)
Unallocated corporate amounts and other	(163)	(155)
Total pre-tax income/(loss) from continuing operations	$ (4,501)	$ 813

* Recast to conform to current year presentation.

** Includes a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion. See note 18, “Retirement-Related Benefits,” for additional information.

\+ Refer to note 8, “Financial Assets & Liabilities,” for additional information.

SEGMENT INFORMATION

(Dollars in millions)	Software	Consulting	Infrastructure	Financing	Total Segments
For the nine months ended September 30, 2022:					
Revenue	$ 17,749	$ 14,337	$ 10,805	$ 474	$ 43,365
Pre-tax income from continuing operations	$ 3,816	$ 1,154	$ 1,236	$ 265	$ 6,470
Revenue year-to-year change	8.6 %	9.5 %	10.6 %	(21.2)%	8.9 %
Pre-tax income year-to-year change	41.0 %	13.9 %	25.0 %	(26.8)%	27.6 %
Pre-tax income margin	21.5 %	8.0 %	11.4 %	55.9 %	14.9 %
For the nine months ended September 30, 2021*:					
Revenue	$ 16,339	$ 13,098	$ 9,774	$ 601	$ 39,812
Pre-tax income from continuing operations	$ 2,707	$ 1,013	$ 989	$ 362	$ 5,071
Pre-tax income margin	16.6 %	7.7 %	10.1 %	60.1 %	12.7 %

Reconciliations to IBM as Reported:

(Dollars in millions) For the nine months ended September 30:	2022	2021*
Revenue:		
Total reportable segments	$ 43,365	$ 39,812
Other–divested businesses	319	583
Other revenue	156	261
Total consolidated revenue	$ 43,840	$ 40,656
Pre-tax income/(loss) from continuing operations:		
Total reportable segments	$ 6,470	$ 5,071
Amortization of acquired intangible assets	(1,337)	(1,371)
Acquisition-related charges	(9)	(37)
Non-operating retirement-related (costs)/income	(6,455)**	(967)
Kyndryl-related impacts+	(353)	—
Eliminations of internal transactions	(15)	(3)
Other–divested businesses	108 ++	(106)
Unallocated corporate amounts	(565)	(619)
Total pre-tax income/(loss) from continuing operations	$ (2,156)	$ 1,968

* Recast to conform to current year presentation.

** Includes a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion. See note 18, “Retirement-Related Benefits,” for additional information.

\+ Refer to note 8, “Financial Assets & Liabilities,” for additional information.

++ Includes a gain from the sale of the company’s healthcare software assets. Refer to note 6, “Acquisitions & Divestitures.”

6. Acquisitions & Divestitures:

Acquisitions

Purchase price consideration for all acquisitions was paid primarily in cash. All acquisitions, except as otherwise stated, were for 100 percent of the acquired business and are reported in the Consolidated Statement of Cash Flows, net of acquired cash and cash equivalents.

During the nine months ended September 30, 2022, the company completed six acquisitions at an aggregate cost of $1,102 million. Each acquisition is expected to enhance the company's portfolio of products and services capabilities and further advance IBM's hybrid cloud and AI strategy.

Acquisition	Segment	Description of Acquired Business
First Quarter		
Envizi	Software	Data and analytics software provider for environmental performance management
Sentaca	Consulting	Telco consulting services and solutions provider specializing in automation, cloud migration, and future networks for telecommunication providers
Neudesic	Consulting	Application development and cloud computing services company
Second Quarter		
Randori	Software	Leading attack surface management (ASM) and cybersecurity provider
Databand.ai	Software	Proactive data observability platform that isolates data errors and issues to alert relevant stakeholders
Third Quarter		
Omnio	Software	Developer of software connectors used in the collection of raw data for various Industrial Internet of Things (IoT) applications

At September 30, 2022, the remaining cash to be remitted by the company related to certain first half 2022 acquisitions was $90 million, most of which is expected to be paid by the second quarter of 2023.

The following table reflects the purchase price related to these acquisitions and the resulting purchase price allocations as of September 30, 2022.

(Dollars in millions)	Amortization Life (in years)	Total Acquisitions
Current assets		$ 63
Property, plant and equipment/noncurrent assets		3
Intangible assets:		
Goodwill	N/A	857
Client relationships	7	151
Completed technology	4-7	90
Trademarks	2-3	7
Total assets acquired		$ 1,171
Current liabilities		48
Noncurrent liabilities		22
Total liabilities assumed		$ 69
Total purchase price		$ 1,102

N/A – not applicable

The goodwill generated is primarily attributable to the assembled workforce of the acquired businesses and the increased synergies expected to be achieved from the integration of the acquired businesses into the company's various integrated solutions and services, neither of which qualifies as an amortizable intangible asset.

The overall weighted-average useful life of the identified amortizable intangible assets acquired was 6.7 years. Goodwill of $432 million and $425 million was assigned to the Software and Consulting segments, respectively. It is expected that 41 percent of the goodwill will be deductible for tax purposes.

The identified intangible assets will be amortized on a straight-line basis over their useful lives, which approximates the pattern that the assets' economic benefits are expected to be consumed over time.

The valuation of the assets acquired and liabilities assumed is subject to revision. If additional information becomes available, the company may further revise the purchase price allocation as soon as practical, but no later than one year from the acquisition date; however, material changes are not expected.

On October 3, 2022, the company acquired Dialexa, a privately held digital product engineering services firm. Dialexa will be integrated into the Consulting segment. At the date of issuance of the financial statements, the initial purchase accounting for Dialexa was not complete.

Divestitures

Healthcare Software Assets — In January 2022, IBM and Francisco Partners (Francisco) signed a definitive agreement in which Francisco would acquire IBM's healthcare data and analytics assets reported within Other–divested businesses for $1,065 million. Refer to note 5, "Segments," for additional information. The assets include Health Insights, MarketScan, Clinical Development, Social Program Management, Micromedex, and imaging software offerings. In addition, IBM is providing Francisco with transition services including IT and other services. The closing completed for the U.S. and Canada on June 30, 2022 and a subsequent closing occurred in most other countries on September 30, 2022. The company expects to close the remaining countries by the first quarter of 2023.

On June 30, 2022, the company received a cash payment of $1,065 million. As of September 30, 2022 a total pre-tax gain of $259 million has been recognized in other (income) and expense in the Consolidated Income Statement. Any pre-tax gains related to the subsequent wave closings are not expected to be material. The total gain on sale may change in the future due to changes in transaction estimates; however, such changes are not expected to be material.

Other Divestitures — In the first quarter of 2022, the Infrastructure segment completed one divestiture. The financial terms related to this transaction were not material.

7. Earnings/(Loss) Per Share of Common Stock:

The following tables provide the computation of basic and diluted earnings/(loss) per share of common stock for the three and nine months ended September 30, 2022 and 2021.

(Dollars in millions except per share amounts) For the three months ended September 30:	2022	2021
Number of shares on which basic earnings per share is calculated:		
Weighted-average shares outstanding during period	904,076,831	897,097,073
Add — Incremental shares under stock-based compensation plans	—	6,946,467
Add — Incremental shares associated with contingently issuable shares	—	1,909,573
Number of shares on which diluted earnings per share is calculated	904,076,831	905,953,114
Income/(loss) from continuing operations	$ (3,214)	$ 1,037
Income/(loss) from discontinued operations, net of tax	18	93
Net income/(loss) on which basic earnings per share is calculated	$ (3,196)	$ 1,130
Income/(loss) from continuing operations	$ (3,214)	$ 1,037
Net income applicable to contingently issuable shares	—	—
Income/(loss) from continuing operations on which diluted earnings per share is calculated	$ (3,214)	$ 1,037
Income/(loss) from discontinued operations, net of tax, on which diluted earnings per share is calculated	18	93
Net income/(loss) on which diluted earnings per share is calculated	$ (3,196)	$ 1,130
Earnings/(loss) per share of common stock:		
Assuming dilution		
Continuing operations	$ (3.55)	$ 1.14
Discontinued operations	0.02	0.10
Total	$ (3.54)	$ 1.25
Basic		
Continuing operations	$ (3.55)	$ 1.16
Discontinued operations	0.02	0.10
Total	$ (3.54)	$ 1.26

Stock options to purchase 840,544 shares and 750,990 shares were outstanding as of September 30, 2022 and 2021, respectively, but were not included in the computation of diluted earnings/(loss) per share because the exercise price of the options during the respective period was greater than the average market price of the common shares, and therefore, the effect would have been antidilutive.

Due to the net loss for the three months ended September 30, 2022, otherwise dilutive potential shares of common stock under stock-based compensation plans and contingently issuable shares of 6,696,350 and 2,069,742, respectively, have been excluded from the computation of diluted earnings/(loss) per share as the effect would have been antidilutive.

(Dollars in millions except per share amounts) For the nine months ended September 30:	2022	2021
Number of shares on which basic earnings per share is calculated:		
Weighted-average shares outstanding during period	901,621,217	895,257,004
Add — Incremental shares under stock-based compensation plans	—	7,000,190
Add — Incremental shares associated with contingently issuable shares	—	1,720,345
Number of shares on which diluted earnings per share is calculated	901,621,217	903,977,539
Income/(loss) from continuing operations	$ (1,087)	$ 2,250
Income/(loss) from discontinued operations, net of tax	16	1,160
Net income/(loss) on which basic earnings per share is calculated	$ (1,071)	$ 3,410
Income/(loss) from continuing operations	$ (1,087)	$ 2,250
Net income applicable to contingently issuable shares	—	—
Income/(loss) from continuing operations on which diluted earnings per share is calculated	$ (1,087)	$ 2,250
Income/(loss) from discontinued operations, net of tax, on which diluted earnings per share is calculated	16	1,160
Net income/(loss) on which diluted earnings per share is calculated	$ (1,071)	$ 3,410
Earnings/(loss) per share of common stock:		
Assuming dilution		
Continuing operations	$ (1.21)	$ 2.49
Discontinued operations	0.02	1.28
Total	$ (1.19)	$ 3.77
Basic		
Continuing operations	$ (1.21)	$ 2.51
Discontinued operations	0.02	1.30
Total	$ (1.19)	$ 3.81

Stock options to purchase 930,788 shares and 879,289 shares (average of first, second and third quarter share amounts) were outstanding as of September 30, 2022 and 2021, respectively, but were not included in the computation of diluted earnings/(loss) per share because the exercise price of the options during the respective period was greater than the average market price of the common shares, and therefore, the effect would have been antidilutive.

Due to the net loss for the nine months ended September 30, 2022, otherwise dilutive potential shares of common stock under stock-based compensation plans and contingently issuable shares of 7,530,115 and 1,899,113, respectively, have been excluded from the computation of diluted earnings/(loss) per share as the effect would have been antidilutive.

8. Financial Assets & Liabilities:

Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The company classifies certain assets and liabilities based on the following fair value hierarchy:

- Level 1–Quoted prices (unadjusted) in active markets for identical assets or liabilities that can be accessed at the measurement date;

- Level 2−Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and

- Level 3−Unobservable inputs for the asset or liability.

When available, the company uses unadjusted quoted market prices in active markets to measure the fair value and classifies such items as Level 1. If quoted market prices are not available, fair value is based upon internally developed models that use current market-based or independently sourced market parameters such as interest rates and currency rates. Items valued using internally generated models are classified according to the lowest level input or value driver that is significant to the valuation.

The determination of fair value considers various factors including interest rate yield curves and time value underlying the financial instruments. For derivatives and debt securities, the company uses a discounted cash flow analysis using discount rates commensurate with the duration of the instrument.

In determining the fair value of financial instruments, the company considers certain market valuation adjustments to the "base valuations" calculated using the methodologies described below for several parameters that market participants would consider in determining fair value:

- Counterparty credit risk adjustments are applied to financial instruments, taking into account the actual credit risk of a counterparty as observed in the credit default swap market to determine the true fair value of such an instrument.

- Credit risk adjustments are applied to reflect the company's own credit risk when valuing all liabilities measured at fair value. The methodology is consistent with that applied in developing counterparty credit risk adjustments, but incorporates the company's own credit risk as observed in the credit default swap market.

The company holds investments primarily in time deposits, certificates of deposit, and U.S. government debt that are designated as available-for-sale. The primary objective of the company's cash and debt investment portfolio is to maintain principal by investing in very liquid and highly rated investment grade securities.

The company's standard practice is to hold all of its debt security investments classified as available-for-sale until maturity. No impairments for credit losses and no material non-credit impairments were recorded for the three and nine months ended September 30, 2022

Certain non-financial assets such as property, plant and equipment, operating right-of-use assets, land, goodwill and intangible assets are also subject to nonrecurring fair value measurements if they are deemed to be impaired. The impairment models used for non-financial assets depend on the type of asset. There were no material impairments of non-financial assets for the three and nine months ended September 30, 2022 and 2021, respectively.

The following table presents the company's financial assets and financial liabilities that are measured at fair value on a recurring basis at September 30, 2022 and December 31, 2021.

(Dollars in millions)	Fair Value Hierarchy Level	At September 30, 2022		At December 31, 2021	
		Assets (8)	Liabilities (9)	Assets (8)	Liabilities (9)
Cash equivalents: (1)					
Time deposits and certificates of deposit (2)	2	$ 4,195	$ N/A	$ 1,903	$ N/A
Money market funds	1	732	N/A	263	N/A
U.S. government securities (2)	2	—	N/A	599	N/A
Total cash equivalents		$ 4,927	$ N/A	$ 2,766	$ N/A
Equity investments (3)	1	—	N/A	0	N/A
Kyndryl common stock (4)	1	184	N/A	807	N/A
Secured borrowing (4)	2	N/A	184	N/A	—
Debt securities-current (2)(5)	2	1,753	N/A	600	N/A
Debt securities-noncurrent (2)(6)	2,3	31	N/A	37	N/A
Derivatives designated as hedging instruments:					
Interest rate contracts	2	1	339	12	—
Foreign exchange contracts	2	998	531	359	117
Derivatives not designated as hedging instruments:					
Foreign exchange contracts	2	13	31	21	42
Equity contracts (7)	1,2	—	178	6	4
Total		$ 7,908	$ 1,263	$ 4,608	$ 162

(1) Included within cash and cash equivalents in the Consolidated Balance Sheet.
(2) Available-for-sale debt securities with carrying values that approximate fair value.
(3) Included within investments and sundry assets in the Consolidated Balance Sheet.
(4) Refer to "Kyndryl Common Stock" below for additional information.
(5) U.S. treasury bills and term deposits that are reported within marketable securities in the Consolidated Balance Sheet.
(6) Includes corporate and government debt securities that are reported within investments and sundry assets in the Consolidated Balance Sheet.
(7) Level 1 includes immaterial amounts related to equity futures contracts.
(8) The gross balances of derivative assets contained within prepaid expenses and other current assets, and investments and sundry assets in the Consolidated Balance Sheet at September 30, 2022 were $1,008 million and $4 million, respectively, and at December 31, 2021 were $358 million and $40 million, respectively.
(9) The gross balances of derivative liabilities contained within other accrued expenses and liabilities, and other liabilities in the Consolidated Balance Sheet at September 30, 2022 were $475 million and $603 million, respectively, and at December 31, 2021 were $60 million and $103 million, respectively.

N/A – not applicable

Kyndryl Common Stock

On November 3, 2021, IBM completed the separation of Kyndryl and retained 19.9 percent of the shares of Kyndryl common stock with the intent to dispose of the shares within twelve months of the separation.

On May 18, 2022, the company borrowed an aggregate principal amount of $357 million under a short-term credit facility with a third-party financial institution, the proceeds of which were used to repay certain of the company's existing indebtedness. On May 23, 2022, the company completed a debt-for-equity exchange where 22.3 million shares of Kyndryl common stock, equal to 9.95 percent or half of the company's 19.9 percent retained interest (the Shares), were exchanged at a strike price of $13.95 per share to extinguish $311 million of the company's indebtedness under the short-term credit facility (the May 2022 Exchange). The remaining portion of the short-term credit facility was repaid with $46 million of cash.

In connection with the May 2022 Exchange, the company entered into a cash-settled swap with the lender of the short-term credit facility as the counterparty that maintained IBM's continued economic exposure in the Shares. Upon

settlement of the swap, which will occur no later than November 2, 2022, IBM will either receive or pay an amount derived from the difference between the volume-weighted average price (VWAP) of the Kyndryl common stock over the outstanding term of the swap and the strike price of $13.95 per share. As a result, the most significant input into the valuation of the swap is the price of Kyndryl common stock. The fair value of the swap at September 30, 2022 was $85 million and is included within other accrued expenses and liabilities in the Consolidated Balance Sheet. For the three and nine months ended September 30, 2022, an unrealized gain on the swap of $3 million and an unrealized loss on the swap of $85 million, respectively, was recorded in other (income) and expense in the Consolidated Income Statement.

As a result of the swap, the transfer of the Shares pursuant to the May 2022 Exchange did not qualify as a true sale, and therefore the Shares remain on the company's Consolidated Balance Sheet at September 30, 2022. Relatedly, the portion of the company's indebtedness under the short-term credit facility that was extinguished pursuant to the May 2022 Exchange has been classified as a secured borrowing within short-term debt in the Consolidated Balance Sheet. The company has elected to record the debt at fair value based on changes in the value of the Shares underlying the debt. The fair value of the debt was $184 million at September 30, 2022. In electing the fair value option, the company recognizes changes in fair value of the debt in other (income) and expense, which amounted to $34 million and $127 million for the three and nine months ended September 30, 2022, respectively. The contractual principal balance of the debt was $311 million at September 30, 2022. Both the Shares and the debt are expected to be entirely derecognized from the company's Consolidated Balance Sheet upon settlement of the swap, which will occur no later than November 2, 2022.

On August 5, 2022, the company borrowed an aggregate principal amount of $300 million under a short-term credit facility with a third-party financial institution, the proceeds of which will be used to repay certain of the company's existing indebtedness. On August 11, 2022, the company completed a debt-for-equity exchange through the transfer of the remaining 22.3 million shares of Kyndryl common stock to extinguish $229 million of the company's indebtedness under the short-term credit facility (the August 2022 Exchange). The remaining portion of the short-term credit facility was repaid with $71 million of cash. As a result of the August 2022 Exchange, the 22.3 million shares of Kyndryl common stock were derecognized from the company's Consolidated Balance Sheet. The debt-for-equity exchange associated with the August 2022 Exchange is a non-cash financing activity for purposes of the company's Consolidated Statement of Cash Flows as of September 30, 2022.

The retained interest in the Kyndryl common stock of $184 million and $807 million at September 30, 2022 and December 31, 2021, respectively, is included within prepaid expenses and other current assets in the Consolidated Balance Sheet. For the nine months ended September 30, 2022, the company recorded an unrealized loss of $93 million, net of adjustment for the mark-to-market on the related debt as described above related to the Kyndryl common stock under the May 2022 Exchange. The net mark-to-market impact for the three months ended September 30, 2022 was zero. The company recorded a realized gain of $11 million and a realized loss of $174 million related to the Kyndryl shares under the August 2022 Exchange for the three and nine months ended September 30, 2022, respectively. Gains and losses for both the May and August exchanges as noted above were recorded in other (income) and expense in the Consolidated Income Statement.

Financial Assets and Liabilities Not Measured at Fair Value

Short-Term Receivables and Payables

Notes and other accounts receivable and other investments are financial assets with carrying values that approximate fair value. Accounts payable, other accrued expenses and short-term debt (excluding the current portion of long-term debt and including short-term finance lease liabilities) are financial liabilities with carrying values that approximate fair value. If measured at fair value in the financial statements, these financial instruments would be classified as Level 3 in the fair value hierarchy, except for short-term debt which would be classified as Level 2.

Loans and Long-Term Receivables

Fair values are based on discounted future cash flows using current interest rates offered for similar loans to clients with similar credit ratings for the same remaining maturities. At September 30, 2022 and December 31, 2021, the difference between the carrying amount and estimated fair value for loans and long-term receivables was immaterial. If measured at fair value in the financial statements, these financial instruments would be classified as Level 3 in the fair value hierarchy.

Long-Term Debt

Fair value of publicly traded long-term debt is based on quoted market prices for the identical liability when traded as an asset in an active market. For other long-term debt (including long-term finance lease liabilities) for which a quoted market price is not available, an expected present value technique that uses rates currently available to the company for debt with similar terms and remaining maturities is used to estimate fair value. The carrying amount of long-term debt was $44,942 million and $44,917 million, and the estimated fair value was $40,944 million and $49,465 million at September 30, 2022 and December 31, 2021, respectively. If measured at fair value in the financial statements, long-term debt (including the current portion) would be classified as Level 2 in the fair value hierarchy.

9. Financing Receivables:

Financing receivables primarily consist of client loan and installment payment receivables (loans), investment in sales-type and direct financing leases (collectively referred to as client financing receivables) and commercial financing receivables. Loans are provided primarily to clients to finance the purchase of hardware, software and services. Payment terms on these financing arrangements are generally for terms up to seven years. Investment in sales-type and direct financing leases relate principally to the company's Infrastructure products and are for terms ranging generally from two to six years. Commercial financing receivables, which consist of both held-for-investment and held-for-sale receivables, relate primarily to working capital financing for dealers and remarketers of IBM products. Payment terms for working capital financing generally range from 30 to 90 days.

A summary of the components of the company's financing receivables is presented as follows:

	Client Financing Receivables		Commercial Financing Receivables		
(Dollars in millions) At September 30, 2022:	Client Loan and Installment Payment Receivables (Loans)	Investment in Sales-Type and Direct Financing Leases	Held for Investment	Held for Sale*	Total
Financing receivables, gross	$ 7,777	$ 3,566	$ 169	$ 395	$ 11,907
Unearned income	(330)	(285)	—	—	(615)
Unguaranteed residual value	—	323	—	—	323
Amortized cost	$ 7,447	$ 3,604	$ 169	$ 395	$ 11,616
Allowance for credit losses	(101)	(53)	(5)	—	(159)
Total financing receivables, net	$ 7,346	$ 3,551	$ 164	$ 395	$ 11,456
Current portion	$ 4,750	$ 1,366	$ 164	$ 395	$ 6,676
Noncurrent portion	$ 2,596	$ 2,185	$ —	$ —	$ 4,781

* The carrying value of the receivables classified as held for sale approximates fair value.

(Dollars in millions) At December 31, 2021:	Client Financing Receivables: Client Loan and Installment Payment Receivables (Loans)	Client Financing Receivables: Investment in Sales-Type and Direct Financing Leases	Commercial Financing Receivables: Held for Investment	Commercial Financing Receivables: Held for Sale*	Total
Financing receivables, gross	$ 9,303	$ 3,336	$ 450	$ 793	$ 13,881
Unearned income	(353)	(223)	—	—	(576)
Unguaranteed residual value	—	335	—	—	335
Amortized cost	$ 8,949	$ 3,448	$ 450	$ 793	$ 13,640
Allowance for credit losses	(131)	(64)	(6)	—	(201)
Total financing receivables, net	$ 8,818	$ 3,384	$ 444	$ 793	$ 13,439
Current portion	$ 5,371	$ 1,406	$ 444	$ 793	$ 8,014
Noncurrent portion	$ 3,447	$ 1,978	$ —	$ —	$ 5,425

* The carrying value of the receivables classified as held for sale approximates fair value.

The company has a long-standing practice of taking mitigation actions, in certain circumstances, to transfer credit risk to third parties. These actions may include credit insurance, financial guarantees, nonrecourse borrowings, transfers of receivables recorded as true sales in accordance with accounting guidance or sales of equipment under operating lease. Sale of receivables arrangements are also utilized in the normal course of business as part of the company's cash and liquidity management.

Financing receivables pledged as collateral for nonrecourse borrowings were $386 million and $408 million at September 30, 2022 and December 31, 2021, respectively. These borrowings are included in note 12, "Borrowings."

Transfer of Financial Assets

The company has an existing agreement with a third-party investor to sell IBM short-term commercial financing receivables on a revolving basis. The company has expanded this agreement to other countries and geographies since commencement in the U.S. and Canada in 2020. In addition, the company enters into agreements with third-party financial institutions to sell certain of its client financing receivables, including both loan and lease receivables, for cash proceeds. In the first nine months of 2022, sales of client financing receivables were largely focused on credit mitigation. During 2021, sales of client financing receivables were utilized as part of the company's cash and liquidity management as well as for credit mitigation.

The following table presents the total amount of client and commercial financing receivables transferred.

(Dollars in millions) For the nine months ended September 30:	2022	2021
Client financing receivables:		
Lease receivables	$ 15	$ 781
Loan receivables	2	2,189
Total client financing receivables transferred	$ 17	$ 2,970
Commercial financing receivables:		
Receivables transferred during the period	$ 6,091	$ 4,465
Receivables uncollected at end of period*	$ 816	$ 707

* Of the total amount of commercial financing receivables sold and derecognized from the Consolidated Balance Sheet, the amounts presented remained uncollected from business partners as of September 30, 2022 and 2021.

The transfer of these receivables qualified as true sales and therefore reduced financing receivables. The cash proceeds from the sales are included in cash flows from operating activities and the impacts to the Consolidated Income

Statement, including fees and net gain or loss associated with the transfers of these receivables for the nine months ended September 30, 2022 and 2021 were not material.

Financing Receivables by Portfolio Segment

The following tables present the amortized cost basis for client financing receivables at September 30, 2022 and December 31, 2021, further segmented by three classes: Americas, Europe/Middle East/Africa (EMEA) and Asia Pacific. The commercial financing receivables portfolio segment is excluded from the tables in the sections below as the receivables are short term in nature and the current estimated risk of loss and resulting impact to the company's financial results are not material.

