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

FORM 10-Q

☒ Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the Quarterly Period Ended September 30, 2023

or

☐ Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Commission File Number 001-35651

THE BANK OF NEW YORK MELLON CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**13-2614959**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

240 Greenwich Street
New York, New York 10286
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code – (212) 495-1784

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value	BK	New York Stock Exchange
6.244% Fixed-to-Floating Rate Normal Preferred Capital Securities of Mellon Capital IV (fully and unconditionally guaranteed by The Bank of New York Mellon Corporation)	BK/P	New York Stock Exchange

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

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

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

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

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

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

As of Sept. 30, 2023, 769,073,278 shares of the registrant's common stock, $0.01 par value per share, were outstanding.

THE BANK OF NEW YORK MELLON CORPORATION

Third Quarter 2023 Form 10-Q
Table of Contents

	Page
Consolidated Financial Highlights (unaudited)	2
Part I – Financial Information	
Items 2. and 3. Management's Discussion and Analysis of Financial Condition and Results of Operations; Quantitative and Qualitative Disclosures about Market Risk:	
General	4
Overview	4
Key third quarter 2023 events	4
Highlights of third quarter 2023 results	4
Fee and other revenue	6
Net interest revenue	9
Noninterest expense	12
Income taxes	12
Review of business segments	13
Critical accounting estimates	21
Consolidated balance sheet review	22
Liquidity and dividends	31
Capital	36
Trading activities and risk management	39
Asset/liability management	41
Supplemental information – Explanation of GAAP and Non-GAAP financial measures	43
Recent accounting and regulatory developments	47
Website information	49
Item 1. Financial Statements:	
Consolidated Income Statement (unaudited)	50
Consolidated Comprehensive Income Statement (unaudited)	52
Consolidated Balance Sheet (unaudited)	53
Consolidated Statement of Cash Flows (unaudited)	54
Consolidated Statement of Changes in Equity (unaudited)	55
Notes to Consolidated Financial Statements:	
Note 1—Basis of presentation	58
Note 2—New accounting guidance	58
Note 3—Acquisitions and dispositions	59
Note 4—Securities	59
Note 5—Loans and asset quality	64
Note 6—Goodwill and intangible assets	71
Note 7—Other assets	73
Note 8—Contract revenue	74
Note 9—Net interest revenue	76
Note 10—Employee benefit plans	77
Note 11—Income taxes	77
Note 12—Variable interest entities	77
Note 13—Preferred stock	78
Note 14—Other comprehensive income (loss)	79
Note 15—Fair value measurement	80
Note 16—Fair value option	85
Note 17—Derivative instruments	85
Note 18—Commitments and contingent liabilities	92
Note 19—Business segments	98
Note 20—Supplemental information to the Consolidated Statement of Cash Flows	101
Item 4. Controls and Procedures	102
Forward-looking Statements	103
Part II – Other Information	
Item 1. Legal Proceedings.	105
Item 2. Unregistered Sales of Equity Securities, Use of Proceeds, and Issuer Purchases of Equity Securities.	105
Item 5. Other Information.	105
Item 6. Exhibits.	105
Index to Exhibits	106
Signature	108

The Bank of New York Mellon Corporation (and its subsidiaries)

Consolidated Financial Highlights (unaudited)

(dollars in millions, except per share amounts and unless otherwise noted)	Quarter ended			Year-to-date	
	Sept. 30, 2023	June 30, 2023	Sept. 30, 2022	**Sept. 30, 2023**	Sept. 30, 2022
Results applicable to common shareholders of The Bank of New York Mellon Corporation:					
Net income	**$ 956**	$ 1,031	$ 319	**$ 2,892**	$ 1,853
Basic earnings per share	**$ 1.23**	$ 1.31	$ 0.39	**$ 3.66**	$ 2.29
Diluted earnings per share	**$ 1.22**	$ 1.30	$ 0.39	**$ 3.65**	$ 2.28
Fee and other revenue	**$ 3,358**	$ 3,354	$ 3,353	**$ 9,947**	$ 10,011
Net interest revenue	**1,016**	1,100	926	**3,244**	2,448
Total revenue	**$ 4,374**	$ 4,454	$ 4,279	**$ 13,191**	$ 12,459
Return on common equity *(annualized)*	**10.5 %**	11.6 %	3.5 %	**10.8 %**	6.8 %
Return on tangible common equity *(annualized)* – Non-GAAP *(a)*	**20.5 %**	22.6 %	7.5 %	**21.1 %**	14.0 %
Fee revenue as a percentage of total revenue	**74 %**	73 %	76 %	**73 %**	78 %
Non-U.S. revenue as a percentage of total revenue	**36 %**	37 %	35 %	**36 %**	35 %
Pre-tax operating margin	**29 %**	30 %	15 %	**29 %**	21 %
Net interest margin	**1.18 %**	1.20 %	1.05 %	**1.23 %**	0.89 %
Net interest margin on a fully taxable equivalent ("FTE") basis – Non-GAAP *(b)*	**1.18 %**	1.20 %	1.05 %	**1.23 %**	0.90 %
Assets under custody and/or administration ("AUC/A") at period end *(in trillions) (c)*	**$ 45.7**	$ 46.9	$ 42.2	**$ 45.7**	$ 42.2
Assets under management ("AUM") at period end *(in billions) (d)*	**$ 1,821**	$ 1,906	$ 1,776	**$ 1,821**	$ 1,776
Average common shares and equivalents outstanding *(in thousands)*:					
Basic	**777,813**	787,718	811,304	**789,609**	810,703
Diluted	**781,781**	790,725	814,516	**793,364**	814,214
Selected average balances:					
Interest-earning assets	**$ 339,044**	$ 362,049	$ 352,062	**$ 349,789**	$ 365,279
Total assets	**$ 397,492**	$ 421,174	$ 415,670	**$ 408,685**	$ 431,074
Interest-bearing deposits	**$ 209,641**	$ 215,057	$ 203,659	**$ 209,624**	$ 215,271
Noninterest-bearing deposits	**$ 52,467**	$ 62,152	$ 84,804	**$ 61,438**	$ 88,952
Long-term debt	**$ 31,161**	$ 31,970	$ 28,449	**$ 31,129**	$ 26,754
Preferred stock	**$ 4,838**	$ 4,838	$ 4,838	**$ 4,838**	$ 4,838
Total The Bank of New York Mellon Corporation common shareholders' equity	**$ 35,983**	$ 35,769	$ 35,942	**$ 35,787**	$ 36,483
Other information at period end:					
Cash dividends per common share	**$ 0.42**	$ 0.37	$ 0.37	**$ 1.16**	$ 1.05
Common dividend payout ratio	**35 %**	29 %	95 %	**32 %**	46 %
Common dividend yield *(annualized)*	**3.9 %**	3.3 %	3.8 %	**3.6 %**	3.6 %
Closing stock price per common share	**$ 42.65**	$ 44.52	$ 38.52	**$ 42.65**	$ 38.52
Market capitalization	**$ 32,801**	$ 34,671	$ 31,135	**$ 32,801**	$ 31,135
Book value per common share	**$ 46.98**	$ 46.35	$ 43.18	**$ 46.98**	$ 43.18
Tangible book value per common share – Non-GAAP *(a)*	**$ 24.66**	$ 24.17	$ 21.55	**$ 24.66**	$ 21.55
Full-time employees	**53,600**	53,200	51,100	**53,600**	51,100
Common shares outstanding *(in thousands)*	**769,073**	778,782	808,280	**769,073**	808,280

Consolidated Financial Highlights (unaudited) (continued)

Regulatory capital and other ratios	Sept. 30, 2023	June 30, 2023	Dec. 31, 2022
Average liquidity coverage ratio ("LCR")	**121 %**	120 %	118 %
Average net stable funding ratio ("NSFR")	**136 %**	136 %	N/A *(e)*
Regulatory capital ratios: *(f)*			
Advanced Approaches:			
Common Equity Tier 1 ("CET1") ratio	**11.4 %**	11.1 %	11.2 %
Tier 1 capital ratio	**14.4**	14.0	14.1
Total capital ratio	**15.2**	14.8	14.9
Standardized Approach:			
CET1 ratio	**11.9 %**	11.8 %	11.3 %
Tier 1 capital ratio	**15.1**	15.0	14.4
Total capital ratio	**16.1**	16.0	15.3
Tier 1 leverage ratio	**6.1 %**	5.7 %	5.8 %
Supplementary leverage ratio ("SLR")	**7.2**	7.0	6.8
BNY Mellon shareholders' equity to total assets ratio	**10.1 %**	9.5 %	10.0 %
BNY Mellon common shareholders' equity to total assets ratio	**8.9**	8.4	8.8

(a) Return on tangible common equity and tangible book value per common share, Non-GAAP measures, exclude goodwill and intangible assets, net of deferred tax liabilities. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 43 for the reconciliation of Non-GAAP measures.

(b) See "Net interest revenue" on page 9 for a reconciliation of this Non-GAAP measure.

(c) Consists of AUC/A primarily from the Asset Servicing line of business and, to a lesser extent, the Clearance and Collateral Management, Issuer Services, Pershing and Wealth Management lines of business. Includes the AUC/A of CIBC Mellon Global Securities Services Company ("CIBC Mellon"), a joint venture with the Canadian Imperial Bank of Commerce, of $1.5 trillion at Sept. 30, 2023, $1.6 trillion at June 30, 2023 and $1.4 trillion at Sept. 30, 2022.

(d) Excludes assets managed outside of the Investment and Wealth Management business segment.

(e) The reporting requirement for the average NSFR became effective in the second quarter of 2023. For additional information on our NSFR, see "Liquidity and dividends" beginning on page 31.

(f) For our CET1, Tier 1 capital and Total capital ratios, our effective capital ratios under U.S. capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches. For additional information on our capital ratios, see "Capital" beginning on page 36.

N/A – Not applicable.

Items 2. and 3. Management's Discussion and Analysis of Financial Condition and Results of Operations; Quantitative and Qualitative Disclosures about Market Risk

General

In this Quarterly Report on Form 10-Q, references to "our," "we," "us," "BNY Mellon," the "Company" and similar terms refer to The Bank of New York Mellon Corporation and its consolidated subsidiaries. The term "Parent" refers to The Bank of New York Mellon Corporation but not its subsidiaries.

Certain business terms used in this report are defined in the Glossary included in our Annual Report on Form 10-K for the year ended Dec. 31, 2022 (the "2022 Annual Report").

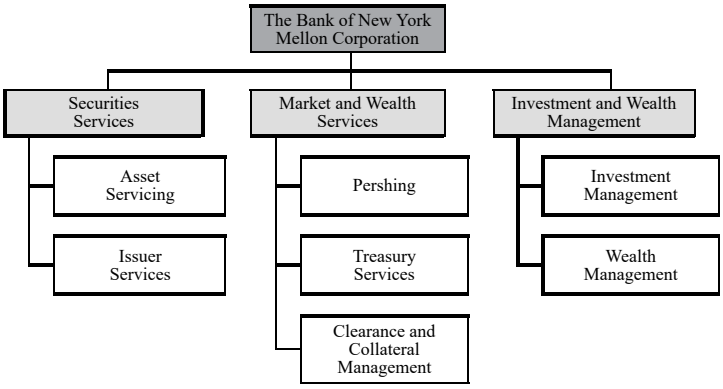
The following should be read in conjunction with the Consolidated Financial Statements included in this report. Investors should also read the section titled "Forward-looking Statements."

Overview

Established in 1784, BNY Mellon is America's oldest bank and the first company listed on the New York Stock Exchange (NYSE: BK). Today, BNY Mellon powers capital markets around the world through comprehensive solutions that help clients manage and service their financial assets throughout the investment life cycle. BNY Mellon has been named among Fortune's World's Most Admired Companies and Fast Company's Best Workplaces for Innovators. BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation.

BNY Mellon has three business segments, Securities Services, Market and Wealth Services and Investment and Wealth Management, which offer a comprehensive set of capabilities and deep expertise across the investment life cycle, enabling the Company to provide solutions to buy-side and sell-side market participants, as well as leading institutional and wealth management clients globally.

The diagram below presents our three business segments and lines of business, with the remaining operations in the Other segment.



Key third quarter 2023 events

Increase in cash dividend on common stock

In July, our Board of Directors approved a 14% increase in the quarterly cash dividend on our common stock, from $0.37 to $0.42 per share.

Highlights of third quarter 2023 results

Net income applicable to common shareholders was $956 million, or $1.22 per diluted common share, in the third quarter of 2023, including the impact of notable items. Notable items in the third quarter of 2023 include severance expense and litigation reserves. Excluding notable items, net income applicable to common shareholders was $992 million (Non-GAAP), or $1.27 (Non-GAAP) per diluted common share, in the third quarter of 2023. Net income applicable to common shareholders was $319 million, or $0.39 per diluted common share, in the third quarter of 2022, including the impact of notable items. Notable items in the third quarter of 2022 include goodwill impairment in the Investment Management reporting unit, a disposal gain (reflected in investment and other revenue), severance expense and litigation reserves. Excluding notable items, net income applicable to common shareholders was $983

million (Non-GAAP), or $1.21 (Non-GAAP) per diluted common share, in the third quarter of 2022.

The highlights below are based on the third quarter of 2023 compared with the third quarter of 2022, unless otherwise noted.