(Dollars in millions) At September 30, 2022:	Americas	EMEA	Asia Pacific	Total
Amortized cost	$ 6,900	$ 2,731	$ 1,420	$ 11,051
Allowance for credit losses:				
Beginning balance at January 1, 2022	$ 111	$ 61	$ 23	$ 195
Write-offs	$ (20)	$ (1)	$ (2)	$ (23)
Recoveries	1	0	4	5
Additions/(releases)	(6)	(3)	(5)	(13)
Other*	1	(8)	(2)	(10)
Ending balance at September 30, 2022	$ 87	$ 49	$ 18	$ 154

(Dollars in millions) At December 31, 2021:	Americas	EMEA	Asia Pacific	Total
Amortized cost	$ 6,573	$ 3,793	$ 2,031	$ 12,397
Allowance for credit losses:				
Beginning balance at January 1, 2021	$ 141	$ 77	$ 37	$ 255
Write-offs	$ (8)	$ (2)	$ (7)	$ (17)
Recoveries	0	0	1	1
Additions/(releases)	(19)	(11)	(7)	(38)
Other*	(3)	(3)	0	(7)
Ending balance at December 31, 2021	$ 111	$ 61	$ 23	$ 195

* Primarily represents translation adjustments.

When determining the allowances, financing receivables are evaluated either on an individual or a collective basis. For the company's policy on determining allowances for credit losses, refer to note A, "Significant Accounting Policies," in the company's 2021 Annual Report. Any changes to economic models that occurred after the balance sheet date will be reflected in future periods.

Past Due Financing Receivables

The company summarizes information about the amortized cost basis for client financing receivables, including amortized cost aged over 90 days and still accruing, billed invoices aged over 90 days and still accruing, and amortized cost not accruing.

(Dollars in millions) At September 30, 2022:	Total Amortized Cost	Amortized Cost > 90 Days*	Amortized Cost > 90 Days and Accruing*	Billed Invoices > 90 Days and Accruing	Amortized Cost Not Accruing**
Americas	$ 6,900	$ 266	$ 197	$ 22	$ 70
EMEA	2,731	81	1	0	81
Asia Pacific	1,420	23	6	1	17
Total client financing receivables	$ 11,051	$ 369	$ 204	$ 23	$ 168

(Dollars in millions) At December 31, 2021:	Total Amortized Cost	Amortized Cost > 90 Days*	Amortized Cost > 90 Days and Accruing*	Billed Invoices > 90 Days and Accruing	Amortized Cost Not Accruing**
Americas	$ 6,573	$ 188	$ 100	$ 6	$ 90
EMEA	3,793	99	7	2	95
Asia Pacific	2,031	25	5	2	20
Total client financing receivables	$ 12,397	$ 312	$ 112	$ 10	$ 205

* At a contract level, which includes total billed and unbilled amounts for financing receivables aged greater than 90 days.

** Of the amortized cost not accruing, there was a related allowance of $120 million and $153 million at September 30, 2022 and December 31, 2021, respectively. Financing income recognized on these receivables was immaterial for the three and nine months ended September 30, 2022, respectively.

Credit Quality Indicators

The company's credit quality indicators, which are based on rating agency data, publicly available information and information provided by customers, are reviewed periodically based on the relative level of risk. The resulting indicators are a numerical rating system that maps to Moody's Investors Service credit ratings as shown below. The company uses information provided by Moody's, where available, as one of many inputs in its determination of customer credit ratings. The credit quality of the customer is evaluated based on these indicators and is assigned the same risk rating whether the receivable is a lease or a loan.

The following tables present the amortized cost basis for client financing receivables by credit quality indicator at September 30, 2022 and December 31, 2021, respectively. Receivables with a credit quality indicator ranging from Aaa to Baa3 are considered investment grade. All others are considered non-investment grade. The credit quality indicators reflect mitigating credit enhancement actions taken by customers which reduce the risk to IBM.

(Dollars in millions)	Americas		EMEA		Asia Pacific	
At September 30, 2022:	Aaa – Baa3	Ba1 – D	Aaa – Baa3	Ba1 – D	Aaa – Baa3	Ba1 – D
Vintage year:						
2022	$ 2,475	$ 1,012	$ 716	$ 465	$ 471	$ 83
2021	1,401	387	487	198	210	77
2020	660	265	268	168	213	53
2019	310	119	167	110	133	24
2018	147	40	45	37	87	25
2017 and prior	40	47	15	54	25	18
Total	$ 5,031	$ 1,869	$ 1,698	$ 1,033	$ 1,140	$ 280

(Dollars in millions)	Americas		EMEA		Asia Pacific	
At December 31, 2021:	Aaa – Baa3	Ba1 – D	Aaa – Baa3	Ba1 – D	Aaa – Baa3	Ba1 – D
Vintage year:						
2021	$ 2,556	$ 1,147	$ 1,181	$ 778	$ 565	$ 226
2020	1,013	392	506	342	381	86
2019	544	236	287	291	297	51
2018	338	117	189	85	211	64
2017	108	50	15	52	74	17
2016 and prior	20	53	21	46	38	20
Total	$ 4,579	$ 1,994	$ 2,198	$ 1,595	$ 1,567	$ 464

Troubled Debt Restructurings

The company did not have any significant troubled debt restructurings during the nine months ended September 30, 2022 or for the year ended December 31, 2021.

10. Leases:

Accounting for Leases as a Lessor

The following table presents amounts included in the Consolidated Income Statement related to lessor activity.

(Dollars in millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Lease income — sales-type and direct financing leases:				
Sales-type lease selling price	$ 99	$ 119	$ 888	$ 870
Less: Carrying value of underlying assets*	(57)	(48)	(195)	(205)
Gross profit	$ 43	$ 70	$ 693	$ 664
Interest income on lease receivables	54	44	144	142
Total sales-type and direct financing lease income	$ 97	$ 114	$ 838	$ 806
Lease income — operating leases	29	38	86	136
Variable lease income	19	18	75	97
Total lease income	$ 145	$ 169	$ 998	$ 1,038

* Excludes unguaranteed residual value.

11. Intangible Assets Including Goodwill:

Intangible Assets

The following tables present the company's intangible asset balances by major asset class.

(Dollars in millions)	At September 30, 2022 Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount*
Intangible asset class:			
Capitalized software	$ 1,697	$ (720)	$ 977
Client relationships	8,051	(2,763)	5,288
Completed technology	5,490	(2,242)	3,248
Patents/trademarks	2,093	(645)	1,448
Other**	32	(27)	5
Total	$ 17,364	$ (6,397)	$ 10,967

(Dollars in millions)	At December 31, 2021 Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount*
Intangible asset class:			
Capitalized software	$ 1,696	$ (751)	$ 945
Client relationships	9,021	(2,889)	6,132
Completed technology	6,074	(2,259)	3,815
Patents/trademarks	2,196	(586)	1,610
Other**	44	(35)	9
Total	$ 19,031	$ (6,520)	$ 12,511

* Amounts as of September 30, 2022 and December 31, 2021 included a decrease in net intangible asset balances of $389 million and $221 million, respectively, due to foreign currency translation.

** Other intangibles are primarily acquired proprietary and non-proprietary business processes, methodologies and systems.

The net carrying amount of intangible assets decreased $1,544 million during the first nine months of 2022, primarily due to intangible asset amortization and the impacts of currency, partially offset by additions of acquired intangibles and capitalized software. The aggregate intangible asset amortization expense was $577 million and $1,828 million for the third quarter and first nine months of 2022, respectively, compared to $640 million and $1,880 million for the third quarter and first nine months of 2021, respectively. In the first nine months of 2022, the company retired $647 million of fully amortized intangible assets, impacting both the gross carrying amount and accumulated amortization by this amount. The company also derecognized intangible assets with a gross carrying amount of $1,313 million and $1,149 million of accumulated amortization as part of the divestiture of its healthcare software assets on June 30, 2022.

The future amortization expense relating to intangible assets currently recorded in the Consolidated Balance Sheet was estimated to be the following at September 30, 2022:

(Dollars in millions)	Capitalized Software	Acquired Intangibles	Total
Remainder of 2022	$ 157	$ 405	$ 562
2023	472	1,469	1,941
2024	286	1,452	1,737
2025	63	1,434	1,497
2026	—	1,417	1,417
Thereafter	—	3,813	3,813

Goodwill

The changes in the goodwill balances by segment for the nine months ended September 30, 2022 and for the year ended December 31, 2021 were as follows:

(Dollars in millions) Segment	Balance 1/1/2022	Goodwill Additions	Purchase Price Adjustments	Divestitures	Foreign Currency Translation and Other Adjustments*	Balance 9/30/2022
Software	$ 43,966	$ 442	$ (118)	$ —	$ (1,290)	$ 43,001
Consulting	6,797	461	(42)	—	(343)	6,872
Infrastructure	4,396	—	—	(1)	(50)	4,345
Other**	484	—	—	(484)	—	—
Total	$ 55,643	$ 903	$ (160)	$ (485)	$ (1,683)	$ 54,218

* Primarily driven by foreign currency translation.
** The company derecognized $484 million of goodwill related to the divestiture of its healthcare software assets. Refer to note 6, "Acquisitions & Divestitures," for additional information.

(Dollars in millions) Segment	Balance 1/1/2021	Goodwill Additions	Purchase Price Adjustments	Divestitures	Foreign Currency Translation and Other Adjustments*	Balance 12/31/2021
Software**	$ 42,665	$ 1,836	$ 23	$ (13)	$ (545)	$ 43,966
Consulting	6,145	713	(21)	—	(40)	6,797
Infrastructure	4,436	—	0	—	(39)	4,396
Other**	520	—	—	(37)	1	484
Total	$ 53,765	$ 2,549	$ 2	$ (50)	$ (623)	$ 55,643

* Primarily driven by foreign currency translation.
** Recast to conform to current year presentation.

There were no goodwill impairment losses recorded during the first nine months of 2022 or full-year 2021 and the company has no accumulated impairment losses. Purchase price adjustments recorded in the first nine months of 2022 and full-year 2021 were related to acquisitions that were still subject to the measurement period that ends at the earlier of 12 months from the acquisition date or when information becomes available. Net purchase price adjustments recorded in the first nine months of 2022 primarily relate to deferred tax assets and liabilities associated with the Turbonomic acquisition.

12. Borrowings:

Short-Term Debt

(Dollars in millions)	At September 30, 2022	At December 31, 2021
Short-term loans	$ 196	$ 22
Long-term debt — current maturities	5,741	6,764
Total	$ 5,937	$ 6,787

Included within short-term debt in the company's Consolidated Balance Sheet at September 30, 2022 is $184 million of secured borrowings recorded at fair value from the short-term credit facility and the May 2022 Exchange as described in note 8, "Financial Assets & Liabilities."

The weighted-average interest rate for short-term loans excluding the aforementioned secured borrowings was 8.2 percent and 6.7 percent at September 30, 2022 and December 31, 2021, respectively.

Long-Term Debt

Pre-Swap Borrowing

(Dollars in millions)	Maturities	Balance 9/30/2022	Balance 12/31/2021
U.S. dollar debt (weighted-average interest rate at September 30, 2022):*			
2.9%	2022	$ 900	$ 5,673
3.4%	2023	1,536	1,573
3.3%	2024	5,011	5,016
5.1%	2025	1,604	608
3.3%	2026	4,352	4,356
3.1%	2027	3,621	2,221
6.5%	2028	313	313
3.5%	2029	3,250	3,250
2.0%	2030	1,350	1,350
4.4%	2032	1,850	600
8.0%	2038	83	83
4.5%	2039	2,745	2,745
2.9%	2040	650	650
4.0%	2042	1,107	1,107
7.0%	2045	27	27
4.7%	2046	650	650
4.3%	2049	3,000	3,000
3.0%	2050	750	750
4.2%	2052	1,400	—
7.1%	2096	316	316
		$ 34,516	$ 34,290
Other currencies (weighted-average interest rate at September 30, 2022, in parentheses):*			
Euro (1.1%)	2023–2040	$ 15,671	$ 15,903
Pound sterling	2022	—	406
Japanese yen (0.3%)	2022–2026	1,005	1,263
Other (16.0%)	2022–2026	397	378
		$ 51,590	$ 52,240
Finance lease obligations (2.8%)	2022–2030	159	99
		$ 51,749	$ 52,339
Less: net unamortized discount		841	839
Less: net unamortized debt issuance costs		140	130
Add: fair value adjustment**		(84)	311
		$ 50,684	$ 51,681
Less: current maturities		5,741	6,764
Total		$ 44,942	$ 44,917

* Includes notes, debentures, bank loans and secured borrowings.

** The portion of the company's fixed-rate debt obligations that is hedged is reflected in the Consolidated Balance Sheet as an amount equal to the sum of the debt's carrying value and a fair value adjustment representing changes in the fair value of the hedged debt obligations attributable to movements in benchmark interest rates.

The company's indenture governing its debt securities and its various credit facilities each contain significant covenants which obligate the company to promptly pay principal and interest, limit the aggregate amount of secured indebtedness and sale and leaseback transactions to 10 percent of the company's consolidated net tangible assets, and restrict the company's ability to merge or consolidate unless certain conditions are met. The credit facilities also include a covenant on the company's consolidated net interest expense ratio, which cannot be less than 2.20 to 1.0, as well as a cross default provision with respect to other defaulted indebtedness of at least $500 million.

The company is in compliance with its debt covenants and provides periodic certifications to its lenders. The failure to comply with its debt covenants could constitute an event of default with respect to the debt to which such provisions apply. If certain events of default were to occur, the principal and interest on the debt to which such event of default applied would become immediately due and payable.

In the first quarter of 2022, the company issued $2.3 billion of Euro fixed-rate notes in tranches with maturities ranging from 8 to 12 years and coupons ranging from 0.875 to 1.25 percent, and $1.8 billion of U.S. dollar fixed-rate notes with maturities ranging from 5 to 30 years and coupons ranging from 2.20 to 3.43 percent.

On July 20, 2022, the company issued $3.25 billion of U.S. dollar fixed-rate notes in tranches with maturities ranging from 3 to 30 years and coupons ranging from 4.00 to 4.90 percent.

Pre-swap annual contractual obligations of long-term debt outstanding at September 30, 2022, were as follows:

(Dollars in millions)	Total
Remainder of 2022	$ 1,334
2023	4,490
2024	6,246
2025	4,586
2026	4,657
Thereafter	30,436
Total	$ 51,749

Interest on Debt

(Dollars in millions) For the nine months ended September 30:	2022	2021
Cost of financing	$ 264	$ 312
Interest expense	903	852
Interest capitalized	4	3
Total interest paid and accrued	$ 1,170	$ 1,167

Lines of Credit

The company has a $2.5 billion Three-Year Credit Agreement and a $7.5 billion Five-Year Credit Agreement with maturity dates of June 20, 2025 and June 22, 2027, respectively. The Credit Agreements permit the company and its subsidiary borrowers to borrow up to $10 billion on a revolving basis. At September 30, 2022, there were no borrowings by the company, or its subsidiaries, under these credit facilities.

13. Commitments:

The company's extended lines of credit to third-party entities include unused amounts of $1.5 billion and $1.7 billion at September 30, 2022 and December 31, 2021, respectively. A portion of these amounts was available to the company's business partners to support their working capital needs. In addition, the company has committed to provide future financing to its clients in connection with client purchase agreements for $2.3 billion and $3.2 billion at September 30, 2022 and December 31, 2021, respectively. The company collectively evaluates the allowance for these arrangements using a provision methodology consistent with the portfolio of the commitments. Refer to note A, "Significant Accounting Policies," in the company's 2021 Annual Report for additional information. The allowance for these commitments is recorded in other liabilities in the Consolidated Balance Sheet and was not material at September 30, 2022.

The company has applied the guidance requiring a guarantor to disclose certain types of guarantees, even if the likelihood of requiring the guarantor's performance is remote. The following is a description of arrangements in which the company is the guarantor.

The company is a party to a variety of agreements pursuant to which it may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in the context of contracts entered into by the company, under which the company customarily agrees to hold the party harmless against losses arising from a breach of representations and covenants related to such matters as title to the assets sold, certain intellectual property rights, specified environmental matters, third-party performance of nonfinancial contractual obligations and certain income taxes. In each of these circumstances, payment by the company is conditioned on the other party making a claim pursuant to the procedures specified in the particular contract, the procedures of which typically allow the company to challenge the other party's claims. While indemnification provisions typically do not include a contractual maximum on the company's payment, the company's obligations under these agreements may be limited in terms of time and/or nature of claim, and in some instances, the company may have recourse against third parties for certain payments made by the company.

It is not possible to predict the maximum potential amount of future payments under these or similar agreements due to the conditional nature of the company's obligations and the unique facts and circumstances involved in each particular agreement. Historically, payments made by the company under these agreements have not had a material effect on the company's business, financial condition or results of operations.

In addition, the company guarantees certain loans and financial commitments. The maximum potential future payment under these financial guarantees and the fair value of these guarantees recognized in the Consolidated Balance Sheet at September 30, 2022 and December 31, 2021 was not material.

Changes in the company's warranty liability for standard warranties, which are included in other accrued expenses and liabilities and other liabilities in the Consolidated Balance Sheet, and for extended warranty contracts, which are included in deferred income in the Consolidated Balance Sheet, are presented in the following tables.

Standard Warranty Liability

(Dollars in millions)	2022	2021
Balance at January 1	$ 77	$ 83
Current period accruals	58	50
Accrual adjustments to reflect actual experience	(1)	(2)
Charges incurred	(62)	(66)
Balance at September 30	$ 72	$ 66

Extended Warranty Liability

(Dollars in millions)	2022	2021
Balance at January 1	$ 350	$ 425
Revenue deferred for new extended warranty contracts	103	71
Amortization of deferred revenue	(148)	(154)
Other*	(21)	(9)
Balance at September 30	$ 284	$ 334
Current portion	$ 139	$ 171
Noncurrent portion	$ 145	$ 163

* Other primarily consists of foreign currency translation adjustments.

14. Contingencies:

As a company with a substantial employee population and with clients in more than 175 countries, IBM is involved, either as plaintiff or defendant, in a variety of ongoing claims, demands, suits, investigations, tax matters and proceedings that arise from time to time in the ordinary course of its business. The company is a leader in the information technology industry and, as such, has been and will continue to be subject to claims challenging its IP rights and associated products and offerings, including claims of copyright and patent infringement and violations of trade secrets and other IP rights. In addition, the company enforces its own IP against infringement, through license negotiations, lawsuits or otherwise. Further, given the rapidly evolving external landscape of cybersecurity, privacy and data protection laws, regulations and threat actors, the company and its clients have been and will continue to be subject to actions or proceedings in various jurisdictions. Also, as is typical for companies of IBM's scope and scale, the company is party to actions and proceedings in various jurisdictions involving a wide range of labor and employment issues (including matters related to contested employment decisions, country-specific labor and employment laws, and the company's pension, retirement and other benefit plans), as well as actions with respect to contracts, product liability, securities, foreign operations, competition law and environmental matters. These actions may be commenced by a number of different parties, including competitors, clients, current or former employees, government and regulatory agencies, stockholders and representatives of the locations in which the company does business. Some of the actions to which the company is party may involve particularly complex technical issues, and some actions may raise novel questions under the laws of the various jurisdictions in which these matters arise.

The company records a provision with respect to a claim, suit, investigation or proceeding when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Any recorded liabilities, including any changes to such liabilities for the quarter ended September 30, 2022 were not material to the Consolidated Financial Statements.

In accordance with the relevant accounting guidance, the company provides disclosures of matters for which the likelihood of material loss is at least reasonably possible. In addition, the company also discloses matters based on its consideration of other matters and qualitative factors, including the experience of other companies in the industry, and investor, customer and employee relations considerations.

With respect to certain of the claims, suits, investigations and proceedings discussed herein, the company believes at this time that the likelihood of any material loss is remote, given, for example, the procedural status, court rulings, and/or the strength of the company's defenses in those matters. With respect to the remaining claims, suits, investigations and proceedings discussed in this note, except as specifically discussed herein, the company is unable to provide estimates of reasonably possible losses or range of losses, including losses in excess of amounts accrued, if any, for the following reasons. Claims, suits, investigations and proceedings are inherently uncertain, and it is not possible to predict the ultimate outcome of these matters. It is the company's experience that damage amounts claimed in litigation against it are unreliable and unrelated to possible outcomes, and as such are not meaningful indicators of the company's potential liability. Further, the company is unable to provide such an estimate due to a number of other factors with respect to

these claims, suits, investigations and proceedings, including considerations of the procedural status of the matter in question, the presence of complex or novel legal theories, and/or the ongoing discovery and development of information important to the matters. The company reviews claims, suits, investigations and proceedings at least quarterly, and decisions are made with respect to recording or adjusting provisions and disclosing reasonably possible losses or range of losses (individually or in the aggregate), to reflect the impact and status of settlement discussions, discovery, procedural and substantive rulings, reviews by counsel and other information pertinent to a particular matter.

Whether any losses, damages or remedies finally determined in any claim, suit, investigation or proceeding could reasonably have a material effect on the company's business, financial condition, results of operations or cash flows will depend on a number of variables, including: the timing and amount of such losses or damages; the structure and type of any such remedies; the significance of the impact any such losses, damages or remedies may have in the Consolidated Financial Statements; and the unique facts and circumstances of the particular matter that may give rise to additional factors. While the company will continue to defend itself vigorously, it is possible that the company's business, financial condition, results of operations or cash flows could be affected in any particular period by the resolution of one or more of these matters.

The following is a summary of the more significant legal matters involving the company.

In December 2017, CIS General Insurance Limited (CISGIL) sued IBM UK regarding a contract entered into by IBM UK and CISGIL in 2015 to implement and operate an IT insurance platform. The contract was terminated by IBM UK in July 2017 for non-payment by CISGIL. CISGIL alleges wrongful termination, breach of contract and breach of warranty. In February 2021, the Technology & Construction Court in London rejected the majority of CISGIL's claims and ruled in IBM's favor on its counterclaim. The court's decision required IBM to pay approximately $20 million in damages, plus interest and litigation costs. In April 2022, the Court of Appeal awarded CISGIL additional damages of approximately $89 million, plus interest and litigation costs. IBM filed an application for permission to appeal with the UK Supreme Court.

On June 8, 2021, IBM sued GlobalFoundries U.S. Inc. (GF) in New York State Supreme Court for claims including fraud and breach of contract relating to a long-term strategic relationship between IBM and GF for researching, developing, and manufacturing advanced semiconductor chips for IBM. GF walked away from its obligations and IBM is now suing to recover amounts paid to GF, and other compensatory and punitive damages, totaling more than $1.5 billion. On September 14, 2021, the court ruled on GF's motion to dismiss. On April 7, 2022, the Appellate Division unanimously reversed the lower court's dismissal of IBM's fraud claim. IBM's claims for breaches of contract, promissory estoppel, and fraud are proceeding.

On April 5, 2022, a putative securities law class action was commenced in the United States District Court for the Southern District of New York alleging that during the period from April 4, 2017 through October 20, 2021, certain strategic imperatives revenues were misclassified. The company, two current IBM senior executives, and two former IBM senior executives are named as defendants. On June 23, 2022, the court entered an order appointing Iron Workers Local 580 Joint Funds as lead plaintiff. On September 21, 2022, the plaintiff voluntarily dismissed the case, without prejudice. On March 25, 2022, the Board of Directors received a shareholder demand letter making similar allegations and demanding that the company's Board of Directors take action to assert the company's rights. A special committee of independent directors has been formed to investigate the issues raised in the letter.

On June 2, 2022, a putative class action lawsuit was filed in the United States District Court for the Southern District of New York alleging that the IBM Pension Plan miscalculated certain joint and survivor annuity pension benefits by using outdated actuarial tables in violation of the Employee Retirement Income Security Act of 1974. IBM, the Plan Administrator Committee, and the IBM Pension Plan are named as defendants.

As disclosed in the Kyndryl Form 10 and subsequent Kyndryl public filings, in 2017 BMC Software, Inc. (BMC) filed suit against IBM in the United States District Court for the Southern District of Texas in a dispute involving IBM's former managed infrastructure services business. On May 30, 2022, the trial court awarded BMC $718 million in direct

damages and $718 million in punitive damages, plus interest and fees. IBM filed a notice of appeal, and BMC cross appealed. IBM does not believe it has any material exposure relating to this litigation. No material liability or related indemnification asset has been recorded by IBM.

The company is party to, or otherwise involved in, proceedings brought by U.S. federal or state environmental agencies under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), known as "Superfund," or laws similar to CERCLA. Such statutes require potentially responsible parties to participate in remediation activities regardless of fault or ownership of sites. The company is also conducting environmental investigations, assessments or remediations at or in the vicinity of several current or former operating sites globally pursuant to permits, administrative orders or agreements with country, state or local environmental agencies, and is involved in lawsuits and claims concerning certain current or former operating sites.

The company is also subject to ongoing tax examinations and governmental assessments in various jurisdictions. Along with many other U.S. companies doing business in Brazil, the company is involved in various challenges with Brazilian tax authorities regarding non-income tax assessments and non-income tax litigation matters. The total potential amount related to all these matters for all applicable years is approximately $400 million. The company believes it will prevail on these matters and that this amount is not a meaningful indicator of liability.

15. Equity Activity:

Reclassifications and Taxes Related to Items of Other Comprehensive Income

(Dollars in millions) For the three months ended September 30, 2022:	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax Amount
Other comprehensive income/(loss):			
Foreign currency translation adjustments	$ 143	$ (301)	$ (158)
Net changes related to available-for-sale securities:			
Unrealized gains/(losses) arising during the period	$ 0	$ 0	$ 0
Reclassification of (gains)/losses to other (income) and expense	—	—	—
Total net changes related to available-for-sale securities	$ 0	$ 0	$ 0
Unrealized gains/(losses) on cash flow hedges:			
Unrealized gains/(losses) arising during the period	$ 189	$ (49)	$ 140
Reclassification of (gains)/losses to:			
Cost of services	(4)	1	(3)
Cost of sales	(35)	10	(25)
Cost of financing	7	(2)	5
SG&A expense	(8)	2	(6)
Other (income) and expense	6	(2)	5
Interest expense	22	(5)	16
Total unrealized gains/(losses) on cash flow hedges	$ 178	$ (45)	$ 133
Retirement-related benefit plans*:			
Prior service costs/(credits)	$ 412	$ (104)	$ 309
Net (losses)/gains arising during the period	53	(13)	39
Curtailments and settlements	5,913	(1,487)	4,426
Amortization of prior service (credits)/costs	3	(1)	2
Amortization of net (gains)/losses	388	(108)	279
Total retirement-related benefit plans	$ 6,768	$ (1,712)	$ 5,056
Other comprehensive income/(loss)	$ 7,089	$ (2,058)	$ 5,030

* These accumulated other comprehensive income (AOCI) components are included in the computation of net periodic pension cost and include the impact of a one-time, non-cash pension settlement charge of $5.9 billion ($4.4 billion net of tax) in the third quarter of 2022. Refer to note 18, "Retirement-Related Benefits," for additional information.

Reclassifications and Taxes Related to Items of Other Comprehensive Income

(Dollars in millions) For the three months ended September 30, 2021:	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax Amount
Other comprehensive income/(loss):			
Foreign currency translation adjustments	$ (114)	$ (120)	$ (234)
Net changes related to available-for-sale securities:			
Unrealized gains/(losses) arising during the period	$ 0	$ 0	$ 0
Reclassification of (gains)/losses to other (income) and expense	—	—	—
Total net changes related to available-for-sale securities	$ 0	$ 0	$ 0
Unrealized gains/(losses) on cash flow hedges:			
Unrealized gains/(losses) arising during the period	$ 109	$ (28)	$ 82
Reclassification of (gains)/losses to:			
Cost of services	(12)	3	(9)
Cost of sales	(1)	1	(1)
Cost of financing	6	(1)	4
SG&A expense	1	0	1
Other (income) and expense	22	(6)	17
Interest expense	16	(4)	12
Total unrealized gains/(losses) on cash flow hedges	$ 141	$ (35)	$ 106
Retirement-related benefit plans*:			
Prior service costs/(credits)	$ 0	$ 0	$ 0
Net (losses)/gains arising during the period	1	0	1
Curtailments and settlements	13	(4)	9
Amortization of prior service (credits)/costs	3	0	3
Amortization of net (gains)/losses	638	(174)	464
Total retirement-related benefit plans	$ 656	$ (178)	$ 478
Other comprehensive income/(loss)	$ 683	$ (333)	$ 350

* These AOCI components are included in the computation of net periodic pension cost. Refer to note 18, “Retirement-Related Benefits,” for additional information.

Reclassifications and Taxes Related to Items of Other Comprehensive Income

(Dollars in millions) For the nine months ended September 30, 2022:	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax Amount
Other comprehensive income/(loss):			
Foreign currency translation adjustments	$ 799	$ (784)	$ 14
Net changes related to available-for-sale securities:			
Unrealized gains/(losses) arising during the period	$ (1)	$ 0	$ (1)
Reclassification of (gains)/losses to other (income) and expense	—	—	—
Total net changes related to available-for-sale securities	$ (1)	$ 0	$ (1)
Unrealized gains/(losses) on cash flow hedges:			
Unrealized gains/(losses) arising during the period	$ 449	$ (118)	$ 332
Reclassification of (gains)/losses to:			
Cost of services	(32)	8	(24)
Cost of sales	(71)	20	(50)
Cost of financing	19	(5)	14
SG&A expense	(28)	8	(20)
Other (income) and expense	51	(13)	38
Interest expense	64	(16)	48
Total unrealized gains/(losses) on cash flow hedges	$ 453	$ (116)	$ 338
Retirement-related benefit plans*:			
Prior service costs/(credits)	$ 408	$ (99)	$ 309
Net (losses)/gains arising during the period	63	(20)	43
Curtailments and settlements	5,931	(1,491)	4,440
Amortization of prior service (credits)/costs	16	(4)	12
Amortization of net (gains)/losses	1,305	(364)	941
Total retirement-related benefit plans	$ 7,722	$ (1,978)	$ 5,745
Other comprehensive income/(loss)	$ 8,973	$ (2,877)	$ 6,096

* These AOCI components are included in the computation of net periodic pension cost and include the impact of a one-time, non-cash pension settlement charge of $5.9 billion ($4.4 billion net of tax) in the third quarter of 2022. Refer to note 18, “Retirement-Related Benefits,” for additional information.

Reclassifications and Taxes Related to Items of Other Comprehensive Income

(Dollars in millions) For the nine months ended September 30, 2021:	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax Amount
Other comprehensive income/(loss):			
Foreign currency translation adjustments	$ 463	$ (304)	$ 160
Net changes related to available-for-sale securities:			
Unrealized gains/(losses) arising during the period	$ 0	$ 0	$ 0
Reclassification of (gains)/losses to other (income) and expense	—	—	—
Total net changes related to available-for-sale securities	$ 0	$ 0	$ 0
Unrealized gains/(losses) on cash flow hedges:			
Unrealized gains/(losses) arising during the period	$ 262	$ (66)	$ 196
Reclassification of (gains)/losses to:			
Cost of services	(33)	8	(25)
Cost of sales	30	(8)	23
Cost of financing	17	(4)	13
SG&A expense	32	(8)	24
Other (income) and expense	187	(47)	140
Interest expense	48	(12)	36
Total unrealized gains/(losses) on cash flow hedges	$ 545	$ (138)	$ 407
Retirement-related benefit plans*:			
Prior service costs/(credits)	$ 0	$ 0	$ 0
Net (losses)/gains arising during the period	23	4	27
Curtailments and settlements	46	(14)	32
Amortization of prior service (credits)/costs	8	0	8
Amortization of net (gains)/losses	1,929	(526)	1,403
Total retirement-related benefit plans	$ 2,006	$ (537)	$ 1,469
Other comprehensive income/(loss)	$ 3,014	$ (978)	$ 2,035

* These AOCI components are included in the computation of net periodic pension cost. Refer to note 18, "Retirement-Related Benefits," for additional information.

Accumulated Other Comprehensive Income/(Loss) (net of tax)

(Dollars in millions)	Net Unrealized Gains/(Losses) on Cash Flow Hedges	Foreign Currency Translation Adjustments*	Net Change Retirement-Related Benefit Plans	Net Unrealized Gains/(Losses) on Available-For-Sale Securities	Accumulated Other Comprehensive Income/(Loss)
January 1, 2022	$ (18)	$ (3,362)	$ (19,854)	$ (1)	$ (23,234)
Other comprehensive income before reclassifications	332	14	352	(1)	697
Amount reclassified from accumulated other comprehensive income	6	—	5,393 **	—	5,399
Total change for the period	$ 338	$ 14	$ 5,745	$ (1)	$ 6,096
September 30, 2022	$ 320	$ (3,347)	$ (14,110)	$ (1)	$ (17,138)

* Foreign currency translation adjustments are presented gross except for any associated hedges which are presented net of tax.

** Includes the impact of a one-time, non-cash pension settlement charge of $5.9 billion ($4.4 billion net of tax) in the third quarter of 2022. Refer to note 18, "Retirement-Related Benefits," for additional information.

(Dollars in millions)	Net Unrealized Gains/(Losses) on Cash Flow Hedges	Foreign Currency Translation Adjustments*	Net Change Retirement-Related Benefit Plans	Net Unrealized Gains/(Losses) on Available-For-Sale Securities	Accumulated Other Comprehensive Income/(Loss)
January 1, 2021	$ (456)	$ (4,665)	$ (24,216)	$ 0	$ (29,337)
Other comprehensive income before reclassifications	196	160	26	0	382
Amount reclassified from accumulated other comprehensive income	211	—	1,442	—	1,654
Total change for the period	$ 407	$ 160	$ 1,469	$ 0	$ 2,035
September 30, 2021	$ (49)	$ (4,505)	$ (22,747)	$ (1)	$ (27,302)

* Foreign currency translation adjustments are presented gross except for any associated hedges which are presented net of tax.

16. Derivative Financial Instruments:

The company operates in multiple functional currencies and is a significant lender and borrower in the global markets. In the normal course of business, the company is exposed to the impact of interest rate changes and foreign currency fluctuations, and to a lesser extent equity and commodity price changes and client credit risk. The company limits these risks by following established risk management policies and procedures, including the use of derivatives, and, where cost effective, financing with debt in the currencies in which assets are denominated. For interest rate exposures, derivatives are used to better align rate movements between the interest rates associated with the company's lease and other financial assets and the interest rates associated with its financing debt. Derivatives are also used to manage the related cost of debt. For foreign currency exposures, derivatives are used to better manage the cash flow volatility arising from foreign exchange rate fluctuations.

In the Consolidated Balance Sheet, the company does not offset derivative assets against liabilities in master netting arrangements nor does it offset receivables or payables recognized upon payment or receipt of cash collateral against the fair values of the related derivative instruments. At September 30, 2022 and December 31, 2021, the amount recognized in other accounts receivables for the right to reclaim cash collateral was $191 million and $2 million, respectively. At September 30, 2022 and December 31, 2021, the amount recognized in accounts payable for the obligation to return cash collateral was $222 million and $38 million, respectively. The company restricts the use of cash collateral received to rehypothecation, and therefore reports it in restricted cash in the Consolidated Balance Sheet. At September 30, 2022 and December 31, 2021, the amount rehypothecated was $158 million and $2 million, respectively. Additionally, if derivative exposures covered by a qualifying master netting agreement had been netted in the Consolidated Balance Sheet at September 30, 2022 and December 31, 2021, the total derivative asset and liability positions each would have been reduced by $311 million and $60 million, respectively.

On May 19, 2022, in connection with the disposition of 22.3 million shares of Kyndryl common stock, the company entered into a cash-settled swap with the lender of the short-term credit facility as the counterparty that maintained IBM's continued economic exposure in those shares pursuant to the May 2022 Exchange. Refer to note 8, "Financial Assets & Liabilities," for additional information. The notional value of the swap is $311 million. Upon settlement of the swap, no later than November 2, 2022, IBM will receive or pay an amount derived from the difference between the VWAP of the Kyndryl common stock over the outstanding term of the swap and the strike price as of May 19, 2022. The fair value of the swap at September 30, 2022 was $85 million and is included within other accrued expenses and liabilities in the Consolidated Balance Sheet. For the three and nine months ended September 30, 2022, an unrealized gain of $3 million and unrealized loss of $85 million, respectively, was recorded in other (income) and expense in the Consolidated Income Statement.

In its hedging programs, the company may use forward contracts, futures contracts, interest-rate swaps, cross-currency swaps, equity swaps, and options depending upon the underlying exposure. The company is not a party to leveraged derivative instruments.

A brief description of the major hedging programs, categorized by underlying risk, follows.

Interest Rate Risk

Fixed and Variable Rate Borrowings

The company issues debt in the global capital markets to fund its operations and financing business. Access to cost-effective financing can result in interest rate mismatches with the underlying assets. To manage these mismatches and to reduce overall interest cost, the company may use interest-rate swaps to convert specific fixed-rate debt issuances into variable-rate debt (i.e., fair value hedges) and to convert specific variable-rate debt issuances into fixed-rate debt (i.e., cash flow hedges). At September 30, 2022 and December 31, 2021, the total notional amount of the company's interest-rate swaps was $6.2 billion and $0.4 billion, respectively. The weighted-average remaining maturity of these instruments at September 30, 2022 and December 31, 2021 was approximately 6.0 years and 1.2 years, respectively. These interest-rate contracts were accounted for as fair value hedges. The company did not have any cash flow hedges relating to this program outstanding at September 30, 2022 and December 31, 2021.

Forecasted Debt Issuance

The company is exposed to interest rate volatility on future debt issuances. To manage this risk, the company may use instruments such as forward starting interest-rate swaps to lock in the rate on the interest payments related to the forecasted debt issuances. There were no instruments outstanding at September 30, 2022 and December 31, 2021.

In connection with cash flow hedges of forecasted interest payments related to the company's borrowings, the company recorded net losses (before taxes) of $144 million and $157 million at September 30, 2022 and December 31, 2021, respectively, in AOCI. The company estimates that $18 million of the deferred net losses (before taxes) on derivatives in AOCI at September 30, 2022 will be reclassified to net income within the next 12 months, providing an offsetting economic impact against the underlying interest payments.

Foreign Exchange Risk

Long-Term Investments in Foreign Subsidiaries (Net Investment)

A large portion of the company's foreign currency denominated debt portfolio is designated as a hedge of net investment in foreign subsidiaries to reduce the volatility in stockholders' equity caused by changes in foreign currency exchange rates in the functional currency of major foreign subsidiaries with respect to the U.S. dollar. At September 30, 2022 and December 31, 2021, the carrying value of debt designated as hedging instruments was $12.8 billion and $14.1 billion, respectively. The company also uses cross-currency swaps and foreign exchange forward contracts for this risk management purpose. At September 30, 2022 and December 31, 2021, the total notional amount of derivative instruments designated as net investment hedges was $5.4 billion and $6.8 billion, respectively. At both September 30, 2022 and December 31, 2021, the weighted-average remaining maturity of these instruments was approximately 0.1 year.

Anticipated Royalties and Cost Transactions

The company's operations generate significant nonfunctional currency, third-party vendor payments and intercompany payments for royalties and goods and services among the company's non-U.S. subsidiaries and with the company. In anticipation of these foreign currency cash flows and in view of the volatility of the currency markets, the company selectively employs foreign exchange forward contracts to manage its currency risk. These forward contracts are accounted for as cash flow hedges. At September 30, 2022, the maximum remaining length of time over which the company hedged its exposure is approximately two years. At September 30 2022 and December 31, 2021, the total notional amount of forward contracts designated as cash flow hedges of forecasted royalty and cost transactions was

$8.2 billion and $7.2 billion, respectively. At both September 30, 2022 and December 31, 2021, the weighted-average remaining maturity of these instruments was approximately 0.6 years.

At September 30, 2022 and December 31, 2021, in connection with cash flow hedges of anticipated royalties and cost transactions, the company recorded net gains (before taxes) of $693 million and $315 million, respectively, in AOCI. The company estimates that $631 million of deferred net gains (before taxes) on derivatives in AOCI at September 30, 2022 will be reclassified to net income within the next 12 months, providing an offsetting economic impact against the underlying anticipated transactions.

Foreign Currency Denominated Borrowings

The company is exposed to exchange rate volatility on foreign currency denominated debt. To manage this risk, the company employs cross-currency swaps to convert fixed-rate foreign currency denominated debt to fixed-rate debt denominated in the functional currency of the borrowing entity. These swaps are accounted for as cash flow hedges. At September 30, 2022, the maximum length of time remaining over which the company hedged its exposure is approximately five years. At September 30, 2022 and December 31, 2021, the total notional amount of cross-currency swaps designated as cash flow hedges of foreign currency denominated debt was $3.0 billion and $2.0 billion, respectively.

At September 30, 2022 and December 31, 2021, in connection with cash flow hedges of foreign currency denominated borrowings, the company recorded net losses (before taxes) of $112 million and $174 million, respectively, in AOCI. The company estimates that $17 million of deferred net gains (before taxes) on derivatives in AOCI at September 30, 2022 will be reclassified to net income within the next 12 months, providing an offsetting economic impact against the underlying exposure.

Subsidiary Cash and Foreign Currency Asset/Liability Management

The company uses its Global Treasury Centers to manage the cash of its subsidiaries. These centers principally use currency swaps to convert cash flows in a cost-effective manner. In addition, the company uses foreign exchange forward contracts to economically hedge, on a net basis, the foreign currency exposure of a portion of the company's nonfunctional currency assets and liabilities. The terms of these forward and swap contracts are generally less than one year. The changes in the fair values of these contracts and of the underlying hedged exposures are generally offsetting and are recorded in other (income) and expense in the Consolidated Income Statement. At September 30, 2022 and December 31, 2021, the total notional amount of derivative instruments in economic hedges of foreign currency exposure was $4.3 billion and $6.8 billion, respectively.

Equity Risk Management

The company is exposed to market price changes in certain broad market indices and in the company's own stock primarily related to certain obligations to employees. Changes in the overall value of these employee compensation obligations are recorded in SG&A expense in the Consolidated Income Statement. Although not designated as accounting hedges, the company utilizes derivatives, including equity swaps and futures, to economically hedge the exposures related to its employee compensation obligations. The derivatives are linked to the total return on certain broad market indices or the total return on the company's common stock, and are recorded at fair value with gains or losses also reported in SG&A expense in the Consolidated Income Statement. At September 30, 2022 and December 31, 2021, the total notional amount of derivative instruments in economic hedges of these compensation obligations was $1.2 billion and $1.4 billion, respectively.

Cumulative Basis Adjustments for Fair Value Hedges

At September 30, 2022 and December 31, 2021, the following amounts were recorded in the Consolidated Balance Sheet related to cumulative basis adjustments for fair value hedges:

(Dollars in millions)	September 30, 2022	December 31, 2021
Short-term debt:		
Carrying amount of the hedged item	$ (425)	$ (227)
Cumulative hedging adjustments included in the carrying amount — assets/(liabilities)*	$ 0	$ (2)
Long-term debt:		
Carrying amount of the hedged item	$ (5,631)	$ (508)
Cumulative hedging adjustments included in the carrying amount — assets/(liabilities)*	$ 84	$ (309)

* Includes ($263) million and ($302) million of hedging adjustments on discontinued hedging relationships at September 30, 2022 and December 31, 2021, respectively.

The Effect of Derivative Instruments in the Consolidated Income Statement

The total amounts of income and expense line items presented in the Consolidated Income Statement in which the effects of fair value hedges, cash flow hedges, net investment hedges and derivatives not designated as hedging instruments are recorded and the total effect of hedge activity on these income and expense line items are as follows:

(Dollars in millions)	Total		Gains/(Losses) of Total Hedge Activity	
For the three months ended September 30:	2022	2021	2022	2021
Cost of services	$ 5,168	$ 4,650	$ 4	$ 12
Cost of sales	$ 1,389	$ 1,363 *	$ 35	$ 1
Cost of financing	$ 120	$ 132 *	$ 1	$ (1)
SG&A expense	$ 4,391	$ 4,306	$ (69)	$ (14)
Other (income) and expense	$ 5,755	$ 244	$ (189)	$ (7)
Interest expense	$ 295	$ 290	$ 4	$ (2)

* Reclassified to conform to current year presentation.

(Dollars in millions) For the three months ended September 30:	Consolidated Income Statement Line Item	Gain (Loss) Recognized in Consolidated Income Statement: Recognized on Derivatives 2022	Recognized on Derivatives 2021	Attributable to Risk Being Hedged (2) 2022	Attributable to Risk Being Hedged (2) 2021
Derivative instruments in fair value hedges (1):					
Interest rate contracts	Cost of financing	$ (64)	$ 0	$ 68	$ 4
	Interest expense	(191)	0	203	11
Derivative instruments not designated as hedging instruments:					
Foreign exchange contracts	Other (income) and expense	(186)	15	N/A	N/A
Equity contracts	SG&A expense	(76)	(13)	N/A	N/A
	Other (income) and expense	3	—	N/A	N/A
Total		$ (514)	$ 3	$ 271	$ 15

(Dollars in millions) For the three months ended September 30:	Gain (Loss) Recognized in Consolidated Income Statement and Other Comprehensive Income: Recognized in OCI 2022	Recognized in OCI 2021	Consolidated Income Statement Line Item	Reclassified from AOCI 2022	Reclassified from AOCI 2021	Amounts Excluded from Effectiveness Testing (3) 2022	Amounts Excluded from Effectiveness Testing (3) 2021
Derivative instruments in cash flow hedges:							
Interest rate contracts	$ —	$ —	Cost of financing	$ (1)	$ (1)	$ —	$ —
			Interest expense	(3)	(3)	—	—
Foreign exchange contracts	189	109	Cost of services	4	12	—	—
			Cost of sales	35	1	—	—
			Cost of financing	(6)	(5)	—	—
			SG&A expense	8	(1)	—	—
			Other (income) and expense	(6)	(22)	—	—
			Interest expense	(18)	(13)	—	—
Instruments in net investment hedges (4):							
Foreign exchange contracts	1,198	477	Cost of financing	—	—	5	1
			Interest expense	—	—	14	3
Total	$ 1,387	$ 587		$ 12	$ (32)	$ 19	$ 5

(1) The amount includes changes in clean fair values of the derivative instruments in fair value hedging relationships and the periodic accrual for coupon payments required under these derivative contracts.
(2) The amount includes basis adjustments to the carrying value of the hedged item recorded during the period and amortization of basis adjustments recorded on de-designated hedging relationships during the period.
(3) The company's policy is to recognize all fair value changes in amounts excluded from effectiveness testing in net income each period.
(4) Instruments in net investment hedges include derivative and non-derivative instruments with the amounts recognized in OCI providing an offset to the translation of foreign subsidiaries.

N/A - not applicable

(Dollars in millions) For the nine months ended September 30:	Total 2022	Total 2021	Gains/(Losses) of Total Hedge Activity 2022	Gains/(Losses) of Total Hedge Activity 2021
Cost of services	$ 15,915	$ 14,014	$ 32	$ 33
Cost of sales	$ 4,555	$ 4,241 *	$ 71	$ (30)
Cost of financing	$ 314	$ 416 *	$ 0	$ 1
SG&A expense	$ 13,843	$ 13,842	$ (291)	$ 88
Other (income) and expense	$ 5,921	$ 891	$ (730)	$ (246)
Interest expense	$ 903	$ 852	$ 1	$ 3

* Reclassified to conform to current year presentation.

(Dollars in millions) For the nine months ended September 30:	Consolidated Income Statement Line Item	Gain (Loss) Recognized in Consolidated Income Statement: Recognized on Derivatives 2022	Recognized on Derivatives 2021	Attributable to Risk Being Hedged (2) 2022	Attributable to Risk Being Hedged (2) 2021
Derivative instruments in fair value hedges (1):					
Interest rate contracts	Cost of financing	$ (76)	$ 0	$ 89	$ 15
	Interest expense	(261)	(1)	305	40
Derivative instruments not designated as hedging instruments:					
Foreign exchange contracts	Other (income) and expense	(595)	(59)	N/A	N/A
Equity contracts	SG&A expense	(319)	120	N/A	N/A
	Other (income) and expense	(85)	—	N/A	N/A
Total		$ (1,336)	$ 59	$ 395	$ 55

(Dollars in millions) For the nine months ended September 30:	Gain (Loss) Recognized in Consolidated Income Statement and Other Comprehensive Income: Recognized in OCI 2022	Recognized in OCI 2021	Consolidated Income Statement Line Item	Reclassified from AOCI 2022	Reclassified from AOCI 2021	Amounts Excluded from Effectiveness Testing (3) 2022	Amounts Excluded from Effectiveness Testing (3) 2021
Derivative instruments in cash flow hedges:							
Interest rate contracts	$ —	$ —	Cost of financing	$ (3)	$ (4)	$ —	$ —
			Interest expense	(10)	(10)	—	—
Foreign exchange contracts	449	262	Cost of services	32	33	—	—
			Cost of sales	71	(30)	—	—
			Cost of financing	(16)	(14)	—	—
			SG&A expense	28	(32)	—	—
			Other (income) and expense	(51)	(187)	—	—
			Interest expense	(54)	(38)	—	—
Instruments in net investment hedges (4):							
Foreign exchange contracts	3,118	1,207	Cost of financing	—	—	6	4
			Interest expense	—	—	22	11
Total	$ 3,567	$ 1,470		$ (4)	$ (282)	$ 28	$ 15

(1) The amount includes changes in clean fair values of the derivative instruments in fair value hedging relationships and the periodic accrual for coupon payments required under these derivative contracts.
(2) The amount includes basis adjustments to the carrying value of the hedged item recorded during the period and amortization of basis adjustments recorded on de-designated hedging relationships during the period.
(3) The company's policy is to recognize all fair value changes in amounts excluded from effectiveness testing in net income each period.
(4) Instruments in net investment hedges include derivative and non-derivative instruments with the amounts recognized in OCI providing an offset to the translation of foreign subsidiaries.

N/A - not applicable

For the three and nine months ended September 30, 2022 and 2021, there were no material gains or losses excluded from the assessment of hedge effectiveness (for fair value or cash flow hedges), or associated with an underlying exposure that did not or was not expected to occur (for cash flow hedges); nor are there any anticipated in the normal course of business.

17. Stock-Based Compensation:

Stock-based compensation cost for stock awards and stock options is measured at grant date, based on the fair value of the award, and is recognized over the employee requisite service period. The following table presents total stock-based compensation cost included in income from continuing operations.

(Dollars in millions)	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
Cost	$ 40	$ 38	$ 124	$ 106
Selling, general and administrative	138	144	427	399
Research, development and engineering	73	60	188	160
Pre-tax stock-based compensation cost	$ 251	$ 242	$ 739	$ 665
Income tax benefits	(51)	(54)	(191)	(166)
Total net stock-based compensation cost	$ 200	$ 188	$ 548	$ 499

Effective April 1, 2022, the company increased the discount for eligible participants under its Employees Stock Purchase Plan (ESPP) from 5 percent to 15 percent off the average market price on the date of purchase. With this change, the ESPP is considered compensatory under the accounting requirements for stock-based compensation.

Pre-tax stock-based compensation cost for the three months ended September 30, 2022 increased $10 million compared to the corresponding period in the prior year, including increases in ESPP ($15 million) as a result of the change described above and performance share units ($5 million), partially offset by decreases in stock options ($10 million) primarily due to the conversion of stock options of acquired entities in the prior year.

Pre-tax stock-based compensation cost for the nine months ended September 30, 2022 increased $74 million compared to the corresponding period in the prior year, including increases in restricted stock units ($32 million), ESPP ($30 million) and performance share units ($16 million). The increases are driven by the change in ESPP described above and a change in the timing of the company's executive grant cycle in 2022.

Total unrecognized compensation cost related to non-vested awards at September 30, 2022 was $1.6 billion and is expected to be recognized over a weighted-average period of approximately 2.7 years.

Capitalized stock-based compensation cost was not material at September 30, 2022 and 2021.

18. Retirement-Related Benefits:

Pre-Tax Cost of Retirement-Related Plans

The company offers defined benefit (DB) pension plans, defined contribution pension plans, as well as nonpension postretirement plans primarily consisting of retiree medical benefits. The following tables provide the pre-tax cost for all retirement-related plans.