- Total revenue of $4.4 billion increased 2%, primarily reflecting:
  - Fee revenue was flat, primarily reflecting higher market values, net new business and the favorable impact of a weaker U.S. dollar, partially offset by the impact of the Alcentra divestiture, the mix of cumulative AUM flows and lower foreign exchange volatility and volumes. (See "Fee and other revenue" beginning on page 6.)
  - Net interest revenue increased 10%, primarily reflecting higher interest rates, partially offset by changes in balance sheet size and mix. (See "Net interest revenue" on page 9.)
- Provision for credit losses was $3 million, compared with a benefit of $30 million. (See "Consolidated balance sheet review – Allowance for credit losses" beginning on page 29.)
- Noninterest expense decreased 16%, primarily related to the third quarter 2022 goodwill impairment associated with the Investment Management reporting unit. Excluding notable items, noninterest expense increased 3% (Non-GAAP), primarily reflecting higher investments and revenue-related expenses, and the unfavorable impact of a weaker U.S. dollar, as well as the impact of inflation, partially offset by the favorable impact of efficiency savings and the impact of the Alcentra divestiture. (See "Noninterest expense" on page 12.)
- Effective tax rate of 18.8%. (See "Income taxes" on page 12.)
- Return on common equity ("ROE") was 10.5% for the third quarter of 2023.

  Return on tangible common equity ("ROTCE") was 20.5% (Non-GAAP) for the third quarter of 2023.

See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 43 for a reconciliation of these Non-GAAP measures.

Metrics

- AUC/A of $45.7 trillion increased 8%, primarily reflecting higher market values, client inflows, the favorable impact of a weaker U.S. dollar and net new business.
- AUM of $1.8 trillion increased 3%, primarily reflecting the favorable impact of a weaker U.S. dollar and higher market values, partially offset by the divestiture of Alcentra.

Capital and liquidity

- Our CET1 ratio calculated under the Advanced Approaches was 11.4% at Sept. 30, 2023 and 11.1% at June 30, 2023. The increase primarily reflects capital generated through earnings and lower risk-weighted assets ("RWAs"), partially offset by capital deployed through common stock repurchases and dividends. (See "Capital" beginning on page 36.)
- Tier 1 leverage was 6.1% at Sept. 30, 2023 and 5.7% at June 30, 2023. The increase primarily reflects lower average assets. (See "Capital" beginning on page 36.)
- Returned $783 million to common shareholders, including $450 million of common share repurchases.

Highlights of our principal business segments

Securities Services

- Total revenue increased 1%.
- Income before income taxes decreased 7%.
- Pre-tax operating margin of 23%.

Market and Wealth Services

- Total revenue increased 6%.
- Income before income taxes was flat.
- Pre-tax operating margin of 44%.

Investment and Wealth Management

- Total revenue decreased 4%.
- Income before income taxes increased to $164 million from $(497) million.
- Pre-tax operating margin of 20%; adjusted pre-tax operating margin – Non-GAAP of 22%.

See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures"

beginning on page 43 for a reconciliation of the Non-GAAP measure. See "Review of business segments" and Note 19 of the Notes to Consolidated Financial Statements f

or additional information on our business segments.

Fee and other revenue

Fee and other revenue										YTD23
					3Q23 vs.					vs.
(dollars in millions, unless otherwise noted)	**3Q23**	2Q23	3Q22	**2Q23**	**3Q22**	**YTD23**	YTD22	**YTD22**
Investment services fees	**$ 2,230**	$ 2,252	$ 2,157	**(1)%**	**3 %**	**$ 6,601**	$ 6,356	**4 %**
Investment management and performance fees *(a)*	**777**	762	800	**2**	**(3)**	**2,315**	2,516	**(8)**
Foreign exchange revenue	**154**	158	203	**(3)**	**(24)**	**488**	632	**(23)**
Financing-related fees	**45**	50	43	**(10)**	**5**	**147**	132	**11**
Distribution and servicing fees	**39**	35	33	**11**	**18**	**107**	97	**10**
Total fee revenue	**3,245**	3,257	3,236	**—**	**—**	**9,658**	9,733	**(1)**
Investment and other revenue	**113**	97	117	**N/M**	**N/M**	**289**	278	**N/M**
Total fee and other revenue	**$ 3,358**	$ 3,354	$ 3,353	**— %**	**— %**	**$ 9,947**	$ 10,011	**(1)%**
Fee revenue as a percentage of total revenue	**74 %**	73 %	76 %			**73 %**	78 %	
AUC/A at period end *(in trillions) (b)*	**$ 45.7**	$ 46.9	$ 42.2	**(3)%**	**8 %**	**$ 45.7**	$ 42.2	**8 %**
AUM at period end *(in billions) (c)*	**$ 1,821**	$ 1,906	$ 1,776	**(4)%**	**3 %**	**$ 1,821**	$ 1,776	**3 %**

(a) Excludes seed capital gains (losses) related to consolidated investment management funds.

(b) Consists of AUC/A primarily from the Asset Servicing line of business and, to a lesser extent, the Clearance and Collateral Management, Issuer Services, Pershing and Wealth Management lines of business. Includes the AUC/A of CIBC Mellon of $1.5 trillion at Sept. 30, 2023, $1.6 trillion at June 30, 2023 and $1.4 trillion at Sept. 30, 2022.

(c) Excludes assets managed outside of the Investment and Wealth Management business segment.

N/M – Not meaningful.

Fee revenue was flat compared with the third quarter of 2022 and the second quarter of 2023. Compared with the third quarter of 2022, higher investment services fees were offset by lower foreign exchange revenue and investment management and performance fees. Compared with the second quarter of 2023, lower investment services fees were offset by higher investment management and performance fees.

Investment and other revenue decreased $4 million compared with the third quarter of 2022 and increased $16 million compared with the second quarter of 2023. The decrease compared with the third quarter of 2022 primarily reflects a disposal gain recorded in the third quarter of 2022, a strategic equity investment loss and net securities losses, partially offset by debt extinguishment gains, higher other trading revenue and improved seed capital results. The increase compared with the second quarter of 2023 primarily reflects debt extinguishment gains and higher other trading revenue, partially offset by strategic equity investment losses and net securities losses.

Investment services fees

Investment services fees increased 3% compared with the third quarter of 2022 and decreased 1% compared with the second quarter of 2023. The increase compared with the third quarter of 2022 primarily reflects higher market values, higher clearance volumes and collateral management balances and higher fees on sweep balances, partially offset by lost business in Pershing. The decrease compared with the second quarter of 2023 primarily reflects lower Depositary Receipts revenue, partially offset by higher fees on sweep balances and higher clearance volumes and collateral management balances.

AUC/A totaled $45.7 trillion at Sept. 30, 2023, an increase of 8% compared with Sept. 30, 2022, primarily reflecting higher market values, client inflows, the favorable impact of a weaker U.S. dollar and net new business. AUC/A consisted of 34% equity securities and 66% fixed income securities at Sept. 30, 2023, and 33% equity securities and 67% fixed income securities at Sept. 30, 2022.

See "Securities Services business segment" and "Market and Wealth Services business segment" in "Review of business segments" for additional details.

Investment management and performance fees

Investment management and performance fees decreased 3% compared with the third quarter of 2022 and increased 2% compared with the second quarter of 2023. The decrease compared with the third quarter of 2022 primarily reflects the impact of the Alcentra divestiture and the mix of cumulative AUM flows, partially offset by higher market values and performance fees. The increase compared with the second quarter of 2023 primarily reflects the timing of performance fees. Performance fees were $30 million in the third quarter of 2023 and $10 million in the third quarter of 2022 and second quarter of 2023. On a constant currency basis (Non-GAAP), investment management and performance fees decreased 5% compared with the third quarter of 2022. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 43 for the reconciliation of Non-GAAP measures.

AUM was $1.8 trillion at Sept. 30, 2023, an increase of 3% compared with Sept. 30, 2022, primarily reflecting the favorable impact of a weaker U.S. dollar and higher market values, partially offset by the divestiture of Alcentra.

See "Investment and Wealth Management business segment" in "Review of business segments" for additional details regarding the drivers of investment management and performance fees, AUM and AUM flows.

Foreign exchange revenue

Foreign exchange revenue is primarily driven by the volume of client transactions and the spread realized on these transactions, both of which are impacted by market volatility, the impact of foreign currency hedging activities and foreign currency remeasurement gain (loss). Foreign exchange revenue decreased 24% compared with the third quarter of 2022 and 3% compared with the second quarter of 2023. The decrease compared with the third quarter of 2022 primarily reflects lower volatility and volumes. Foreign exchange revenue is primarily reported in the Securities Services business segment and, to a lesser extent, in the Market and Wealth Services and Investment and Wealth Management business segments and the Other segment.

Financing-related fees

Financing-related fees, which are primarily reported in the Market and Wealth Services and Securities Services business segments, include capital market fees, loan commitment fees and credit-related fees. Financing-related fees increased 5% compared with the third quarter of 2022 and decreased 10% compared with the second quarter of 2023. The increase compared with the third quarter of 2022 primarily reflects higher fees on standby letters of credit and commitments, partially offset by lower underwriting fees. The decrease compared with the second quarter of 2023 primarily reflects lower underwriting fees.

Investment and other revenue

Investment and other revenue includes income or loss from consolidated investment management funds, seed capital gains or losses, other trading revenue or loss, renewable energy investments losses, income from corporate and bank-owned life insurance contracts, other investment gains or losses, gains or losses from disposals, expense reimbursements from our CIBC Mellon joint venture, other income or loss and net securities gains or losses. The income or loss from consolidated investment management funds should be considered together with the net income or loss attributable to noncontrolling interests, which reflects the portion of the consolidated funds for which we do not have an economic interest and is reflected below net income as a separate line item on the consolidated income statement. Other trading revenue or loss primarily includes the impact of market-risk hedging activity related to our seed capital investments in investment management funds, non-foreign currency derivative and fixed income trading, and other hedging activity. Investments in renewable energy generate losses in investment and other revenue that are more than offset by benefits and credits recorded to the provision for income taxes. Other investment gains or losses includes fair value changes of non-readily marketable strategic equity, private equity and other investments. Expense reimbursements from our CIBC Mellon joint venture relate to expenses incurred by BNY Mellon on behalf of the CIBC Mellon joint venture. Other income includes various miscellaneous revenues.

The following table provides the components of investment and other revenue.

Investment and other revenue *(in millions)*		**3Q23**	2Q23	3Q22	**YTD23**	YTD22
(Loss) income from consolidated investment management funds	**$**	**(11)**	$ 10	$ (7)	**$ 4**	$ (51)
Seed capital (losses) gains *(a)*		**(4)**	7	(11)	**11**	(43)
Other trading revenue		**86**	53	65	**184**	115
Renewable energy investments (losses)		**(45)**	(45)	(44)	**(122)**	(132)
Corporate/bank-owned life insurance		**29**	23	32	**79**	93
Other investments (losses) gains *(b)*		**(9)**	10	13	**(8)**	152
Disposal gains (losses)		**2**	(1)	37	**—**	37
Expense reimbursements from joint venture		**29**	31	27	**89**	80
Other income		**55**	9	4	**72**	22
Net securities (losses) gains		**(19)**	—	1	**(20)**	5
Total investment and other revenue	**$**	**113**	$ 97	$ 117	**$ 289**	$ 278

(a) Includes gains (losses) on investments in BNY Mellon funds which hedge deferred incentive awards.
(b) Includes strategic equity, private equity and other investments.

The decrease in total investment and other revenue compared with the third quarter of 2022 primarily reflects a disposal gain recorded in the third quarter of 2022, a strategic equity investment loss and net securities losses, partially offset by debt extinguishment gains, higher other trading revenue and improved seed capital results. The increase compared with the second quarter of 2023 primarily reflects debt extinguishment gains and higher other trading revenue, partially offset by strategic equity investment losses and net securities losses.

Year-to-date 2023 compared with year-to-date 2022

Fee revenue decreased 1% compared with the first nine months of 2022, primarily reflecting lower investment management and performance fees and foreign exchange revenue, partially offset by higher investment services fees. The 8% decrease in investment management and performance fees primarily reflects the impact of the Alcentra divestiture, the mix of cumulative AUM flows and lower market values, partially offset by the abatement of money market fee waivers and higher performance fees. The 23% decrease in foreign exchange revenue primarily reflects lower volatility and volumes. The 4% increase in investment services fees primarily reflects the abatement of money market fee waivers, the accelerated amortization of deferred costs for depositary receipts services related to Russia recorded in the first quarter of 2022, higher clearance volumes and collateral management balances, net new business in Asset Servicing and higher fees on sweep balances, partially offset by lower client activity, and lost business in Pershing.

Investment and other revenue increased $11 million compared with the first nine months of 2022, primarily reflecting higher other trading revenue, improved seed capital results and debt extinguishment gains, partially offset by strategic equity investment gains recorded in the first nine months of 2022, a disposal gain recorded in the third quarter of 2022 and net securities losses.

Net interest revenue

Net interest revenue											YTD23
					3Q23 vs.						vs.
(dollars in millions)		3Q23		2Q23	3Q22	2Q23	3Q22		YTD23	YTD22	YTD22
Net interest revenue	**$**	**1,016**	$	1,100	$ 926	**(8)%**	**10%**	**$**	**3,244**	$ 2,448	**33%**
Add: Tax equivalent adjustment		**—**		1	3	**N/M**	**N/M**		**1**	9	**N/M**
Net interest revenue (FTE) – Non-GAAP *(a)*	**$**	**1,016**	$	1,101	$ 929	**(8)%**	**9%**	**$**	**3,245**	$ 2,457	**32%**
Average interest-earning assets	**$**	**339,044**	$	362,049	$ 352,062	**(6)%**	**(4)%**	**$**	**349,789**	$ 365,279	**(4)%**
Net interest margin		**1.18 %**		1.20 %	1.05 %	**(2) bps**	**13 bps**		**1.23 %**	0.89 %	**34 bps**
Net interest margin (FTE) – Non-GAAP *(a)*		**1.18 %**		1.20 %	1.05 %	**(2) bps**	**13 bps**		**1.23 %**	0.90 %	**33 bps**

(a) Net interest revenue (FTE) – Non-GAAP and net interest margin (FTE) – Non-GAAP include the tax equivalent adjustments on tax-exempt income, which allows for comparisons of amounts arising from both taxable and tax-exempt sources and is consistent with industry practice. The adjustment to an FTE basis has no impact on net income.

N/M – Not meaningful.

bps – basis points.