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Retirement-related plans — cost:			
Defined benefit and contribution pension plans — cost	$ 6,319 *	$ 598	nm
Nonpension postretirement plans — cost	31	44	(30.2)%
Total	$ 6,350	$ 642	nm

* Includes the impact of a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion related to the Qualified PPP, as described below.
nm - not meaningful

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Retirement-related plans — cost:			
Defined benefit and contribution pension plans — cost	$ 7,252 *	$ 1,816	nm
Nonpension postretirement plans — cost	97	133	(26.7)%
Total	$ 7,350	$ 1,949	nm

* Includes the impact of a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion related to the Qualified PPP, as described below.
nm – not meaningful

Cost/(Income) of Pension Plans

The following tables provide the components of the cost/(income) for the company's pension plans.

(Dollars in millions) For the three months ended September 30:	U.S. Plans 2022	U.S. Plans 2021	Non-U.S. Plans 2022	Non-U.S. Plans 2021
Service cost	$ —	$ —	$ 57	$ 67
Interest cost*	282	277	124	106
Expected return on plan assets*	(432)	(451)	(246)	(274)
Amortization of prior service costs/(credits)*	2	4	3	(2)
Recognized actuarial losses*	132	249	247	347
Curtailments and settlements*	5,894 **	—	19	13
Multi-employer plans	—	—	4	2
Other costs/(credits)*	—	—	8	7
Total net periodic pension (income)/cost of defined benefit plans	$ 5,877	$ 80	$ 216	$ 266
Cost of defined contribution plans	134	152	91	100
Total defined benefit and contribution pension plans cost recognized in the Consolidated Income Statement	$ 6,012	$ 232	$ 307	$ 366

* These components of net periodic pension cost are included in other (income) and expense in the Consolidated Income Statement.
** Reflects the impact of a one-time, non-cash, pre-tax pension settlement charge related to the Qualified PPP, as described below.

(Dollars in millions) For the nine months ended September 30:	U.S. Plans 2022	U.S. Plans 2021	Non-U.S. Plans 2022	Non-U.S. Plans 2021
Service cost	$ —	$ —	$ 180	$ 201
Interest cost*	885	832	394	322
Expected return on plan assets*	(1,382)	(1,352)	(778)	(833)
Amortization of prior service costs/(credits)*	6	12	10	(9)
Recognized actuarial losses*	490	747	784	1,055
Curtailments and settlements*	5,894 **	—	38	46
Multi-employer plans	—	—	11	13
Other costs/(credits)*	—	—	24	21
Total net periodic pension (income)/cost of defined benefit plans	$ 5,893	$ 239	$ 663	$ 817
Cost of defined contribution plans	416	455	280	306
Total defined benefit and contribution pension plans cost recognized in the Consolidated Income Statement	$ 6,309	$ 694	$ 943	$ 1,122

* These components of net periodic pension cost are included in other (income) and expense in the Consolidated Income Statement.
** Reflects the impact of a one-time, non-cash, pre-tax pension settlement charge related to the Qualified PPP, as described below.

Cost of Nonpension Postretirement Plans

The following tables provide the components of the cost for the company's nonpension postretirement plans.

(Dollars in millions) For the three months ended September 30:	U.S. Plan 2022	U.S. Plan 2021	Non-U.S. Plans 2022	Non-U.S. Plans 2021
Service cost	$ 1	$ 2	$ 1	$ 1
Interest cost*	21	16	8	8
Expected return on plan assets*	—	—	0	(1)
Amortization of prior service costs/(credits)*	(2)	1	0	0
Recognized actuarial losses*	1	13	1	4
Curtailments and settlements*	—	—	—	—
Total nonpension postretirement plans cost recognized in the Consolidated Income Statement	$ 21	$ 32	$ 10	$ 12

* These components of net periodic pension cost are included in other (income) and expense in the Consolidated Income Statement.

(Dollars in millions) For the nine months ended September 30:	U.S. Plan 2022	U.S. Plan 2021	Non-U.S. Plans 2022	Non-U.S. Plans 2021
Service cost	$ 4	$ 5	$ 2	$ 3
Interest cost*	58	49	26	25
Expected return on plan assets*	—	—	(2)	(2)
Amortization of prior service costs/(credits)*	(1)	3	0	0
Recognized actuarial losses*	6	39	3	11
Curtailments and settlements*	—	—	—	0
Total nonpension postretirement plans cost recognized in the Consolidated Income Statement	$ 67	$ 96	$ 30	$ 37

* These components of net periodic pension cost are included in other (income) and expense in the Consolidated Income Statement.

IBM U.S. Pension and Nonpension Postretirement Plan Changes

Over the past several years, the company has taken actions to reduce the risk profile of its worldwide retirement-related plans, while at the same time increasing the funded status of the plans. As described in note 1, "Basis of Presentation," in September 2022, the Qualified PPP irrevocably transferred to the Insurers approximately $16 billion of the Qualified PPP's defined benefit pension obligations and related plan assets, thereby reducing the company's pension obligations and assets by the same amount. This transaction further de-risks the company's retirement-related plans by eliminating the potential for the company to make future cash contributions to fund this portion of pension obligations being transferred to the Insurers. After the transaction, the Qualified PPP remained in an overfunded position as of September 30, 2022.

Upon issuance of the group annuity contracts, the Qualified PPP's benefit obligations and administration for approximately 100,000 of the company's retirees and beneficiaries (the Transferred Participants) were transferred to the Insurers. Under the group annuity contracts, each Insurer has made an irrevocable commitment, and will be solely responsible, to pay 50 percent of the pension benefits of each Transferred Participant that are due on and after January 1, 2023. The transaction resulted in no changes to the benefits to be received by the Transferred Participants. The company recognized a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion net of tax) in the third quarter of 2022 primarily related to the accelerated recognition of actuarial losses included within AOCI in the Consolidated Statement of Equity. As a result of this transaction, the company was required to remeasure the benefit obligations and plan assets of the Qualified PPP. The remeasurement reflects the use of an updated discount rate and actual return on plan assets as of August 31, 2022, applying the practical expedient to remeasure plan assets and obligations as of the nearest calendar month-end date.

In September 2022, the company amended its U.S. Nonpension Postretirement Plan to transition coverage for Medicare-eligible participants to a new IBM-sponsored group Medicare Advantage program administered by UnitedHealthcare, starting January 1, 2023. The changes are intended to provide an enhanced member experience, better value and more comprehensive benefits to IBM participants. As a result of this amendment, the company was required to remeasure the benefit obligation of this plan. The amendment and remeasurement resulted in a decrease in nonpension postretirement benefit obligations and a corresponding decrease in accumulated other comprehensive loss, which is reflected in the changes in benefit obligations from actuarial losses/(gains) in the table below. The remeasurement reflects the use of an updated discount rate and actual return on plan assets as of July 31, 2022, applying the practical expedient to remeasure plan assets and obligations as of the nearest calendar month-end date.

The following table presents the changes in benefit obligations and plan assets of the company's retirement related benefit plans affected by the interim remeasurements described above for the nine months ended September 30, 2022.

(Dollars in millions)	Qualified PPP U.S. Plan	Nonpension Postretirement Plan U.S. Plan
Change in benefit obligation:		
Benefit obligation at January 1, 2022	$ 46,457	$ 3,404
Service cost	—	4
Interest cost	853	58
Plan participants' contributions	—	33
Actuarial losses/(gains)*	(6,973)	(624)
Benefits paid from trust	(2,376)	(285)
Direct benefit payments	—	(2)
Amendments/curtailments/settlements/other	(16,644)**	—
Benefit obligation at September 30, 2022	$ 21,316	$ 2,588
Change in plan assets:		
Fair value of plan assets at January 1, 2022	$ 51,851	$ 8
Actual return on plan assets	(5,746)	—
Employer contributions	—	272
Plan participants' contributions	—	33
Benefits paid from trust	(2,376)	(285)
Amendments/curtailments/settlements/other	(16,644)**	—
Fair value of plan assets at September 30, 2022	$ 27,085	$ 28
Funded status at September 30, 2022	$ 5,769	$ (2,560)
Accumulated benefit obligation+	$ 21,316	N/A

* Reflects an increase in the discount rate from 2.60 percent at December 31, 2021 to 4.70 percent at the remeasurement date for the Qualified PPP and from 2.30 percent at December 31, 2021 to 4.10 percent at the remeasurement date for the nonpension postretirement plan.

** Primarily represents the transfer of Qualified PPP pension obligations and related plan assets to the Insurers pursuant to group annuity contracts and lump sum payments to plan participants.

\+ Represents the benefit obligation assuming no future participant compensation increases.

Plan Contributions

The table below includes contributions to the following plans:

(Dollars in millions) For the nine months ended September 30:	Plan Contributions 2022	2021
U.S. and non-U.S. nonpension postretirement benefit plans	$ 272	$ 263
Non-U.S. DB and multi-employer plans*	85	43
Total plan contributions	$ 357	$ 306

* Amounts reported net of refunds.

During the nine months ended September 30, 2022 and 2021, the company contributed $247 million and $307 million of U.S. Treasury Securities, respectively, to the non-U.S. DB plans and nonpension postretirement benefit plans. Additionally, during the nine months ended September 30, 2022 and 2021, the company contributed $366 million and $311 million in U.S. Treasury securities, respectively, to the Active Medical Trust. Contributions made with U.S. Treasury securities are considered a non-cash transaction.

The company does not anticipate any significant changes to the expected plan contributions in 2022 from the amounts disclosed in the 2021 Annual Report.

19. Subsequent Events:

On October 25, 2022, the company announced that the Board of Directors approved a quarterly dividend of $1.65 per common share. The dividend is payable December 10, 2022 to shareholders of record on November 10, 2022.

Item 2.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2022

Snapshot

Financial Results Summary — Three Months Ended September 30:

(Dollars and shares in millions except per share amounts) For the three months ended September 30:	2022*	2021	Yr. to Yr. Percent/ Margin Change
Revenue	$ 14,107	$ 13,251	6.5 %**
Gross profit margin	52.7 %	53.6 %	(1.0)pts.
Total expense and other (income)	$ 11,931	$ 6,293	89.6 %
Income/(loss) from continuing operations before income taxes	$ (4,501)	$ 813	nm
Provision for/(benefit from) income taxes from continuing operations	$ (1,287)	$ (224)	nm
Income/(loss) from continuing operations	$ (3,214)	$ 1,037	nm
Income/(loss) from continuing operations margin	(22.8)%	7.8 %	(30.6)pts.
Income from discontinued operations, net of tax	$ 18	$ 93	(81.1)%
Net income/(loss)	$ (3,196)	$ 1,130	nm
Earnings/(loss) per share from continuing operations - assuming dilution	$ (3.55)	$ 1.14	nm
Consolidated earnings/(loss) per share - assuming dilution	$ (3.54)	$ 1.25	nm
Weighted-average shares outstanding - assuming dilution	904.1	906.0	(0.2)%

* Includes a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion net of tax) resulting in an impact of ($4.86) to diluted earnings/(loss) per share from continuing operations and an impact of ($4.87) to consolidated diluted earnings/(loss) per share. See note 18, "Retirement-Related Benefits," for additional information.

** 14.6 percent adjusted for currency.

nm - not meaningful

Organization of Information:

On November 3, 2021, we completed the separation of our managed infrastructure services unit into a new public company with the distribution of 80.1 percent of the outstanding common stock of Kyndryl Holdings, Inc. (Kyndryl) to IBM stockholders on a pro rata basis. To affect the separation, IBM stockholders received one share of Kyndryl common stock for every five shares of IBM common stock held at the close of business on October 25, 2021, the record date for the distribution. IBM retained 19.9 percent of the shares of Kyndryl common stock immediately following the separation with the intent to dispose of such shares within twelve months after the distribution. The company accounts for the retained Kyndryl common stock as a fair value investment included within prepaid expenses and other current assets in the Consolidated Balance Sheet with subsequent fair value changes included in other (income) and expense in the Consolidated Income Statement. As of September 30, 2022, we transferred all 19.9 percent retained interest in Kyndryl common stock pursuant to exchange agreements with a third-party financial institution. Refer to note 8, "Financial Assets & Liabilities," for additional information.

The accounting requirements for reporting the separation of Kyndryl as a discontinued operation were met when the separation was completed. Accordingly, the historical results of Kyndryl are presented as discontinued operations and, as such, have been excluded from continuing operations and segment results for all periods presented. Consolidated earnings/(loss) per share includes the results of discontinued operations. Refer to note 3, "Separation of Kyndryl," for additional information.

In the first quarter of 2022, the company realigned its management structure to reflect the planned divestiture of its healthcare software assets which was completed in the second quarter of 2022. This change impacted the company's Software segment and Other–divested businesses category. In the fourth quarter of 2021, immediately prior to the

separation of Kyndryl, the company made a number of changes to its organizational structure and management system. These changes impacted the company's reportable segments but did not impact the Consolidated Financial Statements. Refer to note 5, "Segments," for additional information on the company's reportable segments. The segments are reported on a comparable basis for all periods.

In September 2022, the IBM Qualified Personal Pension Plan (Qualified PPP) purchased two separate nonparticipating single premium group annuity contracts from The Prudential Insurance Company of America and Metropolitan Life Insurance Company (collectively, the Insurers) and irrevocably transferred to the Insurers approximately $16 billion of the Qualified PPP's defined benefit pension obligations and related plan assets, thereby reducing our pension obligations and assets by the same amount. The group annuity contracts were purchased using assets of the Qualified PPP and no additional funding contribution was required from the company. As a result of this transaction, we recognized a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion net of tax) in the third quarter of 2022, primarily related to the accelerated recognition of accumulated actuarial losses of the Qualified PPP. The company was also required to remeasure the benefit obligation and plan assets of the Qualified PPP. Refer to note 18, "Retirement-Related Benefits," for additional information.

To provide useful decision-making information for management and shareholders, the company defines and measures hybrid cloud revenue as end-to-end cloud capabilities within hybrid cloud environments, which includes technology (software and hardware), services and solutions to enable clients to implement cloud solutions across public, private and multi-clouds. The definition of hybrid cloud revenue is consistent with the prior methodology for cloud revenue historically presented. This spans across IBM's Consulting, Software and Infrastructure segments. Examples include (but are not limited to) Red Hat Enterprise Linux (RHEL), Red Hat OpenShift, Cloud Paks, as-a-service offerings, service engagements related to cloud deployment of technology and applications, and infrastructure used in cloud deployments.

Within the tables presented, certain columns and rows may not add due to the use of rounded numbers for disclosure purposes. Percentages presented are calculated from the underlying whole-dollar amounts. Certain prior-period amounts have been reclassified to conform to the current-period presentation. This is annotated where applicable.

Currency:

The references to "adjusted for currency" or "at constant currency" in the Management Discussion do not include operational impacts that could result from fluctuations in foreign currency rates. When we refer to growth rates at constant currency or adjust such growth rates for currency, it is done so that certain financial results can be viewed without the impact of fluctuations in foreign currency exchange rates, thereby facilitating period-to-period comparisons of business performance. Financial results adjusted for currency are calculated by translating current period activity in local currency using the comparable prior-year period's currency conversion rate. This approach is used for countries where the functional currency is the local currency. Generally, when the dollar either strengthens or weakens against other currencies, the growth at constant currency rates or adjusting for currency will be higher or lower than growth reported at actual exchange rates. Refer to "Currency Rate Fluctuations" for additional information.

Operating (non-GAAP) Earnings:

In an effort to provide better transparency into the operational results of the business, supplementally, management separates business results into operating and non-operating categories. Operating earnings from continuing operations is a non-GAAP measure that excludes the effects of certain acquisition-related charges, intangible asset amortization, expense resulting from basis differences on equity method investments, retirement-related costs, certain impacts from the Kyndryl separation and their related tax impacts. Due to the unique, non-recurring nature of the enactment of the U.S. Tax Cuts and Jobs Act (U.S. tax reform), management characterizes the one-time provisional charge recorded in the fourth quarter of 2017 and adjustments to that charge as non-operating. Adjustments include true-ups, accounting elections and any changes to regulations, laws, audit adjustments, etc. that affect the recorded one-time charge. Management also characterizes direct and incremental charges incurred related to the Kyndryl separation as non-

operating given their unique and non-recurring nature. These charges primarily relate to any net gains or losses on the Kyndryl common stock and the related cash-settled swap with a third-party financial institution, which are recorded in other (income) and expense in the Consolidated Income Statement. The Kyndryl shares were retained by the company immediately following the separation, with the intent to dispose of such shares within twelve months after the distribution. For acquisitions, operating (non-GAAP) earnings exclude the amortization of purchased intangible assets and acquisition-related charges such as in-process research and development, transaction costs, applicable retention, restructuring and related expenses, tax charges related to acquisition integration and pre-closing charges, such as financing costs. These charges are excluded as they may be inconsistent in amount and timing from period to period and are significantly impacted by the size, type and frequency of the company's acquisitions. All other spending for acquired companies is included in both earnings from continuing operations and in operating (non-GAAP) earnings. For retirement-related costs, management characterizes certain items as operating and others as non-operating, consistent with GAAP. We include defined benefit plan and nonpension postretirement benefit plan service costs, multi-employer plan costs and the cost of defined contribution plans in operating earnings. Non-operating retirement-related costs include defined benefit plan and nonpension postretirement benefit plan amortization of prior service costs, interest cost, expected return on plan assets, amortized actuarial gains/losses, the impacts of any plan curtailments/settlements including a one-time, non-cash, pre-tax settlement charge of $5.9 billion ($4.4 billion, net of tax) in the third quarter of 2022 and pension insolvency costs and other costs. Non-operating retirement-related costs are primarily related to changes in pension plan assets and liabilities which are tied to financial market performance, and the company considers these costs to be outside of the operational performance of the business.

Overall, management believes that supplementally providing investors with a view of operating earnings as described above provides increased transparency and clarity into both the operational results of the business and the performance of the company's pension plans; improves visibility to management decisions and their impacts on operational performance; enables better comparison to peer companies; and allows the company to provide a long-term strategic view of the business going forward. In addition, these non-GAAP measures provide a perspective consistent with areas of interest we routinely receive from investors and analysts. Our reportable segment financial results reflect pre-tax operating earnings from continuing operations, consistent with our management and measurement system.

The following table provides the company's operating (non-GAAP) earnings for the third quarter of 2022 and 2021.

(Dollars in millions except per share amounts) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Net income/(loss) as reported	$ (3,196)*	$ 1,130	nm
Income from discontinued operations, net of tax	18	93	(81.1)%
Income/(loss) from continuing operations	$ (3,214)*	$ 1,037	nm
Non-operating adjustments (net of tax):			
Acquisition-related charges	$ 315	$ 370	(15.0)%
Non-operating retirement-related costs/(income)	4,566 *	262	nm
Kyndryl-related impacts	(14)	—	nm
Operating (non-GAAP) earnings**	$ 1,653	$ 1,670	(1.0)%
Diluted operating (non-GAAP) earnings per share**	$ 1.81	$ 1.84	(1.6)%

* Includes a one-time, non-cash pension settlement charge of $4.4 billion net of tax.
** Refer to page 95 for a more detailed reconciliation of net loss to operating earnings and operating earnings per share.
nm - not meaningful

Macroeconomic Environment:

Throughout 2022, we have seen escalating labor and component costs and a strengthening of the U.S. dollar. Consulting, which makes up well over half of IBM's workforce, is most impacted by the labor cost inflation. While those dynamics continue to put pressure on our margin profile, we are seeing progress in the actions we have taken to mitigate the impacts of these higher costs. We have begun to see improved utilization, acquisitions progressing toward margin accretion and priced margin improvements year over year that will benefit our margin profile going forward. Additionally, across all of our product-based businesses, we have executed price increases above our historical level of increases to be more reflective of the labor and component costs we are incurring due to the inflationary environment and to mitigate the impacts of currency. This includes price increases in our support and maintenance agreements for our hardware and software portfolios. The strengthening of the U.S. dollar impacted our reported revenue and gross profit dollars. We execute hedging programs which defer but do not eliminate the impact of currency. The gains from these hedging programs are reflected primarily in other income and expense. With the rate and magnitude of movements, and because we do not hedge all currencies, we do have a currency impact to our overall profit and cash flows. See "Currency Rate Fluctuations," for additional information.

The geopolitical situation in Eastern Europe intensified in February 2022, with Russia's invasion of Ukraine. The safety and security of our employees and their families in the impacted regions has been our primary focus. The sanctions placed on numerous Russian entities, specific Russian-controlled entities, as well as Belarus and other measures that have been and continue to be imposed as a result of the war have increased the level of economic and political uncertainty. In the second quarter of 2022, we made the decision to carry out an orderly wind-down of our Russian operations. As such, we assessed certain accounting-related matters that generally require consideration of current information reasonably available to us and forecasted financial data in the context of unknown future impacts to IBM that resulted in certain immaterial asset and restructuring charges in the second quarter of 2022. These charges, together with the year-to-year lost business due to the wind-down, impacted our pre-tax income by approximately $180 million for the nine months ended September 30, 2022. The long-term impacts of the Russian war in Ukraine remain uncertain; however, we do not expect a significant impact on the company's future results of operations or financial position. For full year 2021, Russia, Ukraine and Belarus made up less than one percent of the company's full year revenue. While the revenue impact is not expected to be material to total consolidated IBM revenue for the full year 2022, the business in Russia has historically been high margin and therefore, will continue to be a headwind to our profit and cash flows.

In the third year of the COVID-19 pandemic, our priority continues to be the health of IBM employees, our clients, business partners and community. Our objective in returning to the workplace is to allow IBM locations to safely accommodate in-person working during pandemic conditions that are constantly changing. Our approach has enabled hundreds of locations to safely reopen, adhering to IBM protocols and adjusting capacity levels through periods where conditions may be improving or worsening over time. The pandemic has reinforced the need for clients to modernize their businesses to succeed in this new normal, with hybrid cloud and AI at the core of their digital transformations. The spending environment continues to be strong, and we remain focused on providing the technology and consulting services that our clients need to accelerate their digital organizations and emerge from the pandemic even stronger.

Financial Performance Summary — Three Months Ended September 30:

In the third quarter of 2022, we reported $14.1 billion in revenue, a loss from continuing operations of $3.2 billion, which includes the impact of a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion net of tax). The pension settlement charge was the result of the transfer to Insurers of a portion of our U.S. benefit pension obligations, an action we took to further reduce the risk profile of our worldwide retirement-related plans. Our operating (non-GAAP) earnings for the three months ended September 30, 2022 were $1.7 billion, which excludes the impact of the pension settlement charge, among other items. Diluted loss per share from continuing operations was $3.55 as reported, including an impact of $4.86 from the pension settlement charge, and diluted earnings per share was $1.81 on an operating (non-GAAP) basis. On a consolidated basis, we generated $1.9 billion in cash from operations and $0.8 billion in free cash flow. We delivered shareholder returns of $1.5 billion in dividends and our balance sheet continues to provide us with the flexibility to support our business needs. These results reflect our continued focus on the execution of our strategy and the solid demand for our hybrid cloud and AI solutions.

Total revenue grew 6.5 percent as reported and 15 percent adjusted for currency compared to the prior-year period. This includes incremental sales to Kyndryl which contributed approximately 5 points to the revenue growth. Software delivered revenue growth of 7.5 percent as reported and 14 percent adjusted for currency, including approximately 8 points of growth from incremental sales to Kyndryl. Within Software, Hybrid Platform & Solutions increased 2.4 percent as reported and 8 percent adjusted for currency, with incremental sales to Kyndryl contributing approximately 1.5 points of this growth. Performance was led by continued strong double-digit growth in Red Hat. Transaction Processing grew 23.1 percent as reported and 33 percent adjusted for currency, including approximately 26 points of growth from incremental Kyndryl sales. Consulting revenue increased 5.4 percent as reported and 16 percent adjusted for currency, with growth across all three business lines. Infrastructure revenue increased 14.8 percent year to year as reported and 23 percent adjusted for currency, reflecting strong double-digit growth in Hybrid Infrastructure driven primarily by our z16 program. The Infrastructure revenue performance also includes approximately 9 points of growth from incremental sales to Kyndryl. Across the segments, total hybrid cloud revenue of $5.2 billion in the third quarter of 2022 grew 11 percent as reported and 19 percent adjusted for currency. Over the trailing 12 months, total hybrid cloud revenue was $22.2 billion, up 15 percent as reported (20 percent adjusted for currency) year to year.

From a geographic perspective, Americas revenue grew 12.7 percent year to year as reported (13 percent adjusted for currency). Europe/Middle East/Africa (EMEA) increased 0.5 percent (16 percent adjusted for currency). Asia Pacific was flat year to year but grew 16 percent adjusted for currency.

Gross margin of 52.7 percent decreased 1.0 points year to year, however, gross profit dollars grew 4.6 percent compared to the prior-year period driven by strong revenue performance in our high-value businesses. Overall gross margin was impacted by the investments we are making to drive our hybrid cloud and AI strategy, higher labor and component costs and the impacts of currency, while the mitigating hedging benefits and operational productivity and efficiency we have realized are primarily reflected in expense. Operating (non-GAAP) gross margin of 53.8 percent decreased 1.2 points compared to the prior-year period for similar reasons.

Total expense and other (income) increased 89.6 percent in the third quarter of 2022 versus the prior-year period primarily driven by the pension settlement charge of $5.9 billion and higher spending reflecting our continuing focus on our portfolio and investment in our offerings, technical talent and ecosystem, partially offset by the effects of currency and benefits from the actions taken to streamline operations and our go-to-market model. Total operating (non-GAAP) expense and other (income) decreased 1.0 percent year to year, driven primarily by the factors described above, excluding the pension settlement charge.

Pre-tax loss from continuing operations was $4.5 billion in the third quarter of 2022 compared with pre-tax income of $0.8 billion in the prior-year period with the year-to-year decline driven by the $5.9 billion pension settlement charge. Pre-tax margin was down 38.0 points year to year to (31.9) percent reflecting the impact of the charge. The continuing operations benefit from income taxes in the third quarter of 2022 was $1.3 billion compared to a benefit of $0.2 billion in the third quarter of 2021. The current-year tax benefit is primarily due to the pension settlement charge. The prior-year

tax benefit was primarily driven by events that resulted in additional anticipated utilization of U.S. foreign tax credits. Net loss from continuing operations was $3.2 billion compared with net income of $1.0 billion in the prior-year period and the net income/(loss) from continuing operations margin of (22.8) percent was down 30.6 points year to year.

Operating (non-GAAP) pre-tax income from continuing operations of $2.0 billion increased 22.6 percent compared to the prior-year period and the operating (non-GAAP) pre-tax margin from continuing operations increased 1.8 points to 13.9 percent. These profit dynamics reflect our portfolio shift toward higher value, led by software. Our pre-tax profit includes the contribution from incremental sales to Kyndryl and the negative impacts of currency primarily due to the strengthening of the U.S. dollar. The operating (non-GAAP) income tax provision for the third quarter of 2022 was $312 million, compared to a benefit from income taxes of $67 million in the third quarter of 2021. The current-year tax provision was driven by many factors including the impacts of the geographical mix of income, incentives and changes in unrecognized tax benefits and tax laws. The prior-year tax benefit was primarily driven by events that resulted in additional anticipated utilization of U.S. foreign tax credits. Operating (non-GAAP) income from continuing operations of $1.7 billion decreased 1.0 percent and the operating (non-GAAP) income margin from continuing operations of 11.7 percent was down 0.9 points year to year.

Diluted loss per share from continuing operations was $3.55 in the third quarter of 2022, including an impact of $4.86 from the pension settlement charge, compared to diluted earnings per share of $1.14 in the prior-year period. Operating (non-GAAP) diluted earnings per share of $1.81 decreased 1.6 percent versus the prior-year period.

Consolidated diluted loss per share in the third quarter of 2022 was $3.54 compared to diluted earnings per share of $1.25 in the prior-year period. This includes the impact from the pension settlement charge and a year-to-year reduction of $0.08 from discontinued operations due to the separation of Kyndryl.

Our cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows, include the cash flows of discontinued operations. On a consolidated basis, in the third quarter of 2022, we generated $1.9 billion in cash flow provided by operating activities, a decrease of $0.8 billion compared to the third quarter of 2021, primarily driven by a decrease in cash provided by financing receivables. Net cash used in investing activities of $1.7 billion increased $1.1 billion compared to the prior-year period, primarily driven by an increase in cash used in net marketable securities and other investments of $1.3 billion. Financing activities were a net source of cash of $0.7 billion in the third quarter of 2022, compared to a net use of cash of $1.7 billion in the prior-year period primarily due to higher net issuances of debt in the current year.

Financial Results Summary —Nine Months Ended September 30:

(Dollars and shares in millions except per share amounts) For the nine months ended September 30:	2022*	2021	Yr. to Yr. Percent/ Margin Change
Revenue	$ 43,840	$ 40,656	7.8 %**
Gross profit margin	52.6 %	54.1 %	(1.5)pts.
Total expense and other (income)	$ 25,212	$ 20,017	25.9 %
Income/(loss) from continuing operations before income taxes	$ (2,156)	$ 1,968	nm
Provision for/(benefit from) income taxes from continuing operations	$ (1,070)	$ (282)	nm
Income/(loss) from continuing operations	$ (1,087)	$ 2,250	nm
Income/(loss) from continuing operations margin	(2.5)%	5.5 %	(8.0)pts.
Income from discontinued operations, net of tax	$ 16	$ 1,160	(98.7)%
Net income/(loss)	$ (1,071)	$ 3,410	nm
Earnings/(loss) per share from continuing operations - assuming dilution	$ (1.21)	$ 2.49	nm
Consolidated earnings/(loss) per share - assuming dilution	$ (1.19)	$ 3.77	nm
Weighted-average shares outstanding - assuming dilution	901.6	904.0	(0.3)%
	At 9/30/2022	**At 12/31/2021**	
Assets	$ 125,850	$ 132,001	(4.7)%
Liabilities	$ 105,703	$ 113,005	(6.5)%
Equity	$ 20,147	$ 18,996	6.1 %

* Includes a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion net of tax) resulting in an impact of ($4.86) to diluted earnings/(loss) per share from continuing operations and consolidated diluted earnings/(loss) per share. See note 18, "Retirement-Related Benefits," for additional information.

** 13.8 percent adjusted for currency.

nm - not meaningful

The following table provides the company's operating (non-GAAP) earnings for the first nine months of 2022 and 2021.

(Dollars in millions except per share amounts) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Net income/(loss) as reported	$ (1,071)*	$ 3,410	nm
Income from discontinued operations, net of tax	16	1,160	(98.7)%
Income/(loss) from continuing operations	$ (1,087)*	$ 2,250	nm
Non-operating adjustments (net of tax):			
Acquisition-related charges	$ 1,019	$ 1,069	(4.7)%
Non-operating retirement-related costs/(income)	4,856 *	825	nm
U.S. tax reform impacts	(112)	(6)	nm
Kyndryl-related impacts	353	—	nm
Operating (non-GAAP) earnings**	$ 5,029	$ 4,139	21.5 %
Diluted operating (non-GAAP) earnings per share**	$ 5.52	$ 4.58	20.5 %

* Includes a one-time, non-cash pension settlement charge of $4.4 billion net of tax.

** Refer to page 96 for a more detailed reconciliation of net loss to operating earnings and operating earnings per share.

nm - not meaningful

Financial Performance Summary —Nine Months Ended September 30:

In the first nine months of 2022, we reported $43.8 billion in revenue, a loss from continuing operations of $1.1 billion, including a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion net of tax), and operating (non-GAAP) earnings of $5.0 billion, which excludes the impact of the settlement charge. Diluted loss per share from continuing operations was $1.21 as reported, including an impact of $4.86 from the pension settlement charge, and diluted earnings per share was $5.52 on an operating (non-GAAP) basis. On a consolidated basis, we generated $6.5 billion in cash from operations and $4.1 billion in free cash flow. We delivered shareholder returns of $4.5 billion in dividends.

Total revenue grew 7.8 percent as reported and 14 percent adjusted for currency compared to the prior-year period. This includes incremental sales to Kyndryl which contributed 5 points to the revenue growth. Software delivered revenue growth of 8.6 percent as reported and 14 percent adjusted for currency, with growth in both Hybrid Platform & Solutions and Transaction Processing. The Software revenue performance includes approximately 8 points of growth from incremental sales to Kyndryl. Consulting revenue increased 9.5 percent as reported and 17 percent adjusted for currency, with growth across all three business areas. Infrastructure revenue increased 10.6 percent year to year as reported and 16 percent adjusted for currency, with approximately 8 points of growth from incremental sales to Kyndryl. As the separation of Kyndryl occurred in early November 2021, the impact of these incremental sales to growth was largely in the first three quarters of this year.

From a geographic perspective, Americas revenue grew 12.1 percent year to year as reported (12 percent adjusted for currency). EMEA increased 4.4 percent (16 percent adjusted for currency). Asia Pacific grew 2.6 percent (14 percent adjusted for currency).

Gross margin of 52.6 percent decreased 1.5 points year to year, however, gross profit dollars grew 4.9 percent compared to the prior-year period. Overall gross margin was impacted by the investments we are making to drive our hybrid cloud and AI strategy, higher labor and component costs and the impacts of currency, while the mitigating hedging benefits and operational productivity and efficiency we have realized are primarily reflected in expense. Operating (non-GAAP) gross margin of 53.8 percent decreased 1.6 points versus the prior year for similar reasons.

Total expense and other (income) increased 25.9 percent in the first nine months of 2022 versus the prior-year period primarily driven by the pension settlement charge of $5.9 billion, impacts of $0.4 billion related to the Kyndryl retained shares and higher spending reflecting continuing investment in our hybrid cloud and AI strategy, partially offset by the effects of currency, a gain from the divestiture of our healthcare software assets, lower workforce rebalancing charges and benefits from the actions taken to streamline operations and our go-to-market model. Total operating (non-GAAP) expense and other (income) decreased 3.3 percent year to year, driven primarily by the factors described above excluding the pension settlement charge and the impacts related to the Kyndryl retained shares.

Pre-tax loss from continuing operations was $2.2 billion in the first nine months of 2022 compared with pre-tax income of $2.0 billion in the prior-year period with the year-to-year decline driven by the $5.9 billion pension settlement charge. Pre-tax margin was down 9.8 points year to year to (4.9) percent reflecting the impact of the charge. The continuing operations benefit from income taxes in the first nine months of 2022 was $1.1 billion, compared to a benefit of $0.3 billion in the first nine months of 2021. The increase compared to the prior year was primarily due to the pension settlement charge in the third quarter of 2022. Net loss from continuing operations was $1.1 billion compared with net income of $2.3 billion in the prior-year period and the net income/(loss) from continuing operations margin of (2.5) percent was down 8.0 points year to year.

Operating (non-GAAP) pre-tax income from continuing operations of $6.0 billion increased 38.1 percent compared to the prior-year period and the operating (non-GAAP) pre-tax margin from continuing operations increased 3.0 points to 13.7 percent. These profit dynamics reflect our portfolio shift toward higher value, led by software. Our pre-tax profit includes the contribution from incremental sales to Kyndryl and the negative impacts of currency primarily due to the strengthening of the U.S. dollar. The operating (non-GAAP) provision for income taxes was $969 million in the first

nine months of 2022, compared to $204 million in the first nine months of 2021. The increase compared to the prior year was primarily driven by the resolution of certain tax audits in the first quarter of 2021 as well as third-quarter 2021 events that resulted in additional anticipated utilization of U.S. foreign tax credits. Operating (non-GAAP) income from continuing operations of $5.0 billion increased 21.5 percent and the operating (non-GAAP) income margin from continuing operations of 11.5 percent was up 1.3 points year to year.

Diluted loss per share from continuing operations was $1.21 in the first nine months of 2022, including an impact of $4.86 from the pension settlement charge, compared to diluted earnings per share of $2.49 in the prior-year period. Operating (non-GAAP) diluted earnings per share of $5.52 increased 20.5 percent versus the prior-year period.

Consolidated diluted loss per share in the first nine months of 2022 was $1.19 compared to diluted earnings per share of $3.77 in the prior-year period. This includes the impact from the pension settlement charge and a year-to-year reduction of $1.26 from discontinued operations due to the separation of Kyndryl.

Our balance sheet at September 30, 2022 continues to provide us with the flexibility to support the business. Cash and cash equivalents, restricted cash and marketable securities at September 30, 2022 were $9.7 billion, an increase of $2.2 billion from December 31, 2021. Total debt of $50.9 billion at September 30, 2022 decreased $0.8 billion driven by currency impacts, partially offset by net debt issuances.

Key drivers in the balance sheet and total cash flows were:

Total assets decreased $6.2 billion (flat adjusted for currency) from December 31, 2021 driven by:

- A decrease in receivables of $3.3 billion ($1.9 billion adjusted for currency) primarily due to collections of higher year-end balances, partially offset by current-year business volumes;

- A decrease in goodwill and net intangible assets of $3.0 billion ($0.9 billion adjusted for currency) primarily driven by currency impacts, intangibles amortization and derecognition of goodwill and intangible assets of $0.6 billion related to the divestiture of our healthcare software assets, partially offset by additions from new acquisitions; and

- A decrease in net property, plant and equipment and operating right-of-use assets of $1.0 billion ($0.5 billion adjusted for currency); partially offset by

- An increase in cash and cash equivalents, restricted cash and marketable securities of $2.2 billion ($2.7 billion adjusted for currency).

Total liabilities decreased $7.3 billion ($0.9 billion adjusted for currency) from December 31, 2021 driven by:

- A decrease in retirement and nonpension postretirement benefit obligations of $2.7 billion ($1.4 billion adjusted for currency) of which $0.6 billion is due to the amendment and remeasurement impact of the U.S. Nonpension Postretirement Plan;

- A decrease in deferred income of $1.9 billion ($0.8 billion adjusted for currency) reflecting seasonal reductions from higher year-end balances;

- A decrease in total debt of $0.8 billion (an increase of $1.4 billion adjusted for currency) primarily driven by maturities of $5.4 billion and currency impacts, partially offset by issuances of $7.9 billion; and

- A decrease in taxes payable of $0.6 billion ($0.4 billion adjusted for currency) primarily due to indirect tax payments.

Total equity of $20.1 billion increased $1.2 billion from December 31, 2021 as a result of:

- A decrease in accumulated other comprehensive loss of $6.1 billion driven by retirement-related benefit plans primarily due to the pension settlement charge of $4.4 billion net of tax; and
- Common stock issuances of $0.7 billion; partially offset by
- Dividends paid of $4.5 billion; and
- Net loss of $1.1 billion primarily due to the pension settlement charge.

Our cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows, include the cash flows of discontinued operations. On a consolidated basis, cash provided by operating activities was $6.5 billion in the first nine months of 2022, a decrease of $3.8 billion compared to the first nine months of 2021, primarily due to a decrease in cash provided by financing receivables driven by higher prior-year sales of receivables. Net cash used in investing activities of $2.9 billion decreased $2.4 billion compared to the prior-year period. Financing activities were a net use of cash of $2.1 billion in the first nine months of 2022 compared to $10.7 billion in the first nine months of 2021.

Third Quarter and First Nine Months in Review

Results of Continuing Operations

As discussed in the "Organization of Information" section, with the completion of the separation on November 3, 2021, results of Kyndryl are reported as discontinued operations. Prior periods have been reclassified to conform to this presentation in the Management Discussion to allow for a meaningful comparison of continuing operations.

Segment Details

The following tables present each reportable segment's revenue and gross margin results, followed by an analysis of the third quarter and first nine months of 2022 versus the third quarter and first nine months of 2021 reportable segments results. Prior-year results have been recast to conform with the changes as described in the "Organization of Information" section.

(Dollars in millions) For the three months ended September 30:	2022	2021*	Yr. to Yr. Percent/Margin Change	Yr. to Yr. Percent Change Adjusted For Currency
Revenue:				
Software	$ 5,811	$ 5,406	7.5 %	14.2 %
Gross margin	79.0 %	78.6 %	0.4 pts.	
Consulting	4,700	4,457	5.4 %	15.6 %
Gross margin	26.0 %	29.5 %	(3.5)pts.	
Infrastructure	3,352	2,921	14.8 %	23.1 %
Gross margin	50.8 %	52.8 %	(2.0)pts.	
Financing	174	184	(5.7)%	(0.6)%
Gross margin	32.8 %	28.7 %	4.1 pts.	
Other	70	282	(75.1)%	(70.5)%
Gross margin	(197.7)%	(18.5)%	(179.2)pts.	
Total revenue	$ 14,107	$ 13,251	6.5 %	14.6 %
Total gross profit	$ 7,430	$ 7,106	4.6 %	
Total gross margin	52.7 %	53.6 %	(1.0)pts.	
Non-operating adjustments:				
Amortization of acquired intangible assets	165	183	(10.1)%	
Operating (non-GAAP) gross profit	$ 7,595	$ 7,290	4.2 %	
Operating (non-GAAP) gross margin	53.8 %	55.0 %	(1.2)pts.	

* Recast to reflect segment changes.

(Dollars in millions) For the nine months ended September 30:	2022	2021*	Yr. to Yr. Percent/Margin Change	Yr. to Yr. Percent Change Adjusted For Currency
Revenue:				
Software	$ 17,749	$ 16,339	8.6 %	13.7 %
Gross margin	79.0 %	78.7 %	0.3 pts.	
Consulting	14,337	13,098	9.5 %	16.9 %
Gross margin	24.8 %	28.3 %	(3.5)pts.	
Infrastructure	10,805	9,774	10.6 %	16.3 %
Gross margin	51.9 %	55.6 %	(3.7)pts.	
Financing	474	601	(21.2)%	(17.9)%
Gross margin	35.1 %	31.5 %	3.7 pts.	
Other	475	844	(43.8)%	(40.2)%
Gross margin	(63.6)%	(24.4)%	(39.1)pts.	
Total revenue	$ 43,840	$ 40,656	7.8 %	13.8 %
Total gross profit	$ 23,055	$ 21,985	4.9 %	
Total gross margin	52.6 %	54.1 %	(1.5)pts.	
Non-operating adjustments:				
Amortization of acquired intangible assets	526	537	(2.0)%	
Operating (non-GAAP) gross profit	$ 23,582	$ 22,522	4.7 %	
Operating (non-GAAP) gross margin	53.8 %	55.4 %	(1.6)pts.	

* Recast to reflect segment changes.

Software

(Dollars in millions) For the three months ended September 30:	2022	2021*	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Software revenue:	$ 5,811	$ 5,406	7.5 %	14.2 %
Hybrid Platform & Solutions	$ 4,172	$ 4,074	2.4 %	8.1 %
Red Hat			11.7	18.0
Automation			(2.4)	3.0
Data & AI			(1.0)	4.0
Security			(0.9)	5.8
Transaction Processing	1,640	1,332	23.1	32.8

* Recast to reflect segment changes.

(Dollars in millions) For the nine months ended September 30:	2022	2021*	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Software revenue:	$ 17,749	$ 16,339	8.6 %	13.7 %
Hybrid Platform & Solutions	$ 12,641	$ 12,082	4.6 %	9.0 %
Red Hat			13.7	18.6
Automation			1.4	5.6
Data & AI			0.4	4.3
Security			1.4	6.3
Transaction Processing	5,107	4,257	20.0	26.8

* Recast to reflect segment changes.

Software revenue of $5,811 million increased 7.5 percent as reported (14 percent adjusted for currency) in the third quarter of 2022 compared to the prior-year period, driven by revenue growth in both Hybrid Platform & Solutions and Transaction Processing. This includes incremental sales to Kyndryl which contributed approximately 8 points to the revenue growth. This revenue performance reflects our strong and growing recurring revenue base, which is approximately 80 percent of our annual software revenue. Within Software, over the trailing 12 months, hybrid cloud revenue of $9,192 million grew 16 percent as reported (20 percent adjusted for currency) year to year, driven by growth in our hybrid cloud and AI capabilities.

Hybrid Platform & Solutions revenue of $4,172 million increased 2.4 percent as reported (8 percent adjusted for currency) in the third quarter of 2022 compared to the prior-year period, led by continued strong double-digit growth in Red Hat. Incremental sales to Kyndryl contributed approximately 1.5 points to the revenue growth. Red Hat revenue grew 11.7 percent as reported (18 percent adjusted for currency) in the third quarter. As a leader in open-source technologies for enterprises, Red Hat performance in the third quarter continued to be driven by market share gains across RHEL, OpenShift and Ansible. Automation revenue decreased 2.4 percent as reported, but grew 3 percent adjusted for currency, reflecting continued adoption in areas such as AI Ops and Management and Integration, and compared to strong acquisition-related contribution in the prior year. We also brought innovation to our clients this quarter such as new Instana observability capabilities for zSystems in a hybrid cloud environment. Data & AI revenue decreased 1.0 percent as reported, but increased 4 percent adjusted for currency, reflecting growth in areas such as Data Management, Data Fabric and Information Exchange. In addition, our offerings like Envizi and Environmental Intelligence Suite are resonating with clients as they prioritize sustainability efforts. Security revenue decreased 0.9 percent as reported, but grew 6 percent adjusted for currency, reflecting growth in Data Security and Threat Management. Within Data Security, growth was driven by client adoption of Guardium Insights as we continue to deliver new product innovation. Within Threat Management, growth was led by CloudPak for Security, which helps clients prevent and respond to modern threats across disparate security feeds.

Across Hybrid Platform & Solutions, our annual recurring revenue (ARR) was $13 billion, up 9 percent compared to the prior-year period. ARR is a key performance metric management uses to assess the health and growth trajectory of our Hybrid Platform & Solutions business within the Software segment. ARR is calculated by estimating the current quarter's recurring, committed value for certain types of active contracts as of the period-end date and then multiplying that value by four. This value is based on each arrangement's contract value and start date, mitigating fluctuations during the contract term, and includes the following consumption models: (1) software subscription agreements, including committed term licenses, (2) as-a-service arrangements such as SaaS and PaaS, (3) maintenance and support contracts, and (4) security managed services contracts. ARR should be viewed independently of revenue as this performance metric and its inputs may not represent the amount of revenue recognized in the period and therefore is not intended to represent current period revenue or revenue that will be recognized in future periods. ARR is calculated at estimated constant currency.

Transaction Processing revenue of $1,640 million increased 23.1 percent as reported (33 percent adjusted for currency) in the third quarter of 2022 compared to the prior-year period, driven by incremental sales to Kyndryl that contributed approximately 26 points to the revenue growth. The increase in zSystems installed capacity over the last couple of product cycles and continued strong renewal rates are recognition of the importance of this platform in a hybrid cloud environment. As a result, the Transaction Processing annuity base grew this quarter.

For the first nine months of 2022, Software revenue of $17,749 million increased 8.6 percent as reported (14 percent adjusted for currency) compared to the same period in 2021. Incremental sales to Kyndryl contributed approximately 8 points to the revenue growth. We had broad-based growth across Hybrid Platform & Solutions for the first nine months of 2022. Transaction Processing had double-digit growth, driven by incremental sales to Kyndryl that contributed approximately 25 points to the revenue growth.

(Dollars in millions) For the three months ended September 30:	2022	2021*	Yr. to Yr. Percent/ Margin Change
Software:			
Gross profit	$ 4,591	$ 4,250	8.0 %
Gross profit margin	79.0 %	78.6 %	0.4 pts.
Pre-tax income	$ 1,306	$ 990	31.9 %
Pre-tax margin	22.5 %	18.3 %	4.2 pts.

* Recast to reflect segment changes.

(Dollars in millions) For the nine months ended September 30:	2022	2021*	Yr. to Yr. Percent/ Margin Change
Software:			
Gross profit	$ 14,025	$ 12,862	9.0 %
Gross profit margin	79.0 %	78.7 %	0.3 pts.
Pre-tax income	$ 3,816	$ 2,707	41.0 %
Pre-tax margin	21.5 %	16.6 %	4.9 pts.

* Recast to reflect segment changes.

Software gross profit margin increased 0.4 points to 79.0 percent in the third quarter of 2022 compared to the prior-year period, driven primarily by a mix between products and services, partially offset by a margin decline in services. For the first nine months of 2022, gross profit margin increased 0.3 points to 79.0 percent, driven primarily by the same factors.

In the third quarter, pre-tax income of $1,306 million increased 31.9 percent and pre-tax margin of 22.5 percent increased 4.2 points compared to the prior year. We continued to expand our pre-tax margin given the solid revenue growth including the Kyndryl commercial relationship. For the first nine months of 2022, pre-tax income of $3,816 million increased 41.0 percent and pre-tax margin of 21.5 percent increased 4.9 points compared to the prior-year period, driven by the increase in gross profit contribution year to year which reflects our solid revenue growth.

Consulting

(Dollars in millions) For the three months ended September 30:	2022	2021*	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Consulting revenue:	$ 4,700	$ 4,457	5.4 %	15.6 %
Business Transformation	$ 2,165	$ 2,068	4.7 %	14.3 %
Technology Consulting	943	889	6.1	16.6
Application Operations	1,593	1,501	6.2	16.8

* Recast to reflect segment change.

(Dollars in millions) For the nine months ended September 30:	2022	2021*	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Consulting revenue:	$ 14,337	$ 13,098	9.5 %	16.9 %
Business Transformation	$ 6,646	$ 6,070	9.5 %	16.5 %
Technology Consulting	2,826	2,538	11.4	19.3
Application Operations	4,865	4,489	8.4	16.1

* Recast to reflect segment change.

Consulting revenue of $4,700 million increased 5.4 percent as reported (16 percent adjusted for currency) in the third quarter of 2022 compared to the prior-year period, with growth across all business areas. Over the trailing 12 months, our book-to-bill ratio was 1.05, reflecting clients' trust in our deep industry expertise and co-creation approach throughout their hybrid cloud and digital transformation journeys. Within Consulting, over the trailing 12 months, hybrid cloud revenue of $8,889 million grew 21 percent as reported (28 percent adjusted for currency) year to year, as we help clients design and enable enterprise hybrid cloud strategies. Our Red Hat consulting practice continued to be a meaningful contributor to revenue with strong double-digit growth as we continued to add new engagements. Since acquiring Red Hat just over three years ago, Consulting has led nearly 1,400 Red Had engagements with more than $6.5 billion in aggregate bookings. Our strategic partnerships also contributed to our performance in the third quarter, with continued revenue growth at a double-digit rate from these partnerships.

In the third quarter of 2022, Business Transformation revenue of $2,165 million increased 4.7 percent as reported (14 percent adjusted for currency) on a year-to-year basis, as clients looked to IBM to help them transform critical workflows at scale. This growth was pervasive, driven by supply chain, finance, data and client experience transformations. Working with our partners such as SAP, Salesforce and Adobe, we help our clients optimize their operations and improve the way they engage with their customers.

Technology Consulting revenue of $943 million increased 6.1 percent as reported (17 percent adjusted for currency) in the third quarter of 2022 compared to the prior-year period, led by our cloud application development and cloud modernization offerings, including our Red Hat consulting practice.

Application Operations revenue of $1,593 million increased 6.2 percent as reported (17 percent adjusted for currency) compared to the third quarter of 2021. We helped clients optimize their operations and reduce cost by taking over the management of clients' applications in hybrid and multi-cloud environments. We leverage AI to help predict problems before they happen and monitor our clients' different environments with dashboards, enabling action to be taken quickly.

For the first nine months of 2022, Consulting revenue of $14,337 million increased 9.5 percent as reported (17 percent adjusted for currency) reflecting strong year-to-year growth as reported and adjusted for currency across all three business areas. Within Business Transformation, year-to-year revenue grew as we brought technology and strategic

consulting together to help clients transform critical workflows at scale. In our Technology Consulting business, we led client engagements around cloud modernization and cloud development. Through our Application Operations offerings, we continued to provide cloud platform and application management services to help our clients run their hybrid cloud environments.

(Dollars in millions) For the three months ended September 30:	2022	2021*	Yr. to Yr. Percent/ Margin Change
Consulting:			
Gross profit	$ 1,220	$ 1,315	(7.2)%
Gross profit margin	26.0 %	29.5 %	(3.5)pts.
Pre-tax income	$ 462	$ 466	(0.8)%
Pre-tax margin	9.8 %	10.5 %	(0.6)pts.