Net interest revenue increased 10% compared with the third quarter of 2022 and decreased 8% compared with the second quarter of 2023. The increase compared with the third quarter of 2022 primarily reflects higher interest rates, partially offset by changes in balance sheet size and mix. The decrease compared with the second quarter of 2023 primarily reflects changes in balance sheet size and mix, partially offset by higher interest rates.

Net interest margin increased 13 basis points compared with the third quarter of 2022 and decreased 2 basis points compared with the second quarter of 2023. The changes compared with the third quarter of 2022 and the second quarter of 2023 primarily reflect the factors mentioned above.

Average interest-earning assets decreased 4% compared with the third quarter of 2022 and decreased 6% compared with the second quarter of 2023. The decrease compared with the third quarter of 2022 primarily reflects lower securities and loan balances and interest-bearing deposits with banks. The decrease was partially offset by higher interest-bearing deposits with the Federal Reserve and other central banks. The decrease compared with the second quarter of 2023 primarily reflects lower interest-bearing deposits with the Federal Reserve and other central banks, securities and interest-bearing deposits with banks.

Average non-U.S. dollar deposits comprised approximately 25% of our average total deposits in the third quarter of 2023. Approximately 45% of the average non-U.S. dollar deposits in the third quarter of 2023 were euro-denominated.

Year-to-date 2023 compared with year-to-date 2022

Net interest revenue increased 33% compared with the first nine months of 2022, primarily driven by higher interest rates, partially offset by lower deposit balances. The increase in the net interest margin primarily reflects the factors mentioned above.

Average interest-earning assets decreased 4% compared with the first nine months of 2022, primarily reflecting lower securities and loan balances and interest-bearing deposits with banks. The decrease was partially offset by larger interest-bearing deposits with the Federal Reserve and other central banks.

Average balances and interest rates	Quarter ended								
	Sept. 30, 2023			June 30, 2023			Sept. 30, 2022		
(dollars in millions; average rates annualized)	**Average balance**	**Interest**	**Average rates**	Average balance	Interest	Average rates	Average balance	Interest	Average rates
Assets									
Interest-earning assets:									
Interest-bearing deposits with the Federal Reserve and other central banks	**$ 98,767**	**$ 1,153**	**4.57 %**	$ 114,578	$ 1,241	4.29 %	$ 91,836	$ 288	1.23 %
Interest-bearing deposits with banks	**12,287**	**125**	**4.04**	13,919	128	3.68	16,298	67	1.62
Federal funds sold and securities purchased under resale agreements *(a)*	**26,915**	**2,066**	**30.47**	26,989	1,776	26.38	22,971	321	5.55
Loans	**63,962**	**1,029**	**6.39**	63,459	957	6.05	68,082	581	3.39
Securities:									
U.S. government obligations	**32,224**	**250**	**3.08**	34,147	247	2.90	40,829	179	1.75
U.S. government agency obligations	**59,481**	**426**	**2.87**	61,565	428	2.78	62,819	300	1.91
State and political subdivisions *(b)*	**13**	**1**	**4.42**	13	—	4.45	1,982	12	2.39
Other securities *(b)*	**39,861**	**393**	**3.93**	40,976	367	3.59	42,642	204	1.90
Total investment securities *(b)*	**131,579**	**1,070**	**3.24**	136,701	1,042	3.05	148,272	695	1.87
Trading securities *(b)*	**5,534**	**76**	**5.49**	6,403	81	5.02	4,603	35	3.06
Total securities *(b)*	**137,113**	**1,146**	**3.33**	143,104	1,123	3.14	152,875	730	1.91
Total interest-earning assets *(b)*	**$ 339,044**	**$ 5,519**	**6.45 %**	$ 362,049	$ 5,225	5.77 %	$ 352,062	$ 1,987	2.24 %
Noninterest-earning assets	**58,448**			59,125			63,608		
Total assets	**$ 397,492**			$ 421,174			$ 415,670		
Liabilities and equity									
Interest-bearing liabilities:									
Interest-bearing deposits	**$ 209,641**	**$ 1,911**	**3.62 %**	$ 215,057	$ 1,739	3.24 %	$ 203,659	$ 488	0.95 %
Federal funds purchased and securities sold under repurchase agreements *(a)*	**21,512**	**1,956**	**36.07**	26,282	1,729	26.39	12,297	250	8.05
Trading liabilities	**3,959**	**48**	**4.80**	3,893	43	4.46	3,550	23	2.52
Other borrowed funds	**540**	**6**	**4.47**	2,702	32	4.60	504	1	1.15
Commercial paper	**7**	**—**	**4.13**	5	—	5.11	5	—	2.34
Payables to customers and broker-dealers	**13,515**	**147**	**4.30**	14,801	143	3.85	18,030	48	1.07
Long-term debt	**31,161**	**435**	**5.52**	31,970	438	5.45	28,449	248	3.43
Total interest-bearing liabilities	**$ 280,335**	**$ 4,503**	**6.37 %**	$ 294,710	$ 4,124	5.61 %	$ 266,494	$ 1,058	1.57 %
Total noninterest-bearing deposits	**52,467**			62,152			84,804		
Other noninterest-bearing liabilities	**23,790**			23,625			23,547		
Total liabilities	**356,592**			380,487			374,845		
Total The Bank of New York Mellon Corporation shareholders' equity	**40,821**			40,607			40,780		
Noncontrolling interests	**79**			80			45		
Total liabilities and equity	**$ 397,492**			$ 421,174			$ 415,670		
Net interest revenue (FTE) – Non-GAAP *(b)(c)*		**$ 1,016**			$ 1,101			$ 929	
Net interest margin (FTE) – Non-GAAP *(b)(c)*			**1.18 %**			1.20 %			1.05 %
Less: Tax equivalent adjustment		**—**			1			3	
Net interest revenue – GAAP		**$ 1,016**			$ 1,100			$ 926	
Net interest margin – GAAP			**1.18 %**			1.20 %			1.05 %

(a) Includes the average impact of offsetting under enforceable netting agreements of approximately $126 billion for the third quarter of 2023, $113 billion for the second quarter of 2023 and $35 billion for the third quarter of 2022. On a Non-GAAP basis, excluding the impact of offsetting, the yield on federal funds sold and securities purchased under resale agreements would have been 5.36% for the third quarter of 2023, 5.10% for the second quarter of 2023 and 2.21% for the third quarter of 2022. On a Non-GAAP basis, excluding the impact of offsetting, the rate on federal funds purchased and securities sold under repurchase agreements would have been 5.26% for the third quarter of 2023, 4.99% for the second quarter of 2023 and 2.11% for the third quarter of 2022. We believe providing the rates excluding the impact of netting is useful to investors as it is more reflective of the actual rates earned and paid.

(b) Average rates were calculated on an FTE basis, at tax rates of approximately 21%.

(c) See "Net interest revenue" on page 9 for the reconciliation of this Non-GAAP measure.

Average balances and interest rates	Year-to-date					
	Sept. 30, 2023			Sept. 30, 2022		
(dollars in millions; average rates annualized)	**Average balance**	**Interest**	**Average rates**	Average balance	Interest	Average rates
Assets						
Interest-earning assets:						
Interest-bearing deposits with the Federal Reserve and other central banks	**$ 102,762**	**$ 3,247**	**4.17 %**	$ 98,310	$ 389	0.52 %
Interest-bearing deposits with banks	**14,129**	**393**	**3.72**	17,189	114	0.88
Federal funds sold and securities purchased under resale agreements *(a)*	**26,187**	**4,833**	**24.68**	24,715	474	2.56
Loans	**63,563**	**2,852**	**6.00**	67,980	1,211	2.38
Securities:						
U.S. government obligations	**35,050**	**776**	**2.95**	40,988	363	1.19
U.S. government agency obligations	**61,098**	**1,259**	**2.75**	64,922	803	1.65
State and political subdivisions *(b)*	**16**	**1**	**5.71**	2,126	36	2.22
Other securities *(b)*	**41,080**	**1,098**	**3.57**	43,929	461	1.40
Total investment securities *(b)*	**137,244**	**3,134**	**3.05**	151,965	1,663	1.46
Trading securities *(b)*	**5,904**	**227**	**5.15**	5,120	79	2.07
Total securities *(b)*	**143,148**	**3,361**	**3.13**	157,085	1,742	1.48
Total interest-earning assets *(b)*	**$ 349,789**	**$ 14,686**	**5.59 %**	$ 365,279	$ 3,930	1.44 %
Noninterest-earning assets	**58,896**			65,795		
Total assets	**$ 408,685**			$ 431,074		
Liabilities and equity						
Interest-bearing liabilities:						
Interest-bearing deposits	**$ 209,624**	**$ 5,016**	**3.20 %**	$ 215,271	$ 541	0.34 %
Federal funds purchased and securities sold under repurchase agreements *(a)*	**22,048**	**4,577**	**27.75**	12,589	339	3.60
Trading liabilities	**3,629**	**121**	**4.47**	3,385	37	1.46
Other borrowed funds	**1,317**	**41**	**4.08**	467	6	1.85
Commercial paper	**4**	**—**	**4.55**	5	—	1.41
Payables to customers and broker-dealers	**15,077**	**418**	**3.70**	17,099	57	0.45
Long-term debt	**31,129**	**1,268**	**5.39**	26,754	493	2.44
Total interest-bearing liabilities	**$ 282,828**	**$ 11,441**	**5.40 %**	$ 275,570	$ 1,473	0.71 %
Total noninterest-bearing deposits	**61,438**			88,952		
Other noninterest-bearing liabilities	**23,734**			25,097		
Total liabilities	**368,000**			389,619		
Total The Bank of New York Mellon Corporation shareholders' equity	**40,625**			41,321		
Noncontrolling interests	**60**			134		
Total liabilities and equity	**$ 408,685**			$ 431,074		
Net interest revenue (FTE) – Non-GAAP *(b)(c)*		**$ 3,245**			$ 2,457	
Net interest margin (FTE) – Non-GAAP *(b)(c)*			**1.23 %**			0.90 %
Less: Tax equivalent adjustment		**1**			9	
Net interest revenue – GAAP		**$ 3,244**			$ 2,448	
Net interest margin – GAAP			**1.23 %**			0.89 %

(a) Includes the average impact of offsetting under enforceable netting agreements of approximately $101 billion for the first nine months of 2023 and $40 billion for the first nine months of 2022. On a Non-GAAP basis, excluding the impact of offsetting, the yield on federal funds sold and securities purchased under resale agreements would have been 5.10% for the first nine months of 2023 and 0.98% for the first nine months of 2022. On a Non-GAAP basis, excluding the impact of offsetting, the rate on federal funds purchased and securities sold under repurchase agreements would have been 4.99% for the first nine months of 2023 and 0.86% for the first nine months of 2022. We believe providing the rates excluding the impact of netting is useful to investors as it is more reflective of the actual rates earned and paid.

(b) Average rates were calculated on an FTE basis, at tax rates of approximately 21%.

(c) See "Net interest revenue" on page 9 for the reconciliation of this Non-GAAP measure.

Noninterest expense

Noninterest expense (dollars in millions)	3Q23	2Q23	3Q22	3Q23 vs. 2Q23	3Q23 vs. 3Q22	YTD23	YTD22	YTD23 vs. YTD22
Staff	**$ 1,755**	$ 1,718	$ 1,673	**2 %**	**5 %**	**$ 5,264**	$ 4,998	**5 %**
Software and equipment	**452**	450	421	**—**	**7**	**1,331**	1,225	**9**
Professional, legal and other purchased services	**368**	378	363	**(3)**	**1**	**1,121**	1,112	**1**
Net occupancy	**140**	121	124	**16**	**13**	**380**	371	**2**
Sub-custodian and clearing	**121**	119	124	**2**	**(2)**	**358**	373	**(4)**
Distribution and servicing	**87**	93	88	**(6)**	**(1)**	**265**	257	**3**
Business development	**36**	47	34	**(23)**	**6**	**122**	107	**14**
Bank assessment charges	**37**	41	35	**(10)**	**6**	**118**	107	**10**
Goodwill impairment	**—**	—	680	**N/M**	**N/M**	**—**	680	**N/M**
Amortization of intangible assets	**15**	14	17	**7**	**(12)**	**43**	51	**(16)**
Other	**78**	130	120	**(40)**	**(35)**	**298**	516	**(42)**
Total noninterest expense	**$ 3,089**	$ 3,111	$ 3,679	**(1)%**	**(16)%**	**$ 9,300**	$ 9,797	**(5)%**
Full-time employees at period end	**53,600**	53,200	51,100	**1 %**	**5 %**	**53,600**	51,100	**5 %**

Total noninterest expense decreased 16% primarily related to the third quarter 2022 goodwill impairment associated with the Investment Management reporting unit. Excluding notable items, noninterest expense increased 3% (Non-GAAP) primarily reflecting higher investments and revenue-related expenses, and the unfavorable impact of a weaker U.S. dollar, as well as the impact of inflation, partially offset by the favorable impact of efficiency savings and the impact of the Alcentra divestiture. The investments, net of savings, are primarily included in staff, software and equipment, and professional, legal and other purchased services expenses. Total noninterest expense decreased 1% compared with the second quarter of 2023, primarily reflecting the favorable impact of efficiency savings and lower litigation reserves, partially offset by higher investments, severance and revenue-related expenses.

Year-to-date 2023 compared with year-to-date 2022

Noninterest expense decreased 5% primarily related to the third quarter 2022 goodwill impairment associated with the Investment Management reporting unit. Excluding notable items, noninterest expense increased 2% (Non-GAAP) compared with the first nine months of 2022, primarily reflecting higher investments and revenue-related expenses, as well as the impact of inflation, partially offset by the favorable impact of efficiency savings, the impact of the Alcentra divestiture and the favorable impact of a stronger U.S. dollar.

See “Supplemental information – Explanation of GAAP and Non-GAAP financial measures” beginning on page 43 for the reconciliation of this Non-GAAP measure.