* Recast to reflect segment change.

(Dollars in millions) For the nine months ended September 30:	2022	2021*	Yr. to Yr. Percent/ Margin Change
Consulting:			
Gross profit	$ 3,559	$ 3,711	(4.1)%
Gross profit margin	24.8 %	28.3 %	(3.5)pts.
Pre-tax income	$ 1,154	$ 1,013	13.9 %
Pre-tax margin	8.0 %	7.7 %	0.3 pts.

* Recast to reflect segment change.

Consulting gross profit margin of 26.0 percent decreased 3.5 points in the third quarter of 2022 compared to the same period in 2021, reflecting the pressure on the margin profile from continued labor costs inflation, however, the Consulting gross profit margin improved 1.8 points compared to the second quarter of 2022. We had two consecutive quarters of priced margin improvement year over year, that will contribute to improved margin performance going forward. Additionally, our utilization rates are improving as we exit the third quarter, and our acquisitions are scaling toward margin accretion. For the first nine months of 2022, Consulting gross profit margin of 24.8 percent decreased 3.5 points compared to the prior-year period, reflecting the same dynamics described above. We continue to invest in our partner ecosystem, expanding our reach and are investing in talent across our workforce, developing and adding technical skills in the areas of hybrid cloud and AI.

Pre-tax income of $462 million decreased 0.8 percent and pre-tax margin of 9.8 percent decreased 0.6 points in the third quarter of 2022 compared to the prior-year period, with almost 3 points of sequential improvement in the pre-tax margin compared to the second quarter of 2022. For the first nine months of 2022, pre-tax income of $1,154 million increased 13.9 percent and pre-tax margin of 8.0 percent increased 0.3 points compared to the prior-year period, as we start to recognize the benefits of priced margin improvements, increased productivity within our workforce, and a more streamlined operating and go-to-market structure.

Consulting Signings and Book-to-Bill

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total Consulting signings	$ 4,509	$ 5,046	(10.6)%	(1.9)%

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total Consulting signings	$ 14,300	$ 13,497	5.9 %	13.3 %

Signings are management's initial estimate of the value of a client's commitment under a services contract within IBM Consulting. There are no third-party standards or requirements governing the calculation of signings. The calculation used by management involves estimates and judgments to gauge the extent of a client's commitment, including the type and duration of the agreement, and the presence of termination charges or wind-down costs.

Contract extensions and increases in scope are treated as signings only to the extent of the incremental new value. Total signings can vary over time due to a variety of factors including, but not limited to, the timing of signing a small number of larger contracts. Signings associated with an acquisition will be recognized on a prospective basis.

Management believes the estimated values of signings disclosed provide an indication of our forward-looking revenue. Signings are used to monitor the performance of the business and viewed as useful information for management and shareholders. The conversion of signings into revenue may vary based on the types of services and solutions, contract duration, customer decisions, and other factors, which may include, but are not limited to, the macroeconomic environment.

Book-to-bill represents the ratio of IBM Consulting signings to its revenue over the same period. The metric is a useful indicator of the demand of our business over time. This definition should be read in conjunction with the signings definition noted above.

Infrastructure

(Dollars in millions) For the three months ended September 30:	2022	2021*	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Infrastructure revenue:	$ 3,352	$ 2,921	14.8 %	23.1 %
Hybrid Infrastructure	$ 1,931	$ 1,453	32.9 %	41.0 %
zSystems			88.0	97.9
Distributed Infrastructure			13.5	20.9
Infrastructure Support	1,421	1,468	(3.2)	5.3

* Recast to reflect segment change.

(Dollars in millions) For the nine months ended September 30:	2022	2021*	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Infrastructure revenue:	$ 10,805	$ 9,774	10.6 %	16.3 %
Hybrid Infrastructure	$ 6,392	$ 5,294	20.7 %	26.2 %
zSystems			39.6	45.4
Distributed Infrastructure			10.1	15.5
Infrastructure Support	4,413	4,480	(1.5)	4.5

* Recast to reflect segment change.

Infrastructure revenue of $3,352 million increased 14.8 percent as reported (23 percent adjusted for currency) in the third quarter of 2022 compared to the prior-year period. This includes incremental sales to Kyndryl which contributed

approximately 9 points to the revenue growth. This performance reflects continued strong double-digit growth in Hybrid Infrastructure as reported and adjusted for currency, driven primarily by the z16 product cycle. Within Infrastructure, over the trailing 12 months, hybrid cloud revenue of $3,930 million increased 3 percent as reported (6 percent adjusted for currency) year to year, driven primarily by product cycle dynamics.

Hybrid Infrastructure revenue of $1,931 million increased 32.9 percent as reported (41 percent adjusted for currency) in the third quarter of 2022 compared to the prior-year period. Incremental sales to Kyndryl contributed approximately 11 points to the revenue growth. Within Hybrid Infrastructure, zSystems revenue grew 88.0 percent as reported (98 percent adjusted for currency) on a year-to-year basis, driven by continued adoption of our new z16 program. This latest program combines embedded AI at scale, cloud-native development for hybrid cloud and cyber-resilient security. The z16 is also the industry's first quantum-safe system, delivering 25 billion encrypted transactions per day for clients. In the third quarter, we introduced our newest LinuxONE server, a highly scalable Linux and Kubernetes-based platform with capabilities to reduce clients' energy consumption. IBM zSystems remains an enduring platform, playing an important role in a hybrid cloud environment. Distributed Infrastructure revenue grew 13.5 percent as reported (21 percent adjusted for currency). Recent innovation across the portfolio enabled broad-based growth in our Storage and Power platforms, including refreshes to our flash storage solutions and the expansion of our Power10 server family.

Infrastructure Support revenue of $1,421 million decreased 3.2 percent as reported, but grew 5 percent adjusted for currency in the third quarter of 2022 compared to the prior-year period. This includes incremental sales to Kyndryl which contributed approximately 7 points of revenue growth for the quarter.

For the first nine months of 2022, Infrastructure revenue of $10,805 million increased 10.6 percent as reported (16 percent adjusted for currency) compared to the prior-year period. Incremental sales to Kyndryl contributed approximately 8 points of revenue growth. Infrastructure revenue performance was driven by double-digit growth in Hybrid Infrastructure, with zSystems revenue growth driven by the new z16, and growth in Distributed Infrastructure driven by strong performance in high-end disk and flash storage solutions as well as high-end Power10 systems.

(Dollars in millions) For the three months ended September 30:	2022	2021*	Yr. to Yr. Percent/ Margin Change
Infrastructure:			
Gross profit	$ 1,702	$ 1,541	10.4 %
Gross profit margin	50.8 %	52.8 %	(2.0)pts.
Pre-tax income	$ 280	$ 209	34.1 %
Pre-tax margin	8.3 %	7.1 %	1.2 pts.

* Recast to reflect segment change.

(Dollars in millions) For the nine months ended September 30:	2022	2021*	Yr. to Yr. Percent/ Margin Change
Infrastructure:			
Gross profit	$ 5,607	$ 5,430	3.3 %
Gross profit margin	51.9 %	55.6 %	(3.7)pts.
Pre-tax income	$ 1,236	$ 989	25.0 %
Pre-tax margin	11.4 %	10.1 %	1.3 pts.

* Recast to reflect segment change.

Infrastructure gross profit margin of 50.8 percent decreased 2.0 points in the third quarter of 2022 compared to the prior-year period, driven primarily by profit margin decline in Infrastructure Support, partially offset by margin

expansion in Hybrid Infrastructure driven primarily by a product mix benefit from the revenue growth in zSystems. For the first nine months of 2022, gross profit margin of 51.9 percent decreased 3.7 points compared to the prior-year period, driven primarily by profit margin declines in Distributed Infrastructure, which reflects increased component costs and supplier premiums, as well as margin declines in Infrastructure Support, driven by portfolio mix. These declines are partially offset by a product mix benefit from the revenue growth in zSystems.

In the third quarter of 2022, Infrastructure pre-tax income of $280 million increased 34.1 percent and pre-tax margin of 8.3 percent increased 1.2 points compared to the prior-year period, reflecting product mix benefits from the revenue growth in zSystems. For the first nine months of 2022, Infrastructure pre-tax income of $1,236 million increased 25.0 percent and pre-tax margin of 11.4 percent increased 1.3 points compared to the prior-year period, driven primarily by the same factor described above.

Financing

See pages 91 through 94 for a discussion of Financing's segment results.

Geographic Revenue

In addition to the revenue presentation by reportable segment, we also measure revenue performance on a geographic basis.

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total Revenue	$ 14,107	$ 13,251	6.5 %	14.6 %
Americas	$ 7,416	$ 6,579	12.7 %	13.4 %
Europe/Middle East/Africa (EMEA)	3,959	3,939	0.5	15.9
Asia Pacific	2,732	2,734	(0.1)	15.7

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total Revenue	$ 43,840	$ 40,656	7.8 %	13.8 %
Americas	$ 22,614	$ 20,178	12.1 %	12.4 %
Europe/Middle East/Africa (EMEA)	12,716	12,181	4.4	15.8
Asia Pacific	8,509	8,297	2.6	14.0

Total revenue of $14,107 million increased 6.5 percent as reported (15 percent adjusted for currency) in the third quarter of 2022 compared to the prior-year period, which includes approximately 5 points of revenue growth from incremental sales to Kyndryl.

Americas revenue of $7,416 million increased 12.7 percent as reported (13 percent adjusted for currency), which includes approximately 4 points of revenue growth from incremental sales to Kyndryl. Within North America, the U.S. increased 11.5 percent and Canada increased 3.8 percent as reported (7 percent adjusted for currency). Latin America increased 28.0 percent as reported (32 percent adjusted for currency), with Brazil increasing 30.3 percent as reported (31 percent adjusted for currency).

In EMEA, total revenue of $3,959 million increased 0.5 percent as reported (16 percent adjusted for currency), which includes approximately 6 points of revenue growth from incremental sales to Kyndryl. France and the UK increased 4.5 percent and 3.3 percent, respectively, as reported, and increased 21 percent and 20 percent, respectively,

adjusted for currency. Germany and Italy decreased 8.1 percent and 1.3 percent, respectively, as reported, but increased 7 percent and 15 percent, respectively, adjusted for currency. The suspension and orderly wind-down of our Russian operations in the second quarter impacted the revenue growth rate in EMEA by 1.7 points as reported (2 points adjusted for currency).

Asia Pacific revenue of $2,732 million was flat as reported, but increased 16 percent adjusted for currency, which includes approximately 5 points of revenue growth from incremental sales to Kyndryl. Japan decreased 3.4 percent as reported, but increased 22 percent adjusted for currency. India and Australia increased 6.7 percent and 2.6 percent, respectively, as reported, and increased 15 percent and 10 percent, respectively, adjusted for currency. China decreased 15.3 percent as reported (12 percent adjusted for currency).

For the first nine months of 2022, total revenue of $43,840 million increased 7.8 percent as reported (14 percent adjusted for currency) compared to the prior-year period, which includes approximately 5 points of revenue growth from incremental sales to Kyndryl.

Americas revenue of $22,614 million increased 12.1 percent as reported (12 percent adjusted for currency), which includes approximately 4 points of revenue growth from incremental sales to Kyndryl. Within North America, the U.S. increased 10.8 percent and Canada increased 5.3 percent as reported (8 percent adjusted for currency). Latin America increased 29.1 percent as reported (30 percent adjusted for currency), with Brazil increasing 33.6 percent as reported (30 percent adjusted for currency).

In EMEA, total revenue of $12,716 million increased 4.4 percent as reported (16 percent adjusted for currency), which includes approximately 7 points of revenue growth from incremental sales to Kyndryl. The UK, France and Germany increased 8.0 percent, 5.3 percent and 2.2 percent, respectively, as reported, and increased 19 percent, 18 percent and 14 percent, respectively, adjusted for currency. Italy decreased 1.1 percent as reported, but increased 11 percent adjusted for currency. The suspension and orderly wind-down of our Russian operations in the second quarter impacted the revenue growth rate in EMEA by 1.7 points as reported (2 points adjusted for currency).

Asia Pacific revenue of $8,509 million increased 2.6 percent as reported (14 percent adjusted for currency), which includes approximately 6 points of revenue growth from incremental sales to Kyndryl. Japan was flat as reported and increased 18 percent adjusted for currency. India and Australia increased 20.5 percent and 7.8 percent, respectively, as reported, and increased 27 percent and 16 percent, respectively, adjusted for currency. China decreased 13.1 percent as reported and 12 percent adjusted for currency.

Expense

Total Expense and Other (Income)

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Total expense and other (income)	$ 11,931 *	$ 6,293	89.6 %
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (253)	$ (285)	(11.5)%
Acquisition-related charges	(1)	(4)	(76.9)
Non-operating retirement-related (costs)/income	(6,062)*	(318)	nm
Kyndryl-related impacts	14	—	nm
Operating (non-GAAP) expense and other (income)	$ 5,630	$ 5,687	(1.0)%
Total expense-to-revenue ratio	84.6 %	47.5 %	37.1 pts.
Operating (non-GAAP) expense-to-revenue ratio	39.9 %	42.9 %	(3.0)pts.

* Includes a one-time, non-cash pension settlement charge of $5.9 billion. See note 18, “Retirement-Related Benefits,” for additional information.
nm - not meaningful

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Total expense and other (income)	$ 25,212 *	$ 20,017	25.9 %
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (810)	$ (835)	(2.9)%
Acquisition-related charges	(9)	(37)	(75.0)
Non-operating retirement-related (costs)/income	(6,455)*	(967)	nm
Kyndryl-related impacts	(353)	—	nm
Operating (non-GAAP) expense and other (income)	$ 17,584	$ 18,179	(3.3)%
Total expense-to-revenue ratio	57.5 %	49.2 %	8.3 pts.
Operating (non-GAAP) expense-to-revenue ratio	40.1 %	44.7 %	(4.6)pts.

* Includes a one-time, non-cash pension settlement charge of $5.9 billion. See note 18, “Retirement-Related Benefits,” for additional information.
nm - not meaningful

Total expense and other (income) increased 89.6 percent in the third quarter of 2022 versus the prior-year period primarily driven by the one-time, non-cash pension settlement charge of $5.9 billion and higher spending reflecting our continuing focus on our portfolio and investment in our offerings, technical talent and ecosystem, partially offset by the effects of currency and benefits from the actions taken to streamline operations and our go-to-market model. Total operating (non-GAAP) expense and other (income) decreased 1.0 percent year to year, driven primarily by the factors described above excluding the pension settlement charge.

For additional information regarding total expense and other (income) for both expense presentations, see the following analyses by category.

Selling, General and Administrative Expense

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Selling, general and administrative expense:			
Selling, general and administrative — other	$ 3,681	$ 3,553	3.6 %
Advertising and promotional expense	297	342	(13.2)
Workforce rebalancing charges	13	0	nm
Amortization of acquired intangible assets	252	285	(11.5)
Stock-based compensation	138	144	(3.7)
Provision for/(benefit from) expected credit loss expense	11	(17)	nm
Total selling, general and administrative expense	$ 4,391	$ 4,306	2.0 %
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (252)	$ (285)	(11.5)%
Acquisition-related charges	(1)	(4)	(76.9)
Kyndryl-related impacts	0	—	nm
Operating (non-GAAP) selling, general and administrative expense	$ 4,138	$ 4,018	3.0 %

nm - not meaningful

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Selling, general and administrative expense:			
Selling, general and administrative — other	$ 11,501	$ 11,397	0.9 %
Advertising and promotional expense	1,028	1,079	(4.7)
Workforce rebalancing charges	46	201	(77.3)
Amortization of acquired intangible assets	808	833	(2.9)
Stock-based compensation	427	399	6.9
Provision for/(benefit from) expected credit loss expense	33	(67)	nm
Total selling, general and administrative expense	$ 13,843	$ 13,842	0.0 %
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (808)	$ (833)	(2.9)%
Acquisition-related charges	(9)	(37)	(75.0)
Kyndryl-related impacts	0	—	nm
Operating (non-GAAP) selling, general and administrative expense	$ 13,025	$ 12,972	0.4 %

nm - not meaningful

Total selling, general and administrative (SG&A) expense increased 2.0 percent in the third quarter of 2022 versus the prior-year period driven primarily by the following factors:

- Higher spending (6 points) reflecting our continuing investment to drive our hybrid cloud and AI strategy, expenses of acquired businesses and higher travel and commission expense, partially offset by benefits from the actions taken to streamline operations and our go-to-market model and lower spending for shared services transferred to Kyndryl; and

- A provision for expected credit loss expense in the current year compared to a benefit in the prior-year period (1 point); partially offset by

- The effects of currency (5 points).

Operating (non-GAAP) expense increased 3.0 percent year to year, primarily driven by the same factors.

SG&A expense was flat in the first nine months of 2022 versus the prior-year period driven primarily by the following factors:

- Higher spending (4 points) driven primarily by the same factors described above; and
- A provision for expected credit loss expense in the current year compared to a benefit in the prior-year period (1 point); partially offset by
- The effects of currency (3 points); and
- Lower workforce rebalancing charges (1 point).

Operating (non-GAAP) expense increased 0.4 percent year to year, primarily driven by the same factors.

Provisions for expected credit loss expense increased $99 million in the first nine months of 2022 compared to the prior-year period, primarily driven by an increase in specific reserves in the current year compared to decreases in both general and specific reserves in the prior-year period. The receivables provision coverage was 2.3 percent at September 30, 2022, an increase of 20 basis points from December 31, 2021, due to the decline in total receivables balance, and a decrease of 20 basis points from September 30, 2021.

Research, Development and Engineering

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Research, development and engineering expense	$ 1,611	$ 1,606	0.3 %

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Research, development and engineering expense	$ 4,963	$ 4,863	2.0 %

Research, development and engineering (RD&E) expense in the third quarter of 2022 increased 0.3 percent year to year reflecting our continuing investment to deliver innovation in AI, hybrid cloud and emerging areas such as quantum. Higher spending (3 points) in the current-year period was partially offset by the effects of currency (2 points).

RD&E expense in the first nine months of 2022 increased 2.0 percent year to year, primarily driven by higher spending (4 points) partially offset by the effects of currency (2 points).

Intellectual Property and Custom Development Income

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Intellectual property and custom development income:			
Licensing of intellectual property including royalty-based fees	$ 62	$ 75	(17.6)%
Custom development income	59	68	(12.8)
Sales/other transfers of intellectual property	1	10	(94.5)
Total	$ 121	$ 153	(20.5)%

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Intellectual property and custom development income:			
Licensing of intellectual property including royalty-based fees	$ 246	$ 215	14.5 %
Custom development income	164	197	(16.7)
Sales/other transfers of intellectual property	8	20	(58.0)
Total	$ 418	$ 431	(3.0)%

Total intellectual property and custom development income decreased 20.5 percent year to year in the third quarter, and 3.0 percent in the first nine months of 2022 compared to the prior-year period. The timing and amount of licensing, sales or other transfers of IP may vary significantly from period to period depending upon the timing of licensing agreements, economic conditions, industry consolidation and the timing of new patents and know-how development.

Other (Income) and Expense

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Other (income) and expense:			
Foreign currency transaction losses/(gains)	$ (352)	$ (21)	nm
(Gains)/losses on derivative instruments	189	7	nm
Interest income	(53)	(14)	287.1 %
Net (gains)/losses from securities and investment assets	(11)	3	nm
Retirement-related costs/(income)	6,062 *	318	nm
Other	(80)	(48)	65.1
Total other (income) and expense	$ 5,755 *	$ 244	nm
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (1)	$ (1)	—
Non-operating retirement-related (costs)/income	(6,062)*	(318)	nm
Kyndryl-related impacts	14	—	nm
Operating (non-GAAP) other (income) and expense	$ (293)	$ (74)	294.3 %

* Includes a one-time, non-cash pension settlement charge of $5.9 billion.
nm - not meaningful

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Other (income) and expense:			
Foreign currency transaction losses/(gains)	$ (1,021)	$ (145)	nm
(Gains)/losses on derivative instruments	730	246	196.5 %
Interest income	(98)	(39)	154.9
Net (gains)/losses from securities and investment assets	262	(3)	nm
Retirement-related costs/(income)	6,455 *	967	nm
Other	(407)	(135)	200.9
Total other (income) and expense	$ 5,921 *	$ 891	nm
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (2)	$ (2)	—
Non-operating retirement-related (costs)/income	(6,455)*	(967)	nm
Kyndryl-related impacts	(353)	—	nm
Operating (non-GAAP) other (income) and expense	$ (889)	$ (77)	nm

* Includes a one-time, non-cash pension settlement charge of $5.9 billion.
nm - not meaningful

Total other (income) and expense was expense of $5,755 million in the third quarter of 2022 compared to $244 million in the prior-year period. The year-to-year change was primarily driven by:

- Higher non-operating retirement-related costs ($5,744 million) driven by the pension settlement charge. Refer to note 18, "Retirement-Related Benefits," for additional information; partially offset by
- Higher net exchange gains (including derivative instruments) in the current year ($145 million); and
- Higher interest income ($39 million) driven by higher average interest rates in the current year.

Operating (non-GAAP) other (income) and expense was $293 million of income in the third quarter of 2022 and increased $219 million compared to the prior-year period. The year-to-year change was driven primarily by the higher net exchange gains and higher interest income.

Total other (income) and expense was $5,921 million of expense in the first nine months of 2022 compared to $891 million in the prior-year period. The year-to-year decrease was primarily driven by:

- Higher non-operating retirement-related costs ($5,489 million) driven by the pension settlement charge. Refer to note 18, "Retirement-Related Benefits," for additional information; and
- Net losses related to Kyndryl retained shares ($267 million); partially offset by
- Net exchange gains (including foreign exchange derivative instruments) in the current year versus net exchange losses in the prior year ($477 million). The current-year (gains)/losses on derivative instruments also includes a loss on the cash-settled swap related to the Kyndryl retained shares ($85 million);
- Higher gains on divestitures ($283 million) primarily driven by the divestiture of our healthcare software assets (included in "Other"); and
- Higher interest income ($60 million) driven by higher average interest rates in the current year.

Operating (non-GAAP) other (income) and expense was $889 million of income in the first nine months of 2022 and increased $812 million compared to the prior-year period. The year-to-year increase was driven primarily by the effects of currency, higher gains on divestitures and higher interest income described above.

Interest Expense

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Interest expense	$ 295	$ 290	1.7 %

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Interest expense	$ 903	$ 852	6.0 %

Interest expense increased $5 million and $51 million year to year in the third quarter and first nine months of 2022, respectively. Interest expense is presented in cost of financing in the Consolidated Income Statement if the related external borrowings are to support the Financing external business. Overall interest expense (excluding capitalized interest) for the third quarter and first nine months of 2022 was $394 million and $1,166 million, respectively, an increase of $2 million and $3 million, respectively, compared to the prior-year periods. The year-to-year dynamics for

both the third quarter and first nine months of 2022 were primarily driven by higher average interest rates, offset by a lower average debt balance.

Retirement-Related Plans

The following tables provide the total pre-tax cost for all retirement-related plans. The operating cost amounts are included in the Consolidated Income Statement within the caption (e.g., Cost, SG&A, RD&E) relating to the job function of the plan participants. The non-operating cost amounts are included in other (income) and expense.

(Dollars in millions) For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Retirement-related plans — cost:			
Service cost	$ 59	$ 70	(15.6)%
Multi-employer plans	4	2	76.8
Cost of defined contribution plans	225	252	(10.7)
Total operating costs	$ 288	$ 324	(11.2)%
Interest cost	$ 436	$ 408	6.9 %
Expected return on plan assets	(679)	(726)	(6.5)
Recognized actuarial losses	381	613	(37.9)
Amortization of prior service costs/(credits)	3	3	(11.4)
Curtailments/settlements	5,913 *	13	nm
Other costs	8	7	18.5
Total non-operating costs/(income)	$ 6,062 *	$ 318	nm
Total retirement-related plans — cost	$ 6,350 *	$ 642	nm

* Includes a one-time, non-cash pension settlement charge of $5.9 billion. See note 18, "Retirement-Related Benefits," for additional information.
nm - not meaningful

(Dollars in millions) For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Retirement-related plans — cost:			
Service cost	$ 186	$ 209	(11.0)%
Multi-employer plans	11	13	(12.0)
Cost of defined contribution plans	697	760	(8.3)
Total operating costs	$ 894	$ 982	(8.9)%
Interest cost	$ 1,363	$ 1,227	11.1 %
Expected return on plan assets	(2,162)	(2,187)	(1.2)
Recognized actuarial losses	1,283	1,852	(30.7)
Amortization of prior service costs/(credits)	16	7	131.9
Curtailments/settlements	5,931 *	46	nm
Other costs	24	21	9.8
Total non-operating costs/(income)	$ 6,455 *	$ 967	nm
Total retirement-related plans — cost	$ 7,350 *	$ 1,949	277.1 %

* Includes a one-time, non-cash pension settlement charge of $5.9 billion. See note 18, "Retirement-Related Benefits," for additional information.
nm - not meaningful

Total pre-tax retirement-related plan cost increased by $5,708 million compared to the third quarter of 2021 primarily due to an increase in curtailments/settlements ($5,900 million) driven by a one-time, non-cash pension settlement charge, lower expected return on plan assets ($47 million) and higher interest costs ($28 million), partially offset by a decrease in recognized actuarial losses ($232 million) and lower cost of defined contribution plans ($27

million). Total cost for the first nine months of 2022 increased $5,401 million compared to the first nine months of 2021, primarily due to an increase in curtailments/settlements ($5,885 million) driven by the pension settlement charge, higher interest costs ($136 million), partially offset by a decrease in recognized actuarial losses ($569 million), and lower cost of defined contribution plans ($63 million).