Income taxes

BNY Mellon recorded an income tax provision of $241 million (18.8% effective tax rate) in the third quarter of 2023. We recorded an income tax provision of $242 million in the third quarter of 2022. The effective tax rate was 38.4% in the third quarter of 2022, or 19.5% (Non-GAAP) excluding notable items, primarily goodwill impairment. We recorded an income tax provision of $270 million (20.2% effective tax rate) in the second quarter of 2023. See “Supplemental information – Explanation of GAAP and Non-GAAP financial measures” beginning on page 43 for the reconciliation of this Non-GAAP measure. For additional information, see Note 11 of the Notes to Consolidated Financial Statements.

Review of business segments

We have an internal information system that produces performance data along product and service lines for our three principal business segments: Securities Services, Market and Wealth Services and Investment and Wealth Management, and the Other segment.

Business segment accounting principles

Our business segment data has been determined on an internal management basis of accounting, rather than the generally accepted accounting principles ("GAAP") used for consolidated financial reporting. These measurement principles are designed so that reported results of the businesses will track their economic performance.

For information on the accounting principles of our business segments, see Note 19 of the Notes to Consolidated Financial Statements. For information on the primary products and services in each line of business, the primary types of revenue by line of business and how our business segments are presented and analyzed, see Note 24 of the Notes to Consolidated Financial Statements in our 2022 Annual Report.

Business segment results are subject to reclassification when organizational changes are made, or for refinements in revenue and expense allocation methodologies. Refinements are typically reflected on a prospective basis. There were no reclassification or organizational changes in the third quarter of 2023.

The results of our business segments may be influenced by client and other activities that vary by quarter. In the first quarter, staff expense typically increases, reflecting the vesting of long-term stock awards for retirement-eligible employees. In the second quarter, staff expense typically increases, reflecting the annual employee merit increase. In the third quarter, volume-related fees may decline due to reduced client activity. In the fourth quarter, we typically incur higher business development and marketing expenses. In our Investment and Wealth Management business segment, performance fees are typically higher in the fourth and first quarters, as those quarters represent the end of the measurement period for many of the performance fee-eligible relationships.

The results of our business segments may also be impacted by the translation of financial results denominated in foreign currencies to the U.S. dollar. We are primarily impacted by activities denominated in the British pound and the euro. On a consolidated basis and in our Securities Services and Market and Wealth Services business segments, we typically have more foreign currency-denominated expenses than revenues. However, our Investment and Wealth Management business segment typically has more foreign currency-denominated revenues than expenses. Overall, currency fluctuations impact the year-over-year growth rate in the Investment and Wealth Management business segment more than the Securities Services and Market and Wealth Services business segments. However, currency fluctuations, in isolation, are not expected to significantly impact net income on a consolidated basis.

Fee revenue in the Investment and Wealth Management business segment, and, to a lesser extent, the Securities Services and Market and Wealth Services business segments, is impacted by global market fluctuations. At Sept. 30, 2023, we estimated that a 5% change in global equity markets, spread evenly throughout the year, would impact fee revenue by less than 1% and diluted earnings per common share by $0.04 to $0.07.

See Note 19 of the Notes to Consolidated Financial Statements for the consolidating schedules, which show the contribution of our business segments to our overall profitability.

Securities Services business segment

(dollars in millions, unless otherwise noted)	3Q23	2Q23	1Q23	4Q22	3Q22	3Q23 vs. 2Q23	3Q23 vs. 3Q22	YTD23	YTD22	YTD23 vs. YTD22
Revenue:										
Investment services fees:										
Asset Servicing	**$ 984**	$ 991	$ 948	$ 971	$ 953	**(1)%**	**3 %**	**$ 2,923**	$ 2,947	**(1)%**
Issuer Services	**281**	319	236	271	288	**(12)**	**(2)**	**836**	738	**13**
Total investment services fees	**1,265**	1,310	1,184	1,242	1,241	**(3)**	**2**	**3,759**	3,685	**2**
Foreign exchange revenue	**107**	124	139	149	132	**(14)**	**(19)**	**370**	435	**(15)**
Other fees *(a)*	**52**	54	55	55	52	**(4)**	**—**	**161**	147	**10**
Total fee revenue	**1,424**	1,488	1,378	1,446	1,425	**(4)**	**—**	**4,290**	4,267	**1**
Investment and other revenue	**65**	84	72	70	111	**N/M**	**N/M**	**221**	221	**N/M**
Total fee and other revenue	**1,489**	1,572	1,450	1,516	1,536	**(5)**	**(3)**	**4,511**	4,488	**1**
Net interest revenue	**600**	668	666	656	538	**(10)**	**12**	**1,934**	1,372	**41**
Total revenue	**2,089**	2,240	2,116	2,172	2,074	**(7)**	**1**	**6,445**	5,860	**10**
Provision for credit losses	**19**	16	—	11	(6)	**N/M**	**N/M**	**35**	(3)	**N/M**
Noninterest expense (excluding amortization of intangible assets)	**1,577**	1,575	1,548	1,568	1,549	**—**	**2**	**4,700**	4,698	**—**
Amortization of intangible assets	**8**	7	8	8	8	**14**	**—**	**23**	25	**(8)**
Total noninterest expense	**1,585**	1,582	1,556	1,576	1,557	**—**	**2**	**4,723**	4,723	**—**
Income before income taxes	**$ 485**	$ 642	$ 560	$ 585	$ 523	**(24)%**	**(7)%**	**$ 1,687**	$ 1,140	**48 %**
Pre-tax operating margin	**23 %**	29 %	26 %	27 %	25 %			**26 %**	19 %	
Securities lending revenue *(b)*	**$ 46**	$ 47	$ 48	$ 50	$ 48	**(2)%**	**(4)%**	**$ 141**	$ 132	**7 %**
Total revenue by line of business:										
Asset Servicing	**$ 1,593**	$ 1,706	$ 1,664	$ 1,681	$ 1,596	**(7)%**	**— %**	**$ 4,963**	$ 4,642	**7 %**
Issuer Services	**496**	534	452	491	478	**(7)**	**4**	**1,482**	1,218	**22**
Total revenue by line of business	**$ 2,089**	$ 2,240	$ 2,116	$ 2,172	$ 2,074	**(7)%**	**1 %**	**$ 6,445**	$ 5,860	**10 %**
Selected average balances:										
Average loans	**$ 11,236**	$ 11,283	$ 10,939	$ 11,850	$ 11,573	**— %**	**(3)%**	**$ 11,154**	$ 11,042	**1 %**
Average deposits	**$ 162,509**	$ 172,863	$ 167,209	$ 176,541	$ 176,328	**(6)%**	**(8)%**	**$ 167,510**	$ 186,500	**(10)%**
Selected metrics:										
AUC/A at period end *(in trillions) (c)*	**$ 32.3**	$ 33.2	$ 32.6	$ 31.4	$ 30.0	**(3)%**	**8 %**			
Market value of securities on loan at period end *(in billions) (d)*	**$ 406**	$ 415	$ 441	$ 449	$ 435	**(2)%**	**(7)%**			

(a) Other fees primarily include financing-related fees.

(b) Included in investment services fees reported in the Asset Servicing line of business.

(c) Consists of AUC/A primarily from the Asset Servicing line of business and, to a lesser extent, the Issuer Services line of business. Includes the AUC/A of CIBC Mellon of $1.5 trillion at Sept. 30, 2023, $1.6 trillion at June 30, 2023, $1.5 trillion at March 31, 2023 and Dec. 31, 2022 and $1.4 trillion at Sept. 30, 2022.

(d) Represents the total amount of securities on loan in our agency securities lending program. Excludes securities for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, which totaled $63 billion at Sept. 30, 2023, $66 billion at June 30, 2023, $69 billion at March 31, 2023, $68 billion at Dec. 31, 2022 and $75 billion at Sept. 30, 2022.

N/M – Not meaningful.

Business segment description

The Securities Services business segment consists of two distinct lines of business, Asset Servicing and Issuer Services, which provide business solutions across the transaction life cycle to our global asset owner and asset manager clients. We are one of the leading global investment services providers with $32.3 trillion of AUC/A at Sept. 30, 2023. For information on the drivers of the Securities Services fee revenue, see Note 10 of the Notes to Consolidated Financial Statements in our 2022 Annual Report.

The Asset Servicing business provides a comprehensive suite of solutions. We are one of the largest global custody and front-to-back outsourcing partners. We offer services for the safekeeping of assets in capital markets globally, as well as fund

accounting services, exchange-traded funds servicing, transfer agency, trust and depository, front-to-back capabilities as well as data and analytics solutions for our clients. We deliver foreign exchange, and securities lending and financing solutions, on both an agency and principal basis. Our agency securities lending program is one of the largest lenders of U.S. and non-U.S. securities, servicing a lendable asset pool of approximately $4.5 trillion in 34 separate markets. Our market-leading liquidity services portal enables cash investments for institutional clients and includes fund research and analytics.

The Issuer Services business includes Corporate Trust and Depositary Receipts. Our Corporate Trust business delivers a full range of issuer and related investor services, including trustee, paying agency, fiduciary, escrow and other financial services. We are a leading provider to the debt capital markets, providing customized and market-driven solutions to investors, bondholders and lenders. Our Depositary Receipts business drives global investing by providing servicing and value-added solutions that enable, facilitate and enhance cross-border trading, clearing, settlement and ownership. We are one of the largest providers of depositary receipts services in the world, partnering with leading companies from more than 50 countries.

Review of financial results

AUC/A of $32.3 trillion increased 8% compared with Sept. 30, 2022, primarily reflecting higher market values and the favorable impact of a weaker U.S. dollar.

Total revenue of $2.1 billion increased 1% compared with the third quarter of 2022 and decreased 7% compared with the second quarter of 2023. The drivers of total revenue by line of business are indicated below.

Asset Servicing revenue of $1.6 billion was flat compared with the third quarter of 2022 and decreased 7% compared with the second quarter of 2023. The comparison with the third quarter of 2022 primarily reflects a third quarter 2022 disposal gain, lower foreign exchange revenue and a strategic equity investment loss, partially offset by higher net interest revenue and market values and net new business. The decrease compared with the second quarter of 2023 primarily reflects lower net interest revenue, lower foreign exchange revenue and a strategic equity investment loss.

Issuer Services revenue of $496 million increased 4% compared with the third quarter of 2022 and decreased 7% compared with the second quarter of 2023. The increase compared with the third quarter of 2022 primarily reflects higher net interest revenue. The decrease compared with the second quarter of 2023 primarily reflects lower Depositary Receipts revenue.

Market and regulatory trends are driving investable assets toward lower fee asset management products at reduced margins for our clients. These dynamics are also negatively impacting our investment services fees. However, at the same time, these trends are providing additional outsourcing opportunities as clients and other market participants seek to comply with regulations and reduce their operating costs.

Noninterest expense of $1.6 billion increased 2% compared with the third quarter of 2022 and was flat compared with the second quarter of 2023. The increase compared with the third quarter of 2022 primarily reflects higher investments and the impact of inflation, partially offset by the favorable impact of efficiency savings.

Year-to-date 2023 compared with year-to-date 2022

Total revenue of $6.4 billion increased 10% compared with the first nine months of 2022. Asset Servicing revenue of $5.0 billion increased 7%, primarily reflecting higher net interest revenue, net new business and the abatement of money market fee waivers, partially offset by lower foreign exchange revenue and client activity, and a third quarter 2022 disposal gain. Issuer Services revenue of $1.5 billion increased 22%, primarily reflecting higher net interest revenue, the accelerated amortization of deferred costs for depositary receipts services related to Russia recorded in the first quarter of 2022 and the abatement of money market fee waivers.

Noninterest expense of $4.7 billion was unchanged compared with the first nine months of 2022, primarily reflecting the favorable impact of efficiency savings and lower litigation reserves, partially offset by higher investments as well as the impact of inflation.

Market and Wealth Services business segment

(dollars in millions, unless otherwise noted)	3Q23	2Q23	1Q23	4Q22	3Q22	3Q23 vs. 2Q23	3Q23 vs. 3Q22	YTD23	YTD22	YTD23 vs. YTD22
Revenue:										
Investment services fees:										
Pershing	**$ 506**	$ 496	$ 499	$ 502	$ 494	**2 %**	**2 %**	**$ 1,501**	$ 1,406	**7 %**
Treasury Services	**172**	172	168	170	173	**—**	**(1)**	**512**	519	**(1)**
Clearance and Collateral Management	**277**	265	260	249	239	**5**	**16**	**802**	722	**11**
Total investment services fees	**955**	933	927	921	906	**2**	**5**	**2,815**	2,647	**6**
Foreign exchange revenue	**21**	21	18	20	20	**—**	**5**	**60**	68	**(12)**
Other fees *(a)*	**51**	55	54	47	49	**(7)**	**4**	**160**	129	**24**
Total fee revenue	**1,027**	1,009	999	988	975	**2**	**5**	**3,035**	2,844	**7**
Investment and other revenue	**16**	16	15	15	14	**N/M**	**N/M**	**47**	25	**N/M**
Total fee and other revenue	**1,043**	1,025	1,014	1,003	989	**2**	**5**	**3,082**	2,869	**7**
Net interest revenue	**402**	420	453	396	378	**(4)**	**6**	**1,275**	1,014	**26**
Total revenue	**1,445**	1,445	1,467	1,399	1,367	**—**	**6**	**4,357**	3,883	**12**
Provision for credit losses	**6**	7	—	6	(1)	**N/M**	**N/M**	**13**	1	**N/M**
Noninterest expense (excluding amortization of intangible assets)	**806**	779	768	783	735	**3**	**10**	**2,353**	2,141	**10**
Amortization of intangible assets	**2**	2	1	2	2	**—**	**—**	**5**	6	**(17)**
Total noninterest expense	**808**	781	769	785	737	**3**	**10**	**2,358**	2,147	**10**
Income before income taxes	**$ 631**	$ 657	$ 698	$ 608	$ 631	**(4)%**	**— %**	**$ 1,986**	$ 1,735	**14 %**
Pre-tax operating margin	**44 %**	46 %	48 %	43 %	46 %			**46 %**	45 %	
Total revenue by line of business:										
Pershing	**$ 699**	$ 686	$ 693	$ 673	$ 658	**2 %**	**6 %**	**$ 2,078**	$ 1,864	**11 %**
Treasury Services	**389**	402	412	382	390	**(3)**	**—**	**1,203**	1,101	**9**
Clearance and Collateral Management	**357**	357	362	344	319	**—**	**12**	**1,076**	918	**17**
Total revenue by line of business	**$ 1,445**	$ 1,445	$ 1,467	$ 1,399	$ 1,367	**— %**	**6 %**	**$ 4,357**	$ 3,883	**12 %**
Selected average balances:										
Average loans	**$ 37,496**	$ 36,432	$ 36,854	$ 39,843	$ 40,882	**3 %**	**(8)%**	**$ 36,930**	$ 41,791	**(12)%**
Average deposits	**$ 84,000**	$ 85,407	$ 86,040	$ 86,083	$ 90,612	**(2)%**	**(7)%**	**$ 85,141**	$ 93,658	**(9)%**
Selected metrics:										
AUC/A at period end *(in trillions) (b)*	**$ 13.1**	$ 13.4	$ 13.7	$ 12.7	$ 12.0	**(2)%**	**9 %**			
Pershing:										
AUC/A at period end *(in trillions)*	**$ 2.4**	$ 2.4	$ 2.4	$ 2.3	$ 2.1	**— %**	**14 %**			
Net new assets (U.S. platform) *(in billions) (c)*	**$ 23**	$ (34)	$ 37	$ 42	$ 45	**N/M**	**N/M**			
Average active clearing accounts *(in thousands)*	**7,979**	7,946	7,849	7,603	7,466	**— %**	**7 %**			
Treasury Services:										
Average daily U.S. dollar payment volumes	**233,620**	233,931	236,322	246,189	234,468	**— %**	**— %**			
Clearance and Collateral Management:										
Average tri-party collateral management balances *(in billions)*	**$ 5,706**	$ 6,044	$ 5,626	$ 5,451	$ 5,457	**(6)%**	**5 %**			

(a) Other fees primarily include financing-related fees.
(b) Consists of AUC/A from the Clearance and Collateral Management and Pershing lines of business.
(c) Net new assets represents net flows of assets (e.g., net cash deposits and net securities transfers, including dividends and interest) in customer accounts in Pershing LLC, a U.S. broker-dealer.
N/M – Not meaningful.

Business segment description

The Market and Wealth Services business segment consists of three distinct lines of business, Pershing, Treasury Services and Clearance and Collateral Management, which provide business services and technology solutions to entities including financial institutions, corporations, foundations and

endowments, public funds and government agencies. For information on the drivers of the Market and Wealth Services fee revenue, see Note 10 of the Notes to Consolidated Financial Statements in our 2022 Annual Report.

Pershing provides execution, clearing, custody, business and technology solutions, delivering operational support to broker-dealers, wealth managers and registered investment advisors ("RIAs") globally.

Our Treasury Services business is a leading provider of global payments, liquidity management and trade finance services for financial institutions, corporations and the public sector.

Our Clearance and Collateral Management business clears and settles equity and fixed income transactions globally and serves as custodian for tri-party repo collateral worldwide. We are the primary provider of U.S. government securities clearance and a provider of non-U.S. government securities clearance. Our collateral services include collateral management, administration and segregation. We offer innovative solutions and industry expertise, which help financial institutions and institutional investors with their financing, risk and balance sheet challenges. We are a leading provider of tri-party collateral management services with an average of $5.7 trillion serviced globally, including approximately $4.6 trillion of the U.S. tri-party repo market at Sept. 30, 2023.

Review of financial results

AUC/A of $13.1 trillion increased 9% compared with Sept. 30, 2022, primarily reflecting net client inflows and higher market values.

Total revenue of $1.4 billion increased 6% compared with the third quarter of 2022 and was unchanged compared with the second quarter of 2023. The drivers of total revenue by line of business are indicated below.

Pershing revenue of $699 million increased 6% compared with the third quarter of 2022 and 2% compared with the second quarter of 2023. The increase compared with the third quarter of 2022 primarily reflects higher net interest revenue and higher fees on sweep balances, partially offset by lost business. The increase compared with the second quarter of 2023 primarily reflects higher fees on sweep balances.

Treasury Services revenue of $389 million was flat compared with the third quarter of 2022 and decreased 3% compared with the second quarter of 2023. The decrease compared with the second quarter of 2023 primarily reflects lower net interest revenue.

Clearance and Collateral Management revenue of $357 million increased 12% compared with the third quarter of 2022 and was unchanged compared with the second quarter of 2023. The increase compared with the third quarter of 2022 primarily reflects higher clearance volumes and collateral management balances. Compared with the second quarter of 2023, higher clearance volumes and collateral management balances were offset by lower net interest revenue.

Noninterest expense of $808 million increased 10% compared with the third quarter of 2022 and 3% compared with the second quarter of 2023. The increases primarily reflect higher investments and revenue-related expenses, as well as the impact of inflation, partially offset by the favorable impact of efficiency savings.

Year-to-date 2023 compared with year-to-date 2022

Total revenue of $4.4 billion increased 12% compared with the first nine months of 2022. Pershing revenue of $2.1 billion increased 11%, primarily reflecting the abatement of money market fee waivers, higher net interest revenue and higher fees on sweep balances, partially offset by lower client activity and lost business. Treasury Services revenue of $1.2 billion increased 9%, primarily reflecting higher net interest revenue. Clearance and Collateral Management revenue of $1.1 billion increased 17%, primarily reflecting higher net interest revenue, U.S. collateral management balances and U.S. government clearance volumes.

Noninterest expense of $2.4 billion increased 10% compared with the first nine months of 2022, primarily reflecting higher investments and revenue-related expenses, as well as the impact of inflation, partially offset by the favorable impact of efficiency savings.

Investment and Wealth Management business segment

(dollars in millions)	3Q23	2Q23	1Q23	4Q22	3Q22	3Q23 vs. 2Q23	3Q23 vs. 3Q22	YTD23	YTD22	YTD23 vs. YTD22
Revenue:										
Investment management fees	**$ 746**	$ 750	$ 752	$ 754	$ 788	**(1)%**	**(5)%**	**$ 2,248**	$ 2,461	**(9)%**
Performance fees	**30**	10	22	26	10	**N/M**	**N/M**	**62**	49	**27**
Investment management and performance fees *(a)*	**776**	760	774	780	798	**2**	**(3)**	**2,310**	2,510	**(8)**
Distribution and servicing fees	**62**	58	55	54	55	**7**	**13**	**175**	138	**27**
Other fees *(b)*	**(50)**	(56)	(53)	(58)	(45)	**N/M**	**N/M**	**(159)**	(75)	**N/M**
Total fee revenue	**788**	762	776	776	808	**3**	**(2)**	**2,326**	2,573	**(10)**
Investment and other revenue *(c)*	**1**	12	6	(3)	(3)	**N/M**	**N/M**	**19**	(24)	**N/M**
Total fee and other revenue *(c)*	**789**	774	782	773	805	**2**	**(2)**	**2,345**	2,549	**(8)**
Net interest revenue	**38**	39	45	52	57	**(3)**	**(33)**	**122**	176	**(31)**
Total revenue	**827**	813	827	825	862	**2**	**(4)**	**2,467**	2,725	**(9)**
Provision for credit losses	**(9)**	7	—	1	3	**N/M**	**N/M**	**(2)**	—	**N/M**
Noninterest expense (excluding goodwill impairment and amortization of intangible assets)	**667**	672	729	693	669	**(1)**	**—**	**2,068**	2,102	**(2)**
Goodwill impairment	**—**	—	—	—	680	**N/M**	**N/M**	**—**	680	**N/M**
Amortization of intangible assets	**5**	5	5	6	7	**—**	**(29)**	**15**	20	**(25)**
Total noninterest expense	**672**	677	734	699	1,356	**(1)**	**(50)**	**2,083**	2,802	**(26)**
Income (loss) before income taxes	**$ 164**	$ 129	$ 93	$ 125	$ (497)	**27 %**	**N/M**	**$ 386**	$ (77)	**N/M**
Pre-tax operating margin	**20 %**	16 %	11 %	15 %	(57)%			**16 %**	(3)%	
Adjusted pre-tax operating margin – Non-GAAP *(d)*	**22 %**	18 %	13 %	17 %	(64)% *(e)*			**18 %**	(3)% *(e)*	
Total revenue by line of business:										
Investment Management	**$ 557**	$ 546	$ 557	$ 550	$ 579	**2 %**	**(4)%**	**$ 1,660**	$ 1,840	**(10)%**
Wealth Management	**270**	267	270	275	283	**1**	**(5)**	**807**	885	**(9)**
Total revenue by line of business	**$ 827**	$ 813	$ 827	$ 825	$ 862	**2 %**	**(4)%**	**$ 2,467**	$ 2,725	**(9)%**
Average balances:										
Average loans	**$ 13,519**	$ 13,995	$ 13,960	$ 14,404	$ 14,482	**(3)%**	**(7)%**	**$ 13,823**	$ 13,937	**(1)%**
Average deposits	**$ 13,578**	$ 15,410	$ 16,144	$ 16,416	$ 17,225	**(12)%**	**(21)%**	**$ 15,035**	$ 20,157	**(25)%**

(a) On a constant currency basis, investment management and performance fees decreased 5% (Non-GAAP) compared with the third quarter of 2022. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 43 for the reconciliation of this Non-GAAP measure.

(b) Other fees primarily include investment services fees.

(c) Investment and other revenue and total fee and other revenue are net of income (loss) attributable to noncontrolling interests related to consolidated investment management funds.

(d) Net of distribution and servicing expense. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 43 for the reconciliation of this Non-GAAP measure.

(e) Excluding notable items and net of distribution and servicing expense, the adjusted pre-tax operating margin was 24% (Non-GAAP) in the third quarter of 2022 and the first nine months of 2022. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 43 for the reconciliation of this Non-GAAP measure.

N/M – Not meaningful.

AUM trends							3Q23 vs.	
(dollars in billions)		**3Q23**	2Q23	1Q23	4Q22	3Q22	**2Q23**	**3Q22**
AUM by product type: *(a)*								
Equity	**$**	**133**	$ 145	$ 142	$ 135	$ 125	**(8)%**	**6 %**
Fixed income		**190**	203	207	198	205	**(6)**	**(7)**
Index		**425**	440	408	395	366	**(3)**	**16**
Liability-driven investments		**534**	579	604	570	546	**(8)**	**(2)**
Multi-asset and alternative investments		**156**	162	161	153	181	**(4)**	**(14)**
Cash		**383**	377	386	385	353	**2**	**8**
Total AUM	**$**	**1,821**	$ 1,906	$ 1,908	$ 1,836	$ 1,776	**(4)%**	**3 %**
Changes in AUM: *(a)*								
Beginning balance of AUM	**$**	**1,906**	$ 1,908	$ 1,836	$ 1,776	$ 1,937		
Net inflows (outflows):								
Long-term strategies:								
Equity		**(3)**	(3)	(4)	(5)	(5)		
Fixed income		**(7)**	(4)	4	(12)	(3)		
Liability-driven investments		**1**	(3)	10	19	30		
Multi-asset and alternative investments		**(4)**	(1)	(3)	(4)	2		
Total long-term active strategies (outflows) inflows		**(13)**	(11)	7	(2)	24		
Index		**(2)**	2	(2)	(4)	(1)		
Total long-term strategies (outflows) inflows		**(15)**	(9)	5	(6)	23		
Short-term strategies:								
Cash		**7**	(9)	—	27	(2)		
Total net (outflows) inflows		**(8)**	(18)	5	21	21		
Net market impact		**(50)**	(3)	52	18	(118)		
Net currency impact		**(27)**	19	15	53	(64)		
Divestiture		—	—	—	(32)	—		
Ending balance of AUM	**$**	**1,821**	$ 1,906	$ 1,908	$ 1,836	$ 1,776	**(4)%**	**3 %**
Wealth Management client assets *(b)*	**$**	**292**	$ 286	$ 279	$ 269	$ 256	**2 %**	**14 %**

(a) Excludes assets managed outside of the Investment and Wealth Management business segment.
(b) Includes AUM and AUC/A in the Wealth Management line of business.

Business segment description

Our Investment and Wealth Management business segment consists of two distinct lines of business: Investment Management and Wealth Management. Our investment firms deliver a highly diversified portfolio of investment strategies independently, and through our global distribution network, to institutional and retail clients globally. BNY Mellon Wealth Management provides investment management, custody, wealth and estate planning, private banking services, investment servicing and information management. See pages 19 and 20 of our 2022 Annual Report for additional information on our Investment and Wealth Management business segment.

Review of financial results

AUM increased 3% compared with Sept. 30, 2022, primarily reflecting the favorable impact of a weaker U.S. dollar and higher market values, partially offset by the divestiture of Alcentra.

Net long-term strategy outflows were $15 billion in the third quarter of 2023, driven by fixed income, multi-asset and alternative investments and equity investments. Short-term strategy inflows were $7 billion in the third quarter of 2023. Market and regulatory trends have resulted in increased demand for lower fee asset management products and for performance-based fees.

Total revenue of $827 million decreased 4% compared with the third quarter of 2022 and increased 2% compared with the second quarter of 2023. The drivers of total revenue by line of business are indicated below.

Investment Management revenue of $557 million decreased 4% compared with the third quarter of 2022 and increased 2% compared with the second quarter of 2023. The decrease compared with the

third quarter of 2022 primarily reflects the impact of the Alcentra divestiture and the mix of cumulative AUM flows, partially offset by higher performance fees and market values, and the favorable impact of a weaker U.S. dollar. The increase compared with the second quarter of 2023 primarily reflects the timing of performance fees.