As described in the "Operating (non-GAAP) Earnings" section, management characterizes certain retirement-related costs as operating and others as non-operating. Utilizing this characterization, operating retirement-related costs in the third quarter of 2022 were $288 million, a decrease of $36 million compared to the third quarter of 2021. For the first nine months of 2022, operating retirement-related costs were $894 million, a decrease of $88 million compared to the prior-year period. These operating cost decreases were primarily driven by lower cost of defined contribution plans. Non-operating costs of $6,062 million in the third quarter of 2022 increased $5,744 million year to year and for the first nine months of 2022 were $6,455 million, an increase of $5,488 million compared to the prior-year period. These non-operating cost increases were driven primarily by the $5.9 billion pension settlement charge, higher interest costs and lower expected return on plan assets, partially offset by a decrease in recognized actuarial losses.

Taxes

The continuing operations benefit from income taxes for the third quarter of 2022 was $1,287 million, compared to a benefit of $224 million in the third quarter of 2021. The current-year tax benefit was primarily due to the transfer of a portion of the Qualified PPP's defined benefit pension obligations and related plan assets. The prior-year tax benefit was primarily driven by events that resulted in additional anticipated utilization of U.S. foreign tax credits. The operating (non-GAAP) income tax provision for the third quarter of 2022 was $312 million, compared to a benefit from income taxes of $67 million in the third quarter of 2021. The current-year tax provision was driven by many factors including the impacts of the geographical mix of income, incentives and changes in unrecognized tax benefits and tax laws. The prior-year tax benefit was primarily driven by events that resulted in additional anticipated utilization of U.S. foreign tax credits.

The continuing operations benefit from income taxes for the first nine months of 2022 was $1,070 million, compared to a benefit of $282 million for the first nine months of 2021. The increase compared to the prior year was primarily driven by the transfer of a portion of the Qualified PPP's defined benefit pension obligations and related plan assets in the third quarter of 2022. The operating (non-GAAP) provision for income taxes for the first nine months of 2022 was $969 million, compared to $204 million for the first nine months of 2021. The increase in the operating (non-GAAP) income tax provision compared to the prior year was primarily driven by the resolution of certain tax audits in the first quarter of 2021 as well as third-quarter events in 2021 that resulted in additional anticipated utilization of U.S. foreign tax credits.

IBM's full-year tax provision and effective tax rate are impacted by recurring factors including the geographic mix of income before taxes, incentives, changes in unrecognized tax benefits and discrete tax events, such as the settlement of income tax audits and changes in or new interpretations of tax laws. The GAAP tax provision and effective tax rate could also be affected by adjustments to the previously recorded charges for U.S. tax reform attributable to any changes in law, new regulations and guidance, and audit adjustments, among others.

During the fourth quarter of 2020, the U.S. Internal Revenue Service (IRS) concluded its examination of the company's U.S. federal income tax returns for 2013 and 2014, which had a specific focus on certain cross-border transactions that occurred in 2013, and issued a final Revenue Agent's Report (RAR). The IRS' proposed adjustments relative to these cross-border transactions, if sustained, would result in additional taxable income of approximately $4.5 billion. The company strongly disagrees with the IRS on these specific matters and filed its IRS Appeals protest in the first quarter of 2021. In the third quarter of 2018, the IRS commenced its audit of the company's U.S. federal income tax returns for 2015 and 2016. The company anticipates that this audit will be completed in 2022 or early 2023. In the fourth quarter of 2021, the IRS commenced its audit of the company's U.S. federal income tax returns for 2017 and 2018. With respect to major U.S. state and foreign taxing jurisdictions, the company is generally no longer subject to tax examinations for years prior to 2015. The company is no longer subject to income tax examination of its U.S. federal tax

return for years prior to 2013. The open years contain matters that could be subject to differing interpretations of applicable tax laws and regulations as it relates to the amount and/or timing of income, deductions, and tax credits. Although the outcome of tax audits is always uncertain, the company believes that adequate amounts of tax, interest and penalties have been provided for any adjustments that are expected to result for these years.

The company is involved in a number of income tax-related matters in India as a result of tax assessments issued by the India tax authorities. At September 30, 2022, the company had recorded $704 million as prepaid income taxes in India. A significant portion of this balance represents cash tax deposits paid over time to protect the company's right to appeal various income tax assessments made by the India tax authorities. Although the outcome of tax audits is always uncertain, the company believes that adequate amounts of tax, interest and penalties have been provided for any adjustments that are expected to result for these years.

The amount of unrecognized tax benefits at September 30, 2022 is $8,531 million which can be reduced by $538 million associated with timing adjustments, U.S. tax credits, potential transfer pricing adjustments, and state income taxes. The net amount of $7,993 million, if recognized, would favorably affect the company's effective tax rate.

Earnings/(Loss) Per Share

Basic earnings per share is computed on the basis of the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share is computed on the basis of the weighted-average number of shares of common stock outstanding 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.

For the three and nine months ended September 30, 2022, the one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion net of tax) resulted in net losses as reported. Therefore, otherwise dilutive potential shares of common stock have been excluded from the computation of diluted earnings/(loss) per share as the effect would be antidilutive. See note 7, "Earnings Per Share of Common Stock," for additional information.

Operating (non-GAAP) earnings per share for the three and nine months ended September 30, 2022 included all potential dilutive securities.

For the three months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Earnings/(loss) per share of common stock from continuing operations:			
Assuming dilution	$ (3.55)*	$ 1.14	nm
Basic	$ (3.55)*	$ 1.16	nm
Diluted operating (non-GAAP)	$ 1.81	$ 1.84	(1.6)%
Weighted-average shares outstanding: (in millions)			
Assuming dilution	904.1	906.0	(0.2)%
Basic	904.1	897.1	0.8 %
Assuming dilution (non-GAAP)	912.8	906.0	0.8 %

* The $5.9 billion one-time, non-cash, pre-tax pension settlement charge resulted in an impact of ($4.86) to diluted earnings/(loss) per share from continuing operations and an impact of ($4.88) to basic earnings/(loss) per share.

nm - not meaningful

For the nine months ended September 30:	2022	2021	Yr. to Yr. Percent Change
Earnings/(loss) per share of common stock from continuing operations:			
Assuming dilution	$ (1.21)*	$ 2.49	nm
Basic	$ (1.21)*	$ 2.51	nm
Diluted operating (non-GAAP)	$ 5.52	$ 4.58	20.5 %
Weighted-average shares outstanding: (in millions)			
Assuming dilution	901.6	904.0	(0.3)%
Basic	901.6	895.3	0.7 %
Assuming dilution (non-GAAP)	911.1	904.0	0.8 %

* The $5.9 billion one-time, non-cash, pre-tax pension settlement charge resulted in an impact of ($4.86) to diluted earnings/(loss) per share from continuing operations and an impact of ($4.90) to basic earnings/(loss) per share.
nm - not meaningful

Actual shares outstanding at September 30, 2022 were 904.1 million. The weighted-average number of common shares outstanding assuming dilution during the third quarter and first nine months of 2022 were 1.9 million (0.2 percent) and 2.4 million (0.3 percent) shares lower, respectively, than the same periods of 2021, driven by the exclusion of dilutive potential common shares in the current-year computation. The weighted-average number of common shares outstanding assuming dilution used in the non-GAAP diluted earnings per share calculation for the third quarter and first nine months of 2022 were 6.9 million (0.8 percent) and 7.1 million (0.8 percent) shares higher, respectively, than the same periods of 2021.

Financial Position

Dynamics

Our balance sheet at September 30, 2022 continues to provide us with flexibility to support the business.

Cash, restricted cash and marketable securities at September 30, 2022 were $9,728 million, an increase of $2,171 million from December 31, 2021. Total debt of $50,880 million at September 30, 2022 decreased $824 million from December 31, 2021 driven by currency impacts. We continue to manage our debt levels while being acquisitive and without sacrificing investments in our business or our solid dividend policy.

Our cash flow is presented on a consolidated basis and includes discontinued operations. Refer to note 3, “Separation of Kyndryl,” for additional information. In the first nine months of 2022, we generated $6,470 million in cash from operating activities, compared to $10,252 million in the first nine months of 2021, primarily due to financing receivables. There was no cash flow impact from the U.S. pension settlement charge. We invested $1,020 million in acquisitions, generated $1,271 million from divested businesses and returned $4,454 million to shareholders through dividends in the first nine months of 2022. Our cash generation permits us to invest and deploy capital to areas with the most attractive long-term opportunities.

Our pension plans were well funded at the end of 2021, with worldwide qualified plans funded at 107 percent. Overall pension funded status as of the end of September 2022 has increased from year-end 2021, primarily due to higher interest rates and the settlement of approximately $16 billion of the U.S. Qualified PPP’s defined benefit pension obligations. After the settlement and remeasurement, the U.S. Qualified PPP remained in an overfunded position at September 30, 2022. Refer to note 18, “Retirement-Related Benefits,” for additional information. We currently have no change to expected plan contributions in 2022.

IBM Working Capital

(Dollars in millions)	At September 30, 2022	At December 31, 2021
Current assets	$ 28,999	$ 29,539
Current liabilities	30,466	33,619
Working capital	$ (1,467)	$ (4,080)
Current ratio	0.95:1	0.88:1

Working capital increased $2,613 million from the year-end 2021 position. The key changes are described below:

Current assets decreased $540 million (an increase of $1,329 million adjusted for currency) due to:

- A decline in receivables of $2,666 million ($1,593 million adjusted for currency) mainly due to collections of higher year-end balances; partially offset by
- An increase of $2,171 million ($2,718 million adjusted for currency) in cash, restricted cash and marketable securities.

Current liabilities decreased $3,153 million ($1,401 million adjusted for currency) as a result of:

- A decrease in deferred income of $1,378 million ($512 million adjusted for currency) reflecting seasonal reductions from higher year-end balances;
- A decrease in short-term debt of $849 million ($850 million adjusted for currency) due to maturities of $5,338 million; partially offset by reclassifications of $4,757 million from long-term debt to reflect upcoming maturities; and
- A decrease in taxes payable of $622 million ($423 million adjusted for currency) primarily due to indirect tax payments.

Receivables and Allowances

Roll Forward of Total IBM Receivables Allowance for Credit Losses*

(Dollars in millions) January 1, 2022	Additions / (Releases) **	Write-offs +	Foreign currency and other	September 30, 2022
$ 443	$ 53	$ (51)	$ (24)	$ 421

* This roll forward includes any reserves related to discontinued operations.
** Additions/(Releases) for allowance for credit losses are recorded in expense.
\+ Refer to note A, "Significant Accounting Policies," in our 2021 Annual Report for additional information regarding allowance for credit loss write-offs.

Excluding receivables classified as held for sale, the total IBM receivables provision coverage was 2.3 percent at September 30, 2022, an increase of 20 basis points compared to December 31, 2021. The increase was primarily driven by the decline in total receivables. The majority of the write-offs during the nine months ended September 30, 2022 related to receivables which had been previously reserved.

Financing Segment Receivables and Allowances

The following table presents external Financing segment receivables excluding receivables classified as held for sale, and immaterial miscellaneous receivables.

(Dollars in millions)	At September 30, 2022	At December 31, 2021
Amortized cost *	$ 11,234	$ 12,859
Specific allowance for credit losses	126	159
Unallocated allowance for credit losses	34	42
Total allowance for credit losses	159	201
Net financing receivables	$ 11,075	$ 12,658
Allowance for credit losses coverage	1.4 %	1.6 %

* Includes deferred initial direct costs which are expensed in IBM's consolidated financial results.

The percentage of Financing segment receivables reserved decreased from 1.6 percent at December 31, 2021, to 1.4 percent at September 30, 2022, primarily driven by write-offs of previously reserved receivables.

Roll Forward of Financing Segment Receivables Allowance for Credit Losses (included in Total IBM)

(Dollars in millions) January 1, 2022	Additions / (Releases)*	Write-offs **	Foreign currency and other	September 30, 2022
$ 201	$ (13)	$ (23)	$ (5)	$ 159

* Additions/(Releases) for allowance for credit losses are recorded in expense.

** Refer to note A, "Significant Accounting Policies," in our 2021 Annual Report for additional information regarding allowance for credit loss write-offs.

Financing's expected credit loss expense (including reserves for off-balance sheet commitments which are recorded in other liabilities) was a net release of $3 million and $15 million for the three and nine months ended September 30, 2022, respectively, compared to a net release of $18 million and $47 million for the three and nine months ended September 30, 2021, respectively. The declines in net releases in both periods of 2022 were primarily driven by lower unallocated reserve requirements in the prior year in Americas and EMEA due to sales of receivables.

Noncurrent Assets and Liabilities

(Dollars in millions)	At September 30, 2022	At December 31, 2021
Noncurrent assets	$ 96,851	$ 102,462
Long-term debt	$ 44,942	$ 44,917
Noncurrent liabilities (excluding debt)	$ 30,294	$ 34,469

Noncurrent assets decreased $5,611 million ($1,355 million adjusted for currency) driven by:

- A decrease in goodwill and net intangible assets of $2,970 million ($916 million adjusted for currency) primarily driven by currency impacts, intangibles amortization and derecognition of goodwill and intangible assets of $648 million related to the divestiture of our healthcare software assets, partially offset by additions from new acquisitions;

- A decrease of $1,025 million ($528 million adjusted for currency) in net property, plant and equipment and operating right-of-use assets; and

- A decrease in long-term financing receivables of $644 million ($265 million adjusted for currency) due to collections from seasonally higher year-end balances, partially offset by current-year business volumes.

Long-term debt increased $26 million ($2,216 million adjusted for currency) due to:

- Issuances of $7,532 million; partially offset by
- Reclassifications to short-term debt of $4,757 million to reflect upcoming maturities; and
- A decrease of $2,191 million due to currency impacts.

Noncurrent liabilities (excluding debt) decreased $4,175 million ($1,761 million adjusted for currency) due to:

- A decrease in retirement and postretirement benefit obligations of $2,675 million ($1,392 million adjusted for currency) of which $624 million is due to the amendment and remeasurement impact of the U.S. Nonpension Postretirement Plan;
- A decrease of $559 million ($294 million adjusted for currency) in deferred income reflecting seasonal reductions from higher year-end balances; and
- A decrease of $359 million ($184 million adjusted for currency) in long-term operating lease liabilities related primarily to real estate leases.

Debt

Our funding requirements are continually monitored and we execute our strategies to manage the overall asset and liability profile. Additionally, we maintain sufficient flexibility to access global funding sources as needed.

(Dollars in millions)	At September 30, 2022	At December 31, 2021
Total company debt	$ 50,880	$ 51,703
Financing segment debt*	$ 11,198	$ 13,929
Non-Financing debt	$ 39,682	$ 37,775

* Financing segment debt includes debt of $1,166 million at September 30, 2022 and $1,345 million at December 31, 2021 to support intercompany financing receivables and other intercompany assets. Refer to Financing's "Financial Position" on page 92 for additional details.

Total debt of $50,880 million decreased $824 million (increased $1,366 million adjusted for currency) from December 31, 2021, primarily driven by maturities of $5,415 million and currency impacts, partially offset by issuances of $7,871 million.

Non-Financing debt of $39,682 million increased $1,907 million ($3,480 million adjusted for currency) from December 31, 2021 primarily due to new debt issuances.

Financing segment debt of $11,198 million decreased $2,730 million ($2,114 million adjusted for currency) from December 31, 2021 primarily due to lower funding requirements associated with financing assets.

Financing provides financing solutions predominantly for IBM's external client assets, and the debt used to fund Financing assets is primarily composed of intercompany loans. Total debt changes generally correspond with the level of client and commercial financing receivables, the level of cash and cash equivalents, the change in intercompany and external payables and the change in intercompany investment from IBM. The terms of the intercompany loans are set by

the company to substantially match the term, currency and interest rate variability underlying the financing receivable and are based on arm's-length pricing. The Financing debt-to-equity ratio remained at 9.0 to 1 at September 30, 2022.

We measure Financing as a stand-alone entity, and accordingly, interest expense relating to debt supporting Financing's external client and internal business is included in the "Financing Results of Operations" and in note 5, "Segments." In the Consolidated Income Statement, the external debt-related interest expense supporting Financing's internal financing to IBM is classified as interest expense.

Equity

Total equity of $20,147 million increased $1,151 million from December 31, 2021 as a result of:

- A decrease in accumulated other comprehensive loss of $6,096 million driven by retirement-related benefit plans, primarily due to the pension settlement charge of $4,411 million net of tax; and
- Common stock issuances of $736 million; partially offset by
- Dividends paid of $4,454 million; and
- Net loss of $1,071 million, primarily due to the pension settlement charge.

Cash Flow

Our cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows on page 7, are summarized in the table below and include the cash flows of discontinued operations. These amounts also include the cash flows associated with the Financing business.

(Dollars in millions) **For the nine months ended September 30:**	**2022**	**2021**
Net cash provided by/(used in):		
Operating activities	$ 6,470	$ 10,252
Investing activities	(2,883)	(5,300)
Financing activities	(2,106)	(10,662)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(463)	(159)
Net change in cash, cash equivalents and restricted cash	$ 1,018	$ (5,868)

Net cash provided by operating activities decreased $3,782 million as compared to the first nine months of 2021 driven primarily by:

- A decrease in cash provided by financing receivables of $4,164 million primarily driven by higher prior-year sales of receivables; partially offset by
- A decrease in payments for structural actions and Kyndryl separation-related charges; and
- An increase in cash from sales cycle working capital of $578 million.

Net cash used in investing activities decreased $2,417 million driven primarily by:

- A decrease in cash used in acquisitions of $1,999 million;
- An increase in cash provided by divestitures of $1,245 million; and

- A decrease in cash used in net capital expenditures of $539 million; partially offset by
- An increase in cash used in net marketable securities and other investments of $1,365 million.

Net cash used in financing activities decreased $8,556 million driven primarily by:

- Total debt was a net source of cash of $2,572 million in the first nine months of 2022 as compared to a net use of cash of $6,086 million in the first nine months of 2021. The year-to-year change of $8,658 million was driven by higher issuances in the current year and higher maturities in the prior year.

Results of Discontinued Operations

Income from discontinued operations, net of tax was $18 million in the third quarter of 2022 compared to $93 million in the prior-year period. For the first nine months of 2022, income from discontinued operations, net of tax was $16 million compared to income of $1,160 million in the prior-year period. As the separation of Kyndryl occurred on November 3, 2021, the year-to-date discontinued operations results as of September 30, 2021 included a full nine months of Kyndryl operations. The income in the third quarter of 2022 primarily reflects the net impact of changes in separation-related estimates and the settlement of assets and liabilities in accordance with the separation and distribution agreement. The income in the first nine months of 2022 reflects the same drivers as above and also includes a joint venture historically managed by Kyndryl, which did not transfer at separation due to the transfer being subject to regulatory approval. Upon receiving regulatory approval in the first quarter of 2022, the company sold its majority shares in the joint venture to Kyndryl. See note 3, “Separation of Kyndryl,” for additional information.

Looking Forward

As technology remains a fundamental source of competitive advantage, we continue to see solid demand for our hybrid cloud and AI solutions. It is clear that there is a real opportunity to help businesses leverage technology in today’s environment. Clients continue to navigate several challenges and opportunities from inflation to demographic shifts, to supply chain issues to sustainability efforts. We are helping our clients seize new business opportunities, overcome today’s challenges and emerge stronger. We too are building a stronger company that is closely aligned to the needs of our clients. We have continued to focus our portfolio, invest in our offerings, technical talent, and ecosystem and streamline our go-to-market model. We remain confident in our strategy and execution, and feel we are well-positioned to address the needs of our clients.

Hybrid Cloud and AI Progress

We believe Hybrid cloud and AI are the two most transformational enterprise technologies of our time. Our platform, based on Red Hat, allows our clients to consume software driven by open-source innovation. Our software has been optimized to run on that platform and includes advanced data and AI, automation and the security capabilities our clients need. Our global team of consultants offer deep business expertise and co-create with clients to accelerate their digital transformation journeys. And our infrastructure allows clients to take full advantage of a hybrid cloud environment.

Clients are choosing our hybrid cloud capabilities to unlock more business value and meet their rapidly changing demands. We see more clients consuming across our portfolio of software, consulting and infrastructure capabilities to drive business value. Companies are also eager to deploy AI and automation capabilities to boost their levels of productivity and we are working to bring these capabilities to clients across all industries.

Our partner ecosystem is a crucial element of our strategy. We continue to expand and extend the work we do with partners to serve our joint clients through strategic collaboration agreements. Revenue from these partnerships grew double digits again in the third quarter.

We continue to invest, both organically and inorganically, to deliver innovation for our clients and shape the technologies of the future. Most recently, we unveiled the next generation of our LinuxONE server, a Linux and Kubernetes-based platform designed to support thousands of workloads with the footprint of a single system. Quantum is an example of our commitment to shape the future of technology. We remain on track toward our goal of building a 1,000+ qubit system by 2023. Complementing our organic innovation, we acquired Dialexa in October 2022. This brings our total number of acquisitions in 2022 to seven, adding capabilities in areas like hybrid cloud services, security, data observability and sustainability. And as the world takes on the challenge of sustainability and of building a more circular economy, we have been building a portfolio of solutions to help companies make progress on this journey.

We are confident in the strategy that we are executing and in the fundamentals of our business. Our balance sheet and liquidity position remain strong. At September 30, 2022 we had $9.7 billion of cash and cash equivalents, restricted cash and marketable securities and we continue to manage our debt levels while being acquisitive and without sacrificing investments in our business or our solid dividend policy. As we enter the fourth quarter, we look forward to closing out our first calendar year of "today's IBM". Since the separation of Kyndryl, IBM is a more focused, faster-growing and higher-value company. We expect to continue our progress as a leading hybrid cloud and AI company with a focus on revenue growth and cash generation while maintaining our solid and modestly growing dividend policy.

Retirement-Related Plans

Our pension plans are well funded. Contributions for all retirement-related plans are expected to be approximately $2.0 billion in 2022, approximately flat compared to 2021, of which $0.2 billion generally relates to legally required contributions to non-U.S. defined benefit and multi-employer plans. We expect 2022 pre-tax retirement-related plan cost to be approximately $7.8 billion, an increase of approximately $5.2 billion compared to 2021. The increase is primarily driven by a $5.9 billion settlement charge in the third quarter of 2022 resulting from the transfer of a portion of the U.S. Qualified PPP to insurance companies. This estimate reflects current pension plan assumptions at December 31, 2021 and for the U.S. Qualified PPP and U.S. Nonpension Postretirement Plan, at August 31, 2022 and July 31, 2022, respectively. Within total retirement-related plan cost, operating retirement-related plan cost is expected to be approximately $1.2 billion, a decrease of approximately $100 million versus 2021. Non-operating retirement-related plan cost is expected to be approximately $6.6 billion, an increase of approximately $5.4 billion compared to 2021, primarily driven by the third-quarter 2022 settlement charge, partially offset by lower recognized actuarial losses and higher income from expected return on assets.

Currency Rate Fluctuations

Throughout 2022, there has been significant strengthening of the U.S. dollar (USD) as compared to most other currencies. Changes in the relative values of non-U.S. currencies to the USD affect our financial results and financial position. At September 30, 2022, currency changes resulted in assets and liabilities denominated in local currencies being translated into fewer dollars than at year-end 2021. We use financial hedging instruments to limit specific currency risks related to foreign currency-based transactions.

The combination of the rate, breadth and magnitude of movements in currency, and the fact that we do not hedge 100 percent of our currency exposures, will result in a currency impact to our profit and cash flows in 2022. We execute a hedging program which defers, versus eliminates, the volatility of currency impacts on our financial results. During periods of sustained movements in currency, the marketplace and competition adjust to the changing rates over time.

We translate revenue, cost and expense in our non-U.S. operations at current exchange rates in the reported period. References to "adjusted for currency" or "constant currency" reflect adjustments based upon a simple mathematical formula. However, this constant currency methodology that we utilize to disclose this information does not incorporate any operational actions that management could take to mitigate fluctuating currency rates, such as updates to pricing and sourcing. Currency movements impacted our year-to-year revenue and earnings per share results in the first nine months of 2022. Based on the currency rate movements in the first nine months of 2022, total revenue increased 7.8 percent as reported and 13.8 percent at constant currency versus the first nine months of 2021. On an income/(loss) from continuing

operations before income taxes basis, these translation impacts, mitigated by the net impact of hedging activities, resulted in a theoretical maximum (assuming no pricing or sourcing actions) increase in loss of approximately $190 million in the first nine months of 2022 on an as-reported basis and a decrease in income of approximately $280 million on an operating (non-GAAP) basis. The same mathematical exercise resulted in an increase in income of approximately $95 million in the first nine months of 2021 on an as-reported basis and an increase of $130 million on an operating (non-GAAP) basis. We view these amounts as a theoretical maximum impact to our as-reported financial results. Considering the operational responses mentioned above, movements of exchange rates, and the nature and timing of hedging instruments, it is difficult to predict future currency impacts on any particular period.

For non-U.S. subsidiaries and branches that operate in U.S. dollars or whose economic environment is highly inflationary, translation adjustments are reflected in results of operations. Generally, we manage currency risk in these entities by linking prices and contracts to U.S. dollars.

Liquidity and Capital Resources

In our 2021 Annual Report, on pages 47 to 49, there is a discussion of our liquidity including two tables that present three years of data. The table presented on page 47 includes net cash from operating activities, cash and cash equivalents, restricted cash and short-term marketable securities, and the size of our global credit facilities for each of the past three years. For the nine months ended, or at, as applicable, September 30, 2022, those amounts are $6.5 billion of net cash from operating activities, $9.7 billion of cash and cash equivalents, restricted cash and short-term marketable securities and $10.0 billion in global credit facilities, respectively. While we have no current plans to draw on these credit facilities, they are available as back-up liquidity.

The major rating agencies' ratings on our debt securities at September 30, 2022 appear in the following table and remain unchanged from June 30, 2022.

IBM RATINGS:	STANDARD AND POOR'S	MOODY'S INVESTORS SERVICE
Senior long-term debt	A-	A3
Commercial paper	A - 2	Prime - 2

IBM has ample financial flexibility, supported by our strong liquidity position and cash flows, to operate at a single A credit rating. We issued debt in July 2022 to further improve our liquidity and plan for our 2023 debt maturities. Debt levels have decreased $0.8 billion from December 31, 2021, primarily driven by currency, partially offset by net debt issuances, and $22.2 billion from our peak levels at June 30, 2019 (immediately preceding the Red Hat acquisition).