Wealth Management revenue of $270 million decreased 5% compared with the third quarter of 2022 and increased 1% compared with the second quarter of 2023. The decrease compared with the third quarter of 2022 primarily reflects lower net interest revenue and changes in product mix, partially offset by higher market values. The increase compared with the second quarter of 2023 primarily reflects higher market values.

Revenue generated in the Investment and Wealth Management business segment included 33% from non-U.S. sources in the third quarter of 2023, compared with 33% in the third quarter of 2022 and 30% in the second quarter of 2023.

Noninterest expense of $672 million decreased 50% compared with the third quarter of 2022 and 1% compared with the second quarter of 2023. The decrease compared with the third quarter of 2022 primarily reflects the third quarter 2022 goodwill impairment in the Investment Management reporting unit and the impact of the Alcentra divestiture, partially offset by higher investments and the unfavorable impact of a weaker U.S. dollar.

Year-to-date 2023 compared with year-to-date 2022

Total revenue of $2.5 billion decreased 9% compared with the first nine months of 2022. Investment Management revenue of $1.7 billion decreased 10%, primarily reflecting the impact of the Alcentra divestiture, the mix of cumulative AUM flows and lower market values, partially offset by the abatement of money market fee waivers and improved seed capital results. Wealth Management revenue of $807 million decreased 9%, primarily reflecting lower net interest revenue and changes in product mix.

Noninterest expense of $2.1 billion decreased 26% compared with the first nine months of 2022, primarily reflecting the third quarter 2022 goodwill impairment in the Investment Management reporting unit, the impact of the Alcentra divestiture and the favorable impact of efficiency savings, partially offset by higher revenue-related expenses and higher investments, as well as the impact of inflation.

Other segment

(in millions)	**3Q23**	2Q23	1Q23	4Q22	3Q22	**YTD23**	YTD22
Fee revenue	**$ 6**	$ (2)	$ 3	$ 12	$ 28	**$ 7**	$ 49
Investment and other revenue	**28**	(16)	(14)	(442)	(5)	**(2)**	69
Total fee and other revenue	**34**	(18)	(11)	(430)	23	**5**	118
Net interest expense	**(24)**	(27)	(36)	(48)	(47)	**(87)**	(114)
Total revenue	**10**	(45)	(47)	(478)	(24)	**(82)**	4
Provision for credit losses	**(13)**	(25)	27	2	(26)	**(11)**	21
Noninterest expense	**24**	71	41	153	29	**136**	125
(Loss) before income taxes	**$ (1)**	$ (91)	$ (115)	$ (633)	$ (27)	**$ (207)**	$ (142)
Average loans and leases	**$ 1,711**	$ 1,749	$ 1,508	$ 1,267	$ 1,145	**$ 1,656**	$ 1,210

See page 21 of our 2022 Annual Report for additional information on the Other segment.

Review of financial results

Total revenue includes corporate treasury and other investment activity, including hedging activity, which has an offsetting impact between fee and other revenue and net interest expense.

Total revenue increased $34 million compared with the third quarter of 2022 and $55 million compared with the second quarter of 2023. The increase compared with the third quarter of 2022 primarily reflects debt extinguishment gains, partially offset by net securities losses.

The provision for credit losses was a benefit of $13 million in the third quarter of 2023, primarily

reflecting a reduction in reserves related to financial institutions.

Noninterest expense decreased $5 million compared with the third quarter of 2022 and $47 million compared with the second quarter of 2023. The decrease compared with the second quarter of 2023 primarily reflects lower litigation reserves.

Year-to-date 2023 compared with year-to-date 2022

Loss before income taxes increased $65 million compared with the first nine months of 2022. Total fee and other revenue decreased $113 million, primarily reflecting lower strategic equity investment gains and net securities losses, partially offset by debt extinguishment gains.

Noninterest expense increased $11 million compared with the first nine months of 2022, primarily reflecting higher staff expense.

Critical accounting estimates

Our significant accounting policies are described in Note 1 of the Notes to Consolidated Financial Statements in our 2022 Annual Report. Our critical accounting estimates are those related to the allowance for credit losses, goodwill and other intangibles and litigation and regulatory contingencies, as referenced below.

Critical accounting estimates	Reference
Allowance for credit losses	2022 Annual Report, pages 23-25, and "Allowance for credit losses."
Goodwill and other intangibles	2022 Annual Report, pages 25-27. Also see below.
Litigation and regulatory contingencies	"Legal proceedings" in Note 18 of the Notes to Consolidated Financial Statements.

Goodwill and other intangibles

BNY Mellon's business segments include six reporting units for which goodwill impairment testing is performed on an annual basis. An interim test is performed when events or circumstances occur that may indicate that it is more likely than not that the fair value of any reporting unit may be less than its carrying value.

In the third quarter of 2023, due to the results of the second quarter 2023 interim goodwill impairment test and macroeconomic conditions, we performed an interim goodwill impairment test of the Investment Management reporting unit, which had $6.0 billion of allocated goodwill. The fair value of the Investment Management reporting unit exceeded its carrying value by approximately 2%. We determined the fair value of the Investment Management reporting unit using an income approach based on management's projections as of Sept. 30, 2023. The discount rate applied to these cash flows was 10.5%.

As of Sept. 30, 2023, if the discount rate applied to the estimated cash flows was increased or decreased by 25 basis points, the fair value of the Investment Management reporting unit would decrease or increase by 4%, respectively. Similarly, if the long-term growth rate was increased or decreased by 10 basis points, the fair value of the Investment Management reporting unit would increase or decrease by approximately 1%, respectively.

Determining the fair value of a reporting unit is subject to uncertainty as it is reliant on estimates of cash flows that extend far into the future, and, by their nature, are difficult to estimate over such an extended time frame. In the future, changes in the assumptions or the discount rate could produce a material non-cash goodwill impairment.

Consolidated balance sheet review

One of our key risk management objectives is to maintain a balance sheet that remains strong throughout market cycles to meet the expectations of our major stakeholders, including our shareholders, clients, creditors and regulators.

We also seek to undertake overall liquidity risk, including intraday liquidity risk, that stays within our risk appetite. The objective of our balance sheet management strategy is to maintain a balance sheet that is characterized by strong liquidity and asset quality, ready access to external funding sources at competitive rates and a strong capital structure that supports our risk-taking activities and is adequate to absorb potential losses. In managing the balance sheet, appropriate consideration is given to balancing the competing needs of maintaining sufficient levels of liquidity and complying with applicable regulations and supervisory expectations while optimizing profitability.

At Sept. 30, 2023, total assets were $405 billion, compared with $406 billion at Dec. 31, 2022. The decrease in total assets was primarily driven by lower securities and interest-bearing deposits with banks, partially offset by higher interest-bearing deposits with the Federal Reserve and other central banks. Deposits totaled $277 billion at Sept. 30, 2023, compared with $279 billion at Dec. 31, 2022. The decrease reflects lower noninterest-bearing (principally in U.S. offices) and interest-bearing deposits in non-U.S. offices, partially offset by higher interest-bearing deposits in U.S. offices. Total interest-bearing deposits as a percentage of total interest-earning assets were 63% at Sept. 30, 2023 and 58% at Dec. 31, 2022.

At Sept. 30, 2023, available funds totaled $152 billion and included cash and due from banks, interest-bearing deposits with the Federal Reserve and other central banks, interest-bearing deposits with banks and federal funds sold and securities purchased under resale agreements. This compares with available funds of $138 billion at Dec. 31, 2022. Total available funds as a percentage of total assets was 37% at Sept. 30, 2023 and 34% at Dec. 31, 2022. For additional information on our available funds, see “Liquidity and dividends.”

Securities were $128 billion, or 32% of total assets, at Sept. 30, 2023, compared with $143 billion, or 35% of total assets, at Dec. 31, 2022. The decrease primarily reflects lower U.S. Treasury securities and agency residential mortgage-backed securities (“RMBS”), partially offset by higher U.S. government agencies and collateralized loan obligations (“CLOs”). For additional information on our securities portfolio, see “Securities” and Note 4 of the Notes to Consolidated Financial Statements.

Loans were $66.3 billion, or 16% of total assets, at Sept. 30, 2023, compared with $66.1 billion, or 16% of total assets, at Dec. 31, 2022. The increase was driven by higher loans to financial institutions and other residential mortgages, partially offset by lower overdrafts. For additional information on our loan portfolio, see “Loans” and Note 5 of the Notes to Consolidated Financial Statements.

Long-term debt totaled $29 billion at Sept. 30, 2023 and $30 billion at Dec. 31, 2022. Maturities and repurchases, and a decrease in the fair value of hedged long-term debt were partially offset by issuances. For additional information on long-term debt, see “Liquidity and dividends.”

The Bank of New York Mellon Corporation total shareholders’ equity totaled $41 billion at Sept. 30, 2023 and Dec. 31, 2022. For additional information, see “Capital.”

Country risk exposure

The following table presents BNY Mellon's top 10 exposures by country (excluding the U.S.) as of Sept. 30, 2023, as well as certain countries with higher risk profiles. The exposure is presented on an internal risk management basis and has not been reduced by the allowance for credit losses. We monitor our exposure to these and other countries as part of our internal country risk management process.

The country risk exposure below reflects the Company's risk to an immediate default of the counterparty or obligor based on the country of residence of the entity which incurs the liability. If there is credit risk mitigation, the country of residence of the entity providing the risk mitigation is the country of risk. The country of risk for securities is generally based on the domicile of the issuer of the security.

Country risk exposure at Sept. 30, 2023	Interest-bearing deposits						
(in billions)	Central banks	Banks	Lending *(a)*	Securities *(b)*	Other *(c)*	Total exposure	
Top 10 country exposure:							
Germany	$ 17.0	$ 0.7	$ 0.9	$ 3.9	$ 0.3	$ 22.8	
United Kingdom ("UK")	10.7	0.7	1.7	2.9	2.3	18.3	
Japan	8.2	1.0	—	0.4	0.3	9.9	
Belgium	7.8	0.9	0.1	0.7	—	9.5	
Canada	—	1.8	0.4	3.9	1.3	7.4	
Australia	—	2.0	0.3	0.7	0.5	3.5	
South Korea	0.1	—	2.2	0.2	0.5	3.0	
Luxembourg	0.1	0.1	1.5	—	1.2	2.9	
France	—	—	0.2	1.8	0.7	2.7	
Ireland	0.1	0.1	0.4	—	1.6	2.2	
Total Top 10 country exposure	**$ 44.0**	**$ 7.3**	**$ 7.7**	**$ 14.5**	**$ 8.7**	**$ 82.2**	*(d)*
Select country exposure:							
Brazil	$ —	$ —	$ 0.9	$ 0.1	$ 0.3	$ 1.3	
Russia	—	0.4 *(e)*	—	—	—	0.4	

(a) Lending includes loans, acceptances, issued letters of credit, net of participations, and lending-related commitments.
(b) Securities include both the available-for-sale and held-to-maturity portfolios.
(c) Other exposures include over-the-counter ("OTC") derivative and securities financing transactions, net of collateral.
(d) The top 10 country exposures comprise approximately 70% of our total non-U.S. exposure.
(e) Represents cash balances with exposure to Russia.

Events in recent years have resulted in increased focus on Brazil. The country risk exposure to Brazil is primarily short-term trade finance loans extended to large financial institutions. We also have operations in Brazil providing investment services and investment management services.

The war in Ukraine has increased our focus on Russia. The country risk exposure to Russia consists of cash balances related to our securities services businesses and may increase in the future to the extent cash is received for the benefit of our clients that is subject to distribution restrictions. BNY Mellon has ceased new banking business in Russia and suspended investment management purchases of Russian securities. At Sept. 30, 2023, less than 0.1% of our AUC/A and less than 0.01% of our AUM consisted of Russian securities. We will continue to work with multinational clients that depend on our custody and recordkeeping services to manage their exposures.

We are monitoring our exposure to Israel as part of our internal country risk management process. At Sept. 30, 2023, our total exposure to Israel was $187 million and primarily consisted of investment grade short-term interest-bearing deposits and OTC derivatives maturing within six months.

Securities

In the discussion of our securities portfolio, we have included certain credit ratings information because the information can indicate the degree of credit risk to which we are exposed. Significant changes in ratings classifications could indicate increased credit risk for us and could be accompanied by an increase in the allowance for credit losses and/or a reduction in the fair value of our securities portfolio.

The following table shows the distribution of our total securities portfolio.

Securities portfolio	June 30, 2023	3Q23 change in	**Sept. 30, 2023**					Ratings *(c)*				
(dollars in millions)	Fair value	unrealized gain (loss)	Amortized cost *(a)*	Fair value	Fair value as a % of amortized cost *(a)*	Unrealized gain (loss)	% Floating rate *(b)*	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Agency RMBS	$ 38,052	$ (961)	**$ 41,341**	**$ 35,850**	87 %	$ (5,491)	18 %	100 %	— %	— %	— %	— %
U.S. Treasury	33,818	18	**32,689**	**31,439**	96	(1,250)	59	100	—	—	—	—
Agency commercial mortgage-backed securities ("MBS")	11,441	(64)	**11,739**	**10,927**	93	(812)	45	100	—	—	—	—
Sovereign debt/sovereign guaranteed *(d)*	10,662	75	**10,648**	**10,168**	95	(480)	28	90	5	4	1	—
Supranational	8,742	24	**8,498**	**8,239**	97	(259)	65	100	—	—	—	—
CLOs	6,765	48	**6,948**	**6,908**	99	(40)	100	100	—	—	—	—
U.S. government agencies	6,745	(66)	**7,213**	**6,630**	92	(583)	43	100	—	—	—	—
Foreign covered bonds *(e)*	6,133	22	**6,364**	**6,137**	96	(227)	59	100	—	—	—	—
Non-agency commercial MBS	3,031	(6)	**3,315**	**3,012**	91	(303)	55	100	—	—	—	—
Foreign government agencies/local governments *(f)*	2,380	29	**2,334**	**2,243**	96	(91)	40	92	8	—	—	—
Non-agency RMBS	1,895	(27)	**1,953**	**1,763**	90	(190)	47	85	3	—	6	6
Other asset-backed securities ("ABS")	1,043	6	**1,026**	**922**	90	(104)	14	100	—	—	—	—
State and political subdivisions	11	(1)	**12**	**10**	85	(2)	—	—	—	3	—	97
Other	1	—	**1**	**1**	100	—	—	—	—	—	—	100
Total securities	$ 130,719 *(g)*	$ (903)	**$ 134,081**	**$ 124,249** *(g)*	93 %	$ (9,832) *(g)(h)*	44 %	99 %	1 %	— %	— %	— %

(a) Amortized cost reflects historical impairments and is net of the allowance for credit losses.
(b) Includes the impact of hedges.
(c) Represents ratings by Standard & Poor's ("S&P") or the equivalent.
(d) Primarily consists of exposure to Germany, France, UK, Canada, Singapore and Belgium.
(e) Primarily consists of exposure to Canada, UK, Australia, Germany and Norway.
(f) Primarily consists of exposure to Canada, Norway, the Netherlands, Sweden and Finland.
(g) Includes net unrealized gains on derivatives hedging securities available-for-sale (including terminated hedges) of $2,406 million at June 30, 2023 and $2,820 million at Sept. 30, 2023.
(h) At Sept. 30, 2023, includes pre-tax net unrealized losses of $3,036 million related to available-for-sale securities, net of hedges, and $6,796 million related to held-to-maturity securities. The after-tax unrealized losses, net of hedges, related to available-for-sale securities is $2,293 million and the after-tax equivalent related to held-to-maturity securities is $5,182 million.

The fair value of our securities portfolio, including related hedges, was $124.2 billion at Sept. 30, 2023, compared with $139.3 billion at Dec. 31, 2022. The decrease primarily reflects lower U.S. Treasury securities and agency RMBS, partially offset by higher U.S. government agencies and CLOs.

At Sept. 30, 2023, the securities portfolio had a net unrealized loss, including the impact of related hedges, of $9.8 billion, compared with $9.4 billion at Dec. 31, 2022. The increase in the unrealized loss, including the impact of related hedges, primarily reflects the impact of higher interest rates, partially offset by securities moving closer to maturity.

The fair value of the available-for-sale securities totaled $80.0 billion at Sept. 30, 2023, net of hedges, or 64% of the securities portfolio, net of hedges. The fair value of the held-to-maturity securities totaled $44.2 billion at Sept. 30, 2023, or 36% of the securities portfolio, net of hedges.

The unrealized loss (after-tax) on our available-for-sale securities portfolio, net of hedges, included in accumulated other comprehensive income was $2.3 billion at Sept. 30, 2023, compared with $2.4 billion at Dec. 31, 2022. Net unrealized loss, including the impact of hedges, decreased as securities moved closer to maturity, partially offset by the impact of higher interest rates.

At Sept. 30, 2023, 99% of the securities in our portfolio were rated AAA/AA-, unchanged compared with Dec. 31, 2022.

See Note 4 of the Notes to Consolidated Financial Statements for the pre-tax net securities gains (losses) by security type. See Note 15 of the Notes to Consolidated Financial Statements for securities by level in the fair value hierarchy.

The following table presents the amortizable purchase premium (net of discount) and net amortization related to the securities portfolio.

Amortizable purchase premium (net of discount) and net amortization of securities *(a)* *(in millions)*	**3Q23**	2Q23	3Q22
Amortizable purchase premium, net of discount	**$ 973**	$ 1,028	$ 1,386
Net amortization	**$ 45**	$ 42	$ 82

(a) Amortization of purchase premium decreases net interest revenue while accretion of discount increases net interest revenue. Both were recorded on a level yield basis.

Loans

Total exposure – consolidated *(in billions)*	**Sept. 30, 2023** Loans	Unfunded commitments	Total exposure	Dec. 31, 2022 Loans	Unfunded commitments	Total exposure
Financial institutions	**$ 10.4**	**$ 31.8**	**$ 42.2**	$ 9.7	$ 31.7	$ 41.4
Commercial	**1.9**	**11.4**	**13.3**	1.7	11.7	13.4
Wealth management loans	**9.4**	**0.6**	**10.0**	10.3	0.6	10.9
Wealth management mortgages	**9.2**	**0.2**	**9.4**	9.0	0.2	9.2
Commercial real estate	**6.7**	**3.4**	**10.1**	6.2	3.9	10.1
Lease financings	**0.6**	**—**	**0.6**	0.7	—	0.7
Other residential mortgages	**1.0**	**—**	**1.0**	0.4	—	0.4
Overdrafts	**3.6**	**—**	**3.6**	4.8	—	4.8
Capital call financing	**3.5**	**3.2**	**6.7**	3.4	3.5	6.9
Other	**2.8**	**—**	**2.8**	3.0	—	3.0
Margin loans	**17.2**	**—**	**17.2**	16.9	—	16.9
Total	**$ 66.3**	**$ 50.6**	**$ 116.9**	$ 66.1	$ 51.6	$ 117.7

At Sept. 30, 2023, our total lending-related exposure of $116.9 billion decreased 1% compared with Dec. 31, 2022, primarily reflecting lower overdrafts and exposure in the wealth management loan portfolio, partially offset by higher exposure in the financial institutions and other residential mortgage portfolios.

Our financial institutions and commercial portfolios comprise our largest concentrated risk. These portfolios comprised 47% of our total exposure at Sept. 30, 2023 and Dec. 31, 2022. Additionally, most of our overdrafts relate to financial institutions.

Financial institutions

The financial institutions portfolio is shown below.

Financial institutions portfolio exposure *(dollars in billions)*	**Sept. 30, 2023**					Dec. 31, 2022		
	Loans	Unfunded commitments	Total exposure	% Inv. grade	% due <1 yr.	Loans	Unfunded commitments	Total exposure
Securities industry	**$ 1.7**	**$ 17.2**	**$ 18.9**	**95 %**	**99 %**	$ 1.6	$ 17.5	$ 19.1
Asset managers	**1.5**	**8.0**	**9.5**	**97**	**81**	1.6	7.6	9.2
Banks	**6.8**	**1.5**	**8.3**	**85**	**97**	6.1	1.5	7.6
Insurance	**0.1**	**3.9**	**4.0**	**100**	**12**	0.1	3.8	3.9
Government	**—**	**0.2**	**0.2**	**100**	**42**	—	0.2	0.2
Other	**0.3**	**1.0**	**1.3**	**97**	**30**	0.3	1.1	1.4
Total	**$ 10.4**	**$ 31.8**	**$ 42.2**	**94 %**	**84 %**	$ 9.7	$ 31.7	$ 41.4

The financial institutions portfolio exposure was $42.2 billion at Sept. 30, 2023, an increase of 2% compared with Dec. 31, 2022, primarily reflecting higher exposure in the banks portfolio.

Financial institution exposures are high quality, with 94% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at Sept. 30, 2023. Each customer is assigned an internal credit rating, which is mapped to an equivalent external rating agency grade based upon a number of dimensions, which are continually evaluated and may change over time. For ratings of non-U.S. counterparties, our internal credit rating is generally capped at a rating equivalent to the sovereign rating of the country where the counterparty resides, regardless of the internal credit rating assigned to the counterparty or the underlying collateral.

The exposure to financial institutions is generally short term, with 84% of the exposures expiring within one year. At Sept. 30, 2023, 55% of the exposure to financial institutions had an expiration within 90 days, compared with 17% at Dec. 31, 2022.

In addition, 64% of the financial institutions exposure is secured. For example, securities industry clients and asset managers often borrow against marketable securities held in custody.

At Sept. 30, 2023, the secured intraday credit provided to dealers in connection with their tri-party repo activity totaled $16.1 billion and was included in the securities industry portfolio. Dealers secure the outstanding intraday credit with high-quality liquid collateral having a market value in excess of the amount of the outstanding credit. Secured intraday credit facilities represent approximately 38% of the exposure in the financial institutions portfolio and are reviewed and reapproved annually.

The asset managers portfolio exposure is high quality, with 97% of the exposures meeting our investment grade equivalent ratings criteria as of Sept. 30, 2023. These exposures are generally short-term liquidity facilities, with the majority to regulated mutual funds.

Our banks portfolio exposure primarily relates to global trade finance. These exposures are short term in nature, with 97% due in less than one year. The investment grade percentage of our banks portfolio exposure was 85% at Sept. 30, 2023, compared with 86% at Dec. 31, 2022. Our non-investment grade exposures are primarily trade finance loans in Brazil.

Commercial

The commercial portfolio is presented below.

Commercial portfolio exposure	**Sept. 30, 2023**					Dec. 31, 2022		
(dollars in billions)	Loans	Unfunded commitments	Total exposure	% Inv. grade	% due <1 yr.	Loans	Unfunded commitments	Total exposure
Services and other	**$ 1.1**	**$ 3.4**	**$ 4.5**	**98 %**	**34 %**	$ 0.8	$ 3.2	$ 4.0
Manufacturing	**0.5**	**3.6**	**4.1**	**96**	**15**	0.5	4.1	4.6
Energy and utilities	**0.3**	**3.7**	**4.0**	**91**	**5**	0.3	3.7	4.0
Media and telecom	**—**	**0.7**	**0.7**	**87**	**—**	0.1	0.7	0.8
Total	**$ 1.9**	**$ 11.4**	**$ 13.3**	**95 %**	**18 %**	$ 1.7	$ 11.7	$ 13.4

The commercial portfolio exposure was $13.3 billion at Sept. 30, 2023, a decrease of 1% from Dec. 31, 2022, primarily reflecting lower exposure in the manufacturing and media and telecom portfolios, partially offset by higher exposure in the services and other portfolio.

Our credit strategy is to focus on investment grade clients that are active users of our non-credit services. The following table summarizes the percentage of the financial institutions and commercial portfolio exposures that are investment grade.

Percentage of the portfolios that are investment grade	Quarter ended				
	Sept. 30, 2023	June 30, 2023	March 31, 2023	Dec. 31, 2022	Sept. 30, 2022
Financial institutions	**94 %**	94 %	95 %	95 %	96 %
Commercial	**95 %**	95 %	95 %	95 %	95 %

Wealth management loans

Our wealth management loan exposure was $10.0 billion at Sept. 30, 2023, compared with $10.9 billion at Dec. 31, 2022. Wealth management loans primarily consist of loans to high-net-worth individuals, a majority of which are secured by the customers' investment management accounts or custody accounts.

Wealth management mortgages

Our wealth management mortgage exposure was $9.4 billion at Sept. 30, 2023, compared with $9.2 billion at Dec. 31, 2022. Wealth management mortgages primarily consist of loans to high-net-worth individuals, which are secured by residential property. Wealth management mortgages are primarily interest-only, adjustable-rate mortgages with a weighted-average loan-to-value ratio of 61% at origination. At Sept. 30, 2023, less than 1% of the mortgages were past due.

At Sept. 30, 2023, the wealth management mortgage portfolio consisted of the following geographic concentrations: California – 21%; New York – 14%; Florida – 11%; Massachusetts – 8%; and other – 46%.

Commercial real estate

The composition of the commercial real estate portfolio by asset class, including percentage secured, is presented below.

Composition of commercial real estate portfolio by asset class	**Sept. 30, 2023**		Dec. 31, 2022	
(in billions)	Total exposure	Percentage secured *(a)*	Total exposure	Percentage secured *(a)*
Residential	**$ 4.2**	**86 %**	$ 4.1	85 %
Office	**2.6**	**74**	2.8	75
Retail	**0.8**	**65**	0.9	58
Mixed use	**0.8**	**30**	0.8	33
Hotels	**0.6**	**40**	0.6	42
Healthcare	**0.5**	**58**	0.4	49
Other	**0.6**	**71**	0.5	66
Total commercial real estate	**$ 10.1**	**72 %**	$ 10.1	71 %

(a) Represents the percentage of exposure secured by real estate in each asset class.

Our commercial real estate exposure totaled $10.1 billion at Sept. 30, 2023 and Dec. 31, 2022. Our income-producing commercial real estate facilities are focused on experienced owners and are structured with moderate leverage based on existing cash flows. Our commercial real estate lending activities also include construction and renovation facilities. Our client base consists of experienced developers and long-term holders of real estate assets. Loans are approved on the basis of existing or projected cash flows and supported by appraisals and knowledge of local market conditions. Development loans are structured with moderate leverage and, in many instances, involve some level of recourse to the developer.

At Sept. 30, 2023, the unsecured portfolio consisted of real estate investment trusts ("REITs") and real estate operating companies, which are both primarily investment grade.

At Sept. 30, 2023, our commercial real estate portfolio consisted of the following concentrations: New York metro – 36%; REITs and real estate operating companies – 28%; and other – 36%.

Lease financings

The lease financings portfolio exposure totaled $633 million at Sept. 30, 2023 and $657 million at Dec. 31, 2022. At Sept. 30, 2023, 100% of leasing exposure was investment grade, or investment grade equivalent, and consisted of exposures backed by well-diversified assets, primarily real estate and large-ticket transportation equipment. The largest components of our lease residual value exposure relate to freight-related rail cars and aircraft. Assets are both domestic and foreign-based, with primary concentrations in Germany and the U.S.

Other residential mortgages

The other residential mortgages portfolio primarily consists of 1-4 family residential mortgage loans and totaled $1.0 billion at Sept. 30, 2023 and $345 million at Dec. 31, 2022. Included in this portfolio at Sept. 30, 2023 was $750 million of fixed-rate jumbo mortgage loans, purchased primarily in the first quarter of 2023, with a weighted-average loan-to-value ratio of 73% at origination.