We do not have "ratings trigger" provisions in our debt covenants or documentation, which would allow the holders to declare an event of default and seek to accelerate payments thereunder in the event of a change in credit rating. Our debt covenants are well within the required levels. Our contractual agreements governing derivative instruments contain standard market clauses which can trigger the termination of the agreement if our credit rating were to fall below investment grade. At September 30, 2022, the fair value of those instruments that were in a liability position was $1,079 million, before any applicable netting, and this position is subject to fluctuations in fair value period to period based on the level of our outstanding instruments and market conditions. We have no other contractual arrangements that, in the event of a change in credit rating, would result in a material adverse effect on our financial position or liquidity.

Effective December 31, 2021, the use of LIBOR was substantially eliminated for purposes of any new financial contract executions. The UK's Financial Conduct Authority (FCA) extended the phase out of LIBOR in the case of U.S. dollar settings for certain tenors until the end of June 2023. Any legacy USD LIBOR based financial contracts are expected to be addressed using the LIBOR rates published through the June 2023 extension period. The replacement of the LIBOR benchmark within the company's risk management activities did not have a material impact in the consolidated financial results.

We prepare our Consolidated Statement of Cash Flows in accordance with applicable accounting standards for cash flow presentation on page 7 of this Form 10-Q and highlight causes and events underlying sources and uses of cash in that format on pages 86 and 87. For the purpose of running its business, IBM manages, monitors and analyzes cash flows in a different manner.

Management uses free cash flow as a measure to evaluate its operating results, plan shareholder return levels, strategic investments and assess its ability and need to incur and service debt. The entire free cash flow amount is not necessarily available for discretionary expenditures. We define free cash flow as net cash from operating activities less the change in Financing receivables and net capital expenditures, including the investment in software. A key objective of the Financing business is to generate strong returns on equity, and our Financing receivables are the basis for that growth. Accordingly, management considers Financing receivables as a profit-generating investment, not as working capital that should be minimized for efficiency. Therefore, management includes presentations of both free cash flow and net cash from operating activities that exclude the effect of Financing receivables.

The following is management's view of cash flows for the first nine months of 2022 and 2021 prepared in a manner consistent with the description above and is presented on a consolidated basis, including cash flows of discontinued operations.

(Dollars in millions) **For the nine months ended September 30:**	**2022**	**2021**
Net cash from operating activities per GAAP*	$ 6,470	$ 10,252
Less: change in Financing receivables	1,071	5,235
Net cash from operating activities, excluding Financing receivables	$ 5,399	$ 5,018
Capital expenditures, net	(1,317)	(1,855)
Free cash flow	$ 4,082	$ 3,162
Acquisitions	(1,020)	(3,018)
Divestitures	1,271	26
Common stock repurchases for tax withholdings	(329)	(252)
Dividends	(4,454)	(4,395)
Non-Financing debt	4,686	(1,143)
Other (includes Financing net receivables and Financing debt)	(2,066)	(249)
Change in cash, cash equivalents, restricted cash and short-term marketable securities	$ 2,171	$ (5,868)

* Includes cash flows of discontinued operations. See note 3, "Separation of Kyndryl," for additional information.

In the first nine months of 2022, we generated free cash flow of $4.1 billion, an increase of $0.9 billion versus the prior-year period. Payments for the 2020 structural actions and Kyndryl separation-related charges are down year to year and we are driving working capital improvements. In the first nine months of 2022, we continued to return value to shareholders with $4.5 billion in dividends and invested $1.0 billion in acquisitions, which was more than offset by proceeds from divested businesses.

Events that could temporarily change the historical cash flow dynamics discussed previously and in our 2021 Annual Report include significant changes in operating results, material changes in geographic sources of cash, unexpected adverse impacts from litigation, future pension funding requirements, periods of severe downturn in the capital markets or the timing of tax payments. Whether any litigation has such an adverse impact will depend on a number of variables, which are more completely described in note 14, "Contingencies," in this Form 10-Q. With respect to pension funding, we expect to make legally mandated pension plan contributions to certain non-U.S. defined benefit plans of approximately $200 million in 2022. Contributions related to all retirement-related plans are expected to be approximately $2.0 billion in 2022. Financial market performance could increase the legally mandated minimum contributions in certain non-U.S. countries that require more frequent remeasurement of the funded status. We are not quantifying any further impact from pension funding because it is not possible to predict future movements in the capital markets or changes in pension plan funding regulations.

In 2022, we are not legally required to make any contributions to the U.S. defined benefit pension plans.

Our cash flows are sufficient to fund our current operations and obligations, including investing and financing activities such as dividends and debt service. When additional requirements arise, we have several liquidity options available. These options may include the ability to borrow additional funds at reasonable interest rates and utilizing our committed global credit facilities. With our share repurchase program suspended since the close of the Red Hat acquisition, our overall shareholder payout remains at a comfortable level and we remain fully committed to our long-standing dividend policy.

Financing

Financing is a reportable segment that is measured as a stand-alone entity. Financing facilitates IBM clients' acquisition of information technology systems, software and services by providing financing solutions in the areas where the company has the expertise, while generating solid returns on equity.

Results of Operations

(Dollars in millions) For the three months ended September 30:	2022	2021*	Yr. to Yr. Percent Change
Revenue	$ 174	$ 184	(5.7)%
Pre-tax income	$ 79	$ 132	(40.4)%

* Recast to reflect 2021 segment changes.

(Dollars in millions) For the nine months ended September 30:	2022	2021*	Yr. to Yr. Percent Change
Revenue	$ 474	$ 601	(21.2)%
Pre-tax income	$ 265	$ 362	(26.8)%

* Recast to reflect 2021 segment changes.

Our Financing business is focused on IBM's products and services. For the three months ended September 30, 2022, financing revenue decreased 5.7 percent as reported (1 percent adjusted for currency) compared to the prior year, driven by client financing down $9 million to $172 million. For the nine months ended September 30, 2022, financing revenue decreased 21.2 percent as reported (18 percent adjusted for currency) compared to the prior year, driven by client financing down $123 million to $469 million. The decreases in client financing revenue in both periods in 2022 were primarily driven by the strategic actions taken in the prior year including selling certain client lease and loan financing receivables to third parties. While these strategic actions impact revenue and pre-tax income on a year-to-year basis, our repositioning of the Financing business has strengthened our liquidity position, improved the quality of our portfolio, and lowered our debt needs.

Financing pre-tax income decreased 40.4 percent to $79 million in the third quarter of 2022, compared to the prior year and the pre-tax margin of 45.4 percent decreased 26.4 points year to year. For the nine months ended September 30, 2022, Financing pre-tax income decreased 26.8 percent to $265 million compared to the prior year and the pre-tax margin of 55.9 percent decreased 4.3 points year to year. The decreases in pre-tax income in both periods in 2022 were primarily driven by the strategic actions described above.

Financial Position

(Dollars in millions)	At September 30, 2022	At December 31, 2021
Cash and cash equivalents	$ 471	$ 1,359
Client financing receivables:		
Net investment in sales-type and direct financing leases[1]	3,565	3,396
Client loans	7,346	8,818
Total client financing receivables	$ 10,911	$ 12,215
Commercial financing receivables:		
Held for investment	164	444
Held for sale	395	793
Other receivables	46	61
Total external receivables[2]	$ 11,516	$ 13,512
Intercompany financing receivables[3] [4]	671	778
Other assets[5]	1,075	1,231
Total assets	$ 13,733	$ 16,880
Intercompany payables[3]	$ 488	$ 467
Debt[6]	11,198	13,929
Other liabilities	797	937
Total liabilities	$ 12,483	$ 15,333
Total equity	$ 1,249	$ 1,547
Total liabilities and equity	$ 13,733	$ 16,880

(1) Includes deferred initial direct costs which are expensed in IBM's consolidated financial results.
(2) The difference between the decrease in total external receivables of $2.0 billion (from $13.5 billion in December 2021 to $11.5 billion in September 2022) and the $1.1 billion change in Financing segment's receivables disclosed in the free cash flow presentation on page 90 is primarily attributable to currency impacts.
(3) This entire amount is eliminated for purposes of IBM's consolidated financial results and therefore does not appear in the Consolidated Balance Sheet.
(4) These assets, along with all other financing assets in this table, are leveraged at the value in the table using Financing segment debt.
(5) Includes $0.6 billion of other intercompany assets in September 2022 and $0.7 billion in December 2021.
(6) Financing segment debt is primarily composed of intercompany loans.

Total external receivables decreased $1,996 million primarily driven by collections of higher year-end balances partially offset by current-year business volumes, with corresponding changes in debt funding.

At September 30, 2022, we continue to apply our rigorous credit policies. Approximately 72 percent of the total external portfolio was with investment-grade clients with no direct exposure to consumers, an increase of 6 points year to year and an increase of 1 point compared to June 30, 2022. This investment grade percentage is based on the credit ratings of the companies in the portfolio and reflects certain mitigating actions taken to reduce the risk to IBM.

We have a long-standing practice of taking mitigation actions, in certain circumstances, to transfer credit risk to third parties. These actions may include credit insurance, financial guarantees, nonrecourse borrowings, transfers of receivables recorded as true sales in accordance with accounting guidance or sales of equipment under operating lease. Sale of receivables arrangements are also utilized in the normal course of business as part of our cash and liquidity management.

The company has an existing agreement with a third-party investor to sell IBM short-term commercial financing receivables on a revolving basis. The company has expanded this agreement to other countries and geographies since commencement in the U.S. and Canada in 2020. In addition, the company enters into agreements with third-party financial institutions to sell certain of its client financing receivables, including both loan and lease receivables, for cash proceeds. In the first nine months of 2022, sales of client financing receivables were largely focused on credit mitigation.

During 2021, sales of client financing receivables were utilized as part of the company's cash and liquidity management as well as for credit mitigation.

The following table presents the total amount of client and commercial financing receivables transferred.

(Dollars in millions) For the nine months ended September 30:	2022	2021
Client financing receivables:		
Lease receivables	$ 15	$ 781
Loan receivables	2	2,189
Total client financing receivables transferred	$ 17	$ 2,970
Commercial financing receivables:		
Receivables transferred during the period	$ 6,091	$ 4,465
Receivables uncollected at end of period*	$ 816	$ 707

* Of the total amount of commercial financing receivables sold and derecognized from the Consolidated Balance Sheet, the amounts presented remained uncollected from the business partners as of September 30, 2022 and 2021.

For additional information relating to financing receivables refer to note 9, "Financing Receivables." Refer to pages 26 through 30 for additional information related to Financing segment receivables, allowance for credit losses and debt.

Return on Equity Calculation

(Dollars in millions)	For Three Months Ended September 30, 2022	For Three Months Ended September 30, 2021*	For Nine Months Ended September 30, 2022	For Nine Months Ended September 30, 2021*
Numerator				
Financing after-tax income**	$ 64	$ 98	$ 217	$ 267
Annualized after-tax income (1)	$ 257	$ 391	$ 289	$ 356
Denominator				
Average Financing equity (2)+	$ 1,306	$ 1,842	$ 1,378	$ 2,013
Financing return on equity (1)/(2)	19.7 %	21.2 %	21.0 %	17.7 %

* Recast to reflect 2021 segment changes.

** Calculated based upon an estimated tax rate principally based on Financing's geographic mix of earnings as IBM's provision for income taxes is determined on a consolidated basis.

+ Average of the ending equity for Financing for the last two quarters and four quarters, for the three months ended September 30 and for the nine months ended September 30, respectively.

Return on equity was 19.7 percent and 21.0 percent for the three and nine months ended September 30, 2022, respectively, compared to 21.2 percent and 17.7 percent for the same periods in 2021. The changes in both periods in 2022 were driven by a lower average equity balance, and a decrease in net income, which reflects the strategic actions taken in the prior year to reposition the Financing business.

Residual Value

Residual value is a risk unique to the financing business, and management of this risk is dependent upon the ability to accurately project future equipment values at lease inception. Financing has insight into product plans and cycles for IBM products. Based upon this product information, Financing continually monitors projections of future equipment values and compares them with the residual values reflected in the portfolio.

Financing optimizes the recovery of residual values by selling assets sourced from end of lease, leasing used equipment to new clients, or extending lease arrangements with current clients.

The following table presents the recorded amount of unguaranteed residual value for sales-type and direct financing leases, as well as operating leases at September 30, 2022 and December 31, 2021. In addition, the table presents the run out of when the unguaranteed residual value assigned to equipment on leases at September 30, 2022 is expected to be returned to the company.

Unguaranteed Residual Value

(Dollars in millions)	At December 31, 2021	At September 30, 2022	Estimated Run Out of September 30, 2022 Balance			
			2022	2023	2024	2025 and Beyond
Sales-type and direct financing leases	$ 335	$ 323	$ 21	$ 72	$ 62	$ 168
Operating leases	13	10	7	2	0	0
Total unguaranteed residual value	$ 348	$ 333	$ 28	$ 74	$ 62	$ 168

GAAP Reconciliation

The tables below provide a reconciliation of our income statement results as reported under GAAP to our operating earnings presentation which is a non-GAAP measure. Management's calculation of operating (non-GAAP) earnings, as presented, may differ from similarly titled measures reported by other companies. Refer to the "Operating (non-GAAP) Earnings" section for management's rationale for presenting operating earnings information.

(Dollars in millions except per share amounts) For the three months ended September 30, 2022:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments*	U.S. Tax Reform Impacts	Kyndryl-Related Impacts	Operating (non-GAAP)
Gross profit	$ 7,430	$ 165	$ —	$ —	$ —	$ 7,595
Gross profit margin	52.7 %	1.2 pts.	— pts.	— pts.	— pts.	53.8 %
SG&A	$ 4,391	$ (253)	$ —	$ —	$ 0	$ 4,138
Other (income) and expense	$ 5,755	$ (1)	$ (6,062)	$ —	$ 14	$ (293)
Total expense and other (income)	$ 11,931	$ (253)	$ (6,062)	$ —	$ 14	$ 5,630
Pre-tax income/(loss) from continuing operations	$ (4,501)	$ 418	$ 6,062	$ —	$ (14)	$ 1,965
Pre-tax margin from continuing operations	(31.9)%	3.0 pts.	43.0 pts.	— pts.	(0.1)pts.	13.9 %
Provision for/(benefit from) income taxes**	$ (1,287)	$ 103	$ 1,495	$ —	$ —	$ 312
Effective tax rate	28.6 %	(0.8)pts.	(12.1)pts.	— pts.	0.2 pts.	15.9 %
Income/(loss) from continuing operations	$ (3,214)	$ 315	$ 4,566	$ —	$ (14)	$ 1,653
Income/(loss) from continuing operations margin	(22.8)%	2.2 pts.	32.4 pts.	— pts.	(0.1)pts.	11.7 %
Diluted earnings/(loss) per share from continuing operations +	$ (3.55)	$ 0.35	$ 5.05	$ —	$ (0.02)	$ 1.81

* Retirement-Related Adjustments includes a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion after tax). See note 18 "Retirement-Related Benefits," for additional information.

** The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

\+ Operating (non-GAAP) earnings per share was calculated using 912.8 million shares, which includes 8.8 million dilutive potential shares under our stock-based compensation plans and contingently issuable shares. Due to the GAAP net loss for the three months ended September 30, 2022, these dilutive potential shares were excluded from the GAAP loss per share calculation as the effect would have been antidilutive. The difference in share count resulted in an additional ($0.02) reconciling item.

(Dollars in millions except per share amounts) For the three months ended September 30, 2021:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments	U.S. Tax Reform Impacts	Kyndryl-Related Impacts	Operating (non-GAAP)
Gross profit	$ 7,106	$ 183	$ —	$ —	$ —	$ 7,290
Gross profit margin	53.6 %	1.4 pts.	— pts.	— pts.	— pts.	55.0 %
SG&A	$ 4,306	$ (288)	$ —	$ —	$ —	$ 4,018
Other (income) and expense	$ 244	$ (1)	$ (318)	$ —	$ —	$ (74)
Total expense and other (income)	$ 6,293	$ (289)	$ (318)	$ —	$ —	$ 5,687
Pre-tax income from continuing operations	$ 813	$ 472	$ 318	$ —	$ —	$ 1,603
Pre-tax margin from continuing operations	6.1 %	3.6 pts.	2.4 pts.	— pts.	— pts.	12.1 %
Provision for/(benefit from) income taxes*	$ (224)	$ 102	$ 55	$ —	$ —	$ (67)
Effective tax rate	(27.6)%	14.5 pts.	8.9 pts.	— pts.	— pts.	(4.2)%
Income from continuing operations	$ 1,037	$ 370	$ 262	$ —	$ —	$ 1,670
Income from continuing operations margin	7.8 %	2.8 pts.	2.0 pts.	— pts.	— pts.	12.6 %
Diluted earnings per share from continuing operations	$ 1.14	$ 0.41	$ 0.29	$ —	$ —	$ 1.84

* The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

(Dollars in millions except per share amounts) For the nine months ended September 30, 2022:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments*	U.S. Tax Reform Impacts	Kyndryl-Related Impacts	Operating (non-GAAP)
Gross profit	$ 23,055	$ 526	$ —	$ —	$ —	$ 23,582
Gross profit margin	52.6 %	1.2 pts.	— pts.	— pts.	— pts.	53.8 %
SG&A	$ 13,843	$ (818)	$ —	$ —	$ 0	$ 13,025
Other (income) and expense	$ 5,921	$ (2)	$ (6,455)	$ —	$ (353)	$ (889)
Total expense and other (income)	$ 25,212	$ (820)	$ (6,455)	$ —	$ (353)	$ 17,584
Pre-tax income/(loss) from continuing operations	$ (2,156)	$ 1,346	$ 6,455	$ —	$ 353	$ 5,998
Pre-tax margin from continuing operations	(4.9)%	3.1 pts.	14.7 pts.	— pts.	0.8 pts.	13.7 %
Provision for/(benefit from) income taxes**	$ (1,070)	$ 327	$ 1,599	$ 112	$ —	$ 969
Effective tax rate	49.6 %	(5.7)pts.	(26.7)pts.	1.9 pts.	(2.9)pts.	16.1 %
Income/(loss) from continuing operations	$ (1,087)	$ 1,019	$ 4,856	$ (112)	$ 353	$ 5,029
Income/(loss) from continuing operations margin	(2.5)%	2.3 pts.	11.1 pts.	(0.3)pts.	0.8 pts.	11.5 %
Diluted earnings/(loss) per share from continuing operations +	$ (1.21)	$ 1.13	$ 5.39	$ (0.12)	$ 0.39	$ 5.52

* Retirement-Related Adjustments includes a one-time, non-cash, pre-tax pension settlement charge of $5.9 billion ($4.4 billion after tax). See note 18 “Retirement-Related Benefits,” for additional information.

** The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

\+ Operating (non-GAAP) earnings per share was calculated using 911.1 million shares, which includes 9.4 million dilutive potential shares under our stock-based compensation plans and contingently issuable shares. Due to the GAAP net loss for the nine months ended September 30, 2022, these dilutive potential shares were excluded from the GAAP loss per share calculation as the effect would have been antidilutive. The difference in share count resulted in an additional ($0.06) reconciling item.

(Dollars in millions except per share amounts) For the nine months ended September 30, 2021:	GAAP	Acquisition-Related Adjustments	Retirement-Related Adjustments	U.S. Tax Reform Impacts	Kyndryl-Related Impacts	Operating (non-GAAP)
Gross profit	$ 21,985	$ 537	$ —	$ —	$ —	$ 22,522
Gross profit margin	54.1 %	1.3 pts.	— pts.	— pts.	— pts.	55.4 %
SG&A	$ 13,842	$ (870)	$ —	$ —	$ —	$ 12,972
Other (income) and expense	$ 891	(2)	(967)	—	—	(77)
Total expense and other (income)	$ 20,017	(872)	(967)	—	—	18,179
Pre-tax income from continuing operations	$ 1,968	1,409	967	—	—	4,343
Pre-tax margin from continuing operations	4.8 %	3.5 pts.	2.4 pts.	— pts.	— pts.	10.7 %
Provision for/(benefit from) income taxes*	$ (282)	$ 340	$ 141	$ 6	$ —	$ 204
Effective tax rate	(14.4)%	12.5 pts.	6.5 pts.	0.1 pts.	— pts.	4.7 %
Income from continuing operations	$ 2,250	$ 1,069	$ 825	$ (6)	$ —	$ 4,139
Income from continuing operations margin	5.5 %	2.6 pts.	2.0 pts.	0.0 pts.	— pts.	10.2 %
Diluted earnings per share from continuing operations	$ 2.49	$ 1.18	$ 0.91	$ (0.01)	$ —	$ 4.58

* The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

Forward-Looking and Cautionary Statements

Except for the historical information and discussions contained herein, statements contained in this Form 10-Q may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based on the company's current assumptions regarding future business and financial performance. These statements involve a number of risks, uncertainties and other factors that could cause actual results to differ materially, including, but not limited to, the following: a downturn in economic environment and client spending budgets; a failure of the company's innovation initiatives; damage to the company's reputation; risks from investing in growth opportunities; failure of the company's intellectual property portfolio to prevent competitive offerings and the failure of the company to obtain necessary licenses; the company's ability to successfully manage acquisitions, alliances and dispositions, including integration challenges, failure to achieve objectives, the assumption of liabilities, and higher debt levels; fluctuations in financial results; impact of local legal, economic, political, health and other conditions; the company's failure to meet growth and productivity objectives; ineffective internal controls; the company's use of accounting estimates; impairment of the company's goodwill or amortizable intangible assets; the company's ability to attract and retain key employees and its reliance on critical skills; impacts of relationships with critical suppliers; product quality issues; impacts of business with government clients; reliance on third party distribution channels and ecosystems; cybersecurity and data privacy considerations; adverse effects related to climate change and environmental matters, tax matters; legal proceedings and investigatory risks; the company's pension plans; currency fluctuations and customer financing risks; impact of changes in market liquidity conditions and customer credit risk on receivables; potential failure of the separation of Kyndryl to qualify for tax-free treatment; risk factors related to IBM securities; and other risks, uncertainties and factors discussed in the company's Form 10-Qs, Form 10-K and in the company's other filings with the U.S. Securities and Exchange Commission or in materials incorporated therein by reference. Any forward-looking statement in this Form 10-Q speaks only as of the date on which it is made. Except as required by law, the company assumes no obligation to update or revise any forward-looking statements.

Item 4. Controls and Procedures

The company's management evaluated, with the participation of the Chief Executive Officer and Chief Financial Officer, the effectiveness of the company's disclosure controls and procedures 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 the company's disclosure controls and procedures were effective as of the end of the period covered by this report. There has been no change in the company's internal control over financial reporting that occurred during the quarter covered by this report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.

Part II — Other Information

Item 1. Legal Proceedings

Refer to note 14, "Contingencies," in this Form 10-Q.

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

The following table provides information relating to the company's repurchase of common stock for the third quarter of 2022.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Approximate Dollar Value of Shares that May Yet Be Purchased Under The Program*
July 1, 2022 - July 31, 2022	—	$ —	—	$ 2,007,611,768
August 1, 2022 - August 31, 2022	—	$ —	—	$ 2,007,611,768
September 1, 2022 - September 30, 2022	—	$ —	—	$ 2,007,611,768
Total	—	$ —	—	

* On October 30, 2018, the Board of Directors authorized $4.0 billion in funds for use in the company's common stock repurchase program. The company stated that it would repurchase shares on the open market or in private transactions depending on market conditions. The common stock repurchase program does not have an expiration date. This table does not include shares tendered to satisfy the exercise price in connection with cashless exercises of employee stock options or shares tendered to satisfy tax withholding obligations in connection with employee equity awards.

The company suspended its share repurchase program at the time of the Red Hat closing. At September 30, 2022 there was approximately $2.0 billion in authorized funds remaining for purchases under this program.

Item 6. Exhibits

Exhibit Number	
31.1	Certification by principal executive officer pursuant to Rule 13A-14(a) or 15D-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by principal financial officer pursuant to Rule 13A-14(a) or 15D-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by principal executive officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by principal financial officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document – the instance document does not appear on the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File – the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document

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.

International Business Machines Corporation
(Registrant)

Date: October 25, 2022

By: /s/ Robert F. Del Bene
Robert F. Del Bene
Vice President and Controller

Exhibit 31.1

CERTIFICATION PURSUANT TO RULE 13A-14(a) OR 15D-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Arvind Krishna, certify that:

1. I have reviewed this quarterly report on Form 10-Q of International Business Machines Corporation;

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

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

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

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

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

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

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

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

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

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

Date: October 25, 2022

/s/ Arvind Krishna

Arvind Krishna
Chairman and Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO RULE 13A-14(a) OR 15D-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, James J. Kavanaugh, certify that:

1. I have reviewed this quarterly report on Form 10-Q of International Business Machines Corporation;

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

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

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

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

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

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

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

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

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

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

Date: October 25, 2022

/s/ James J. Kavanaugh

James J. Kavanaugh
Senior Vice President and Chief Financial Officer

Exhibit 32.1

INTERNATIONAL BUSINESS MACHINES CORPORATION

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of International Business Machines Corporation (the "Company") on Form 10-Q for the period ending September 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Arvind Krishna, Chairman and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

/s/ Arvind Krishna

Arvind Krishna
Chairman and Chief Executive Officer
October 25, 2022

A signed original of this written statement required by Section 906 has been provided to IBM and will be retained by IBM and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

INTERNATIONAL BUSINESS MACHINES CORPORATION

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of International Business Machines Corporation (the "Company") on Form 10-Q for the period ending September 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, James J. Kavanaugh, Senior Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

/s/ James J. Kavanaugh

James J. Kavanaugh
Senior Vice President and Chief Financial Officer
October 25, 2022

A signed original of this written statement required by Section 906 has been provided to IBM and will be retained by IBM and furnished to the Securities and Exchange Commission or its staff upon request.