Overdrafts

Overdrafts primarily relate to custody and securities clearance clients and are generally repaid within two business days.

Capital call financing

Capital call financing includes loans to private equity funds that are secured by the fund investors' capital commitments and the funds' rights to call capital.

Other loans

Other loans primarily include loans to consumers that are fully collateralized with equities, mutual funds and fixed-income securities.

Margin loans

Margin loan exposure of $17.2 billion at Sept. 30, 2023 and $16.9 billion at Dec. 31, 2022 was collateralized with marketable securities. Borrowers are required to maintain a daily collateral margin in excess of 100% of the value of the loan. Margin loans included $6 billion at Sept. 30, 2023 and Dec. 31, 2022 related to a term loan program that offers fully collateralized loans to broker-dealers.

Allowance for credit losses

Our credit strategy is to focus on investment grade clients who are active users of our non-credit services. Our primary exposure to the credit risk of a customer consists of funded loans, unfunded contractual commitments to lend, standby letters of credit and overdrafts associated with our custody and securities clearance businesses.

The following table details changes in our allowance for credit losses.

Allowance for credit losses activity *(dollars in millions)*	**Sept. 30, 2023**	June 30, 2023	Dec. 31, 2022	Sept. 30, 2022
Beginning balance of allowance for credit losses	**$ 323**	$ 320	$ 280	$ 310
Provision for credit losses	**3**	5	20	(30)
Net (charge-offs) recoveries:				
Loans:				
Other residential mortgages	**—**	(1)	1	1
Other financial instruments	**(1)**	(1)	(9)	(1)
Net (charge-offs) recoveries	**(1)**	(2)	(8)	—
Ending balance of allowance for credit losses	**$ 325**	$ 323	$ 292	$ 280
Allowance for loan losses	**$ 211**	$ 191	$ 176	$ 164
Allowance for lending-related commitments	**85**	91	78	72
Allowance for other financial instruments *(a)*	**29**	41	38	44
Total allowance for credit losses	**$ 325**	$ 323	$ 292	$ 280
Total loans, at period end	**$ 66,290**	$ 64,469	$ 66,063	$ 69,829
Allowance for loan losses as a percentage of total loans	**0.32 %**	0.30 %	0.27 %	0.23 %
Allowance for loan losses and lending-related commitments as a percentage of total loans	**0.45 %**	0.44 %	0.38 %	0.34 %

(a) Includes allowance for credit losses on federal funds sold and securities purchased under resale agreements, available-for-sale securities, held-to-maturity securities, accounts receivable, cash and due from banks and interest-bearing deposits with banks.

The provision for credit losses was $3 million in the third quarter of 2023, compared with a benefit of $30 million in the third quarter of 2022.

The allowance for loan losses and the allowance for lending-related commitments represent management's estimate of lifetime expected losses in our credit portfolio. This evaluation process is subject to numerous estimates and judgments. To the extent actual results differ from forecasts or management's judgment, the allowance for credit losses may be greater or less than future charge-offs.

Based on an evaluation of the allowance for credit losses as discussed in "Critical accounting estimates" in our 2022 Annual Report, we have allocated our allowance for loans and lending-related commitments as presented below.

Allocation of allowance for loan losses and lending-related commitments *(a)*	**Sept. 30, 2023**		June 30, 2023		Dec. 31, 2022		Sept. 30, 2022	
(dollars in millions)	**$**	%	$	%	$	%	$	%
Commercial real estate	**$ 222**	**75 %**	$ 199	71 %	$ 184	72 %	$ 176	74 %
Commercial	**32**	**10**	21	7	18	7	17	7
Financial institutions	**22**	**7**	32	11	24	9	20	8
Wealth management mortgages	**9**	**3**	15	5	12	5	9	4
Other residential mortgages	**6**	**2**	9	3	8	3	8	3
Capital call financing	**3**	**1**	4	1	6	2	4	2
Lease financings	**1**	**1**	1	1	1	1	1	1
Wealth management loans	**1**	**1**	1	1	1	1	1	1
Total	**$ 296**	**100 %**	$ 282	100 %	$ 254	100 %	$ 236	100 %

(a) The allowance allocated to margin loans, overdrafts and other loans was insignificant at Sept. 30, 2023, June 30, 2023, Dec. 31, 2022 and Sept. 30, 2022.

The allocation of the allowance for credit losses is inherently judgmental, and the entire allowance for credit losses is available to absorb credit losses regardless of the nature of the losses.

Our allowance for credit losses is sensitive to a number of inputs, most notably the credit ratings assigned to each borrower, as well as macroeconomic forecast assumptions that are incorporated into our estimate of credit losses through the expected life of the loan portfolio. Thus, as the macroeconomic environment and related forecasts change, the allowance for credit losses may change materially. The following sensitivity analyses do not represent management's expectations of the deterioration of our portfolios or the economic environment, but are provided as hypothetical scenarios to assess the sensitivity of the allowance for credit losses to changes in key inputs. If commercial real estate property values were increased 10% and all other credits were rated one grade better, the quantitative allowance would have decreased by $47 million, and if commercial real estate property values were decreased 10% and all other credits were rated one grade worse, the quantitative allowance would have increased by $83 million. Our multi-scenario-based macroeconomic forecast used in determining the Sept. 30, 2023 allowance for credit losses consisted of three scenarios. The baseline scenario reflects slightly negative GDP growth through the fourth quarter of 2023 before moderating, slightly rising unemployment and declining commercial real estate prices through the end of 2024. The upside scenario reflects faster GDP growth, slightly declining unemployment and higher commercial real estate prices compared with the baseline. The downside scenario contemplates negative GDP growth through the second quarter of 2024 with subsequent stabilization, as well as rapidly increasing unemployment through 2024 and sharply lower commercial real estate prices than the baseline. In the third quarter of 2023, we placed the most weight on our downside scenario, followed by the baseline scenario, with the remaining weighting placed on the upside scenario. From a sensitivity perspective, at Sept. 30, 2023, if we had applied 100% weighting to the downside scenario, the allowance for credit losses would have been approximately $83 million higher.

Nonperforming assets

The table below presents our nonperforming assets.

Nonperforming assets		
(dollars in millions)	**Sept. 30, 2023**	Dec. 31, 2022
Nonperforming loans:		
Other residential mortgages	**$ 24**	$ 31
Wealth management mortgages	**22**	22
Commercial real estate	**—**	54
Total nonperforming loans	**46**	107
Other assets owned	**2**	2
Total nonperforming assets	**$ 48**	$ 109
Nonperforming assets ratio	**0.07 %**	0.16 %
Allowance for loan losses/nonperforming loans	**458.7**	164.5
Allowance for loan losses/nonperforming assets	**439.6**	161.5
Allowance for loan losses and lending-related commitments/nonperforming loans	**643.5**	237.4
Allowance for loan losses and lending-related commitments/nonperforming assets	**616.7**	233.0

Nonperforming assets were $48 million at Sept. 30, 2023, a decrease of $61 million, compared with $109 million at Dec. 31, 2022. The decrease reflects lower nonperforming commercial real estate loans.

Deposits

Total deposits were $277.5 billion at Sept. 30, 2023, a decrease of 1%, compared with $279.0 billion at Dec. 31, 2022. The decrease reflects lower noninterest-bearing (principally in U.S. offices) and interest-bearing deposits in non-U.S. offices, partially offset by higher interest-bearing deposits in U.S. offices.

Noninterest-bearing deposits were $60.6 billion at Sept. 30, 2023, compared with $78.0 billion at Dec. 31, 2022. Interest-bearing deposits were primarily demand deposits and totaled $216.9 billion at Sept. 30, 2023, compared with $201.0 billion at Dec. 31, 2022.

Short-term borrowings

We fund ourselves primarily through deposits and, to a lesser extent, other short-term borrowings and long-term debt. Short-term borrowings consist of federal funds purchased and securities sold under repurchase agreements, payables to customers and broker-dealers, commercial paper and other borrowed funds. Certain short-term borrowings, for example, securities sold under repurchase agreements, require the delivery of securities as collateral.

Federal funds purchased and securities sold under repurchase agreements include repurchase agreement activity with the Fixed Income Clearing Corporation ("FICC"), where we record interest expense on a gross basis, but the ending and average balances reflect the impact of offsetting under enforceable netting agreements. This activity primarily relates to government securities collateralized resale and repurchase agreements executed with clients that are novated to and settle with the FICC.

Payables to customers and broker-dealers represent funds awaiting reinvestment and short sale proceeds payable on demand. Payables to customers and broker-dealers are driven by customer trading activity and market volatility.

The Bank of New York Mellon may issue commercial paper that matures within 397 days from the date of issue and is not redeemable prior to maturity or subject to voluntary prepayment.

Other borrowed funds primarily include borrowings from the Federal Home Loan Bank, overdrafts of sub-custodian account balances in our Securities Services businesses, finance lease liabilities and borrowings under lines of credit by our Pershing subsidiaries. Overdrafts typically relate to timing differences for settlements.

Liquidity and dividends

BNY Mellon defines liquidity as the ability of the Parent and its subsidiaries to access funding or convert assets to cash quickly and efficiently, or to roll over or issue new debt, especially during periods of market stress, at a reasonable cost, and in order to meet its short-term (up to one year) obligations. Funding liquidity risk is the risk that BNY Mellon cannot meet its cash and collateral obligations at a reasonable cost for both expected and unexpected cash flow and collateral needs without adversely affecting daily operations or our financial condition. Funding liquidity risk can arise from funding mismatches, market constraints from the inability to convert assets into cash, the inability to hold or raise cash, low overnight deposits, deposit run-off or contingent liquidity events.

Changes in economic conditions or exposure to credit, market, operational, legal and reputational risks also can affect BNY Mellon's liquidity risk profile and are considered in our liquidity risk framework. For additional information, see "Risk Management – Liquidity Risk" in our 2022 Annual Report.

The Parent's policy is to have access to sufficient unencumbered cash and cash equivalents at each quarter-end to cover maturities and other forecasted debt redemptions, net interest payments and net tax payments for the following 18-month period, and to provide sufficient collateral to satisfy transactions subject to Section 23A of the Federal Reserve Act. As of Sept. 30, 2023, the Parent was in compliance with this policy.

We monitor and control liquidity exposures and funding needs within and across significant legal entities, branches, currencies and business lines, taking into account, among other factors, any applicable restrictions on the transfer of liquidity among entities.

BNY Mellon also manages potential intraday liquidity risks. We monitor and manage intraday liquidity against existing and expected intraday liquid resources (such as cash balances, remaining intraday credit capacity, intraday contingency funding and available collateral) to enable BNY Mellon to meet its intraday obligations under normal and reasonably severe stressed conditions.

We define available funds for internal liquidity management purposes as cash and due from banks, interest-bearing deposits with the Federal Reserve and other central banks, interest-bearing deposits with banks and federal funds sold and securities purchased under resale agreements.

The following table presents our total available funds at period end and on an average basis.

Available funds			Average				
(dollars in millions)	**Sept. 30, 2023**	Dec. 31, 2022	**3Q23**	2Q23	3Q22	**YTD23**	YTD22
Cash and due from banks	**$ 4,904**	$ 5,030	**$ 5,183**	$ 5,295	$ 5,089	**$ 5,390**	$ 5,585
Interest-bearing deposits with the Federal Reserve and other central banks	**107,419**	91,655	**98,767**	114,578	91,836	**102,762**	98,310
Interest-bearing deposits with banks	**12,999**	17,169	**12,287**	13,919	16,298	**14,129**	17,189
Federal funds sold and securities purchased under resale agreements	**26,299**	24,298	**26,915**	26,989	22,971	**26,187**	24,715
Total available funds	**$ 151,621**	$ 138,152	**$ 143,152**	$ 160,781	$ 136,194	**$ 148,468**	$ 145,799
Total available funds as a percentage of total assets	**37 %**	34 %	**36 %**	38 %	33 %	**36 %**	34 %

Total available funds were $151.6 billion at Sept. 30, 2023, compared with $138.2 billion at Dec. 31, 2022. The increase was primarily due to higher interest-bearing deposits with the Federal Reserve and other central banks, partially offset by lower interest-bearing deposits with banks.

Average non-core sources of funds, such as federal funds purchased and securities sold under repurchase agreements, trading liabilities, other borrowed funds and commercial paper, were $27.0 billion for the first nine months of 2023, compared with $16.4 billion for the first nine months of 2022. The increase primarily reflects federal funds purchased and securities sold under repurchase agreements and other borrowed funds.

Average interest-bearing foreign deposits, primarily from our European-based businesses included in the Securities Services and Market and Wealth Services segments, were $88.9 billion for the first nine months of 2023, compared with $103.0 billion for the first nine months of 2022. Average interest-bearing domestic deposits were $120.8 billion for the first nine months of 2023, compared with $112.3 billion for the first nine months of 2022. The changes primarily reflect client activity.

Average payables to customers and broker-dealers were $15.1 billion for the first nine months of 2023 and $17.1 billion for the first nine months of 2022. Payables to customers and broker-dealers are driven by customer trading activity and market volatility.

Average long-term debt was $31.1 billion for the first nine months of 2023 and $26.8 billion for the first nine months of 2022.

Average noninterest-bearing deposits decreased to $61.4 billion for the first nine months of 2023 from $89.0 billion for the first nine months of 2022, primarily reflecting client activity.

A significant reduction of client activity in our Securities Services and Market and Wealth Services business segments would reduce our access to deposits. See “Asset/liability management” for additional factors that could impact our deposit balances.

Sources of liquidity

The Parent’s major sources of liquidity are access to the debt and equity markets, dividends from its subsidiaries, and cash on hand and cash otherwise made available in business-as-usual circumstances to the Parent through a committed credit facility with our intermediate holding company (“IHC”).

Our ability to access the capital markets on favorable terms, or at all, is partially dependent on our credit ratings, which are as follows:

Credit ratings at Sept. 30, 2023	Moody's		S&P	Fitch	DBRS
Parent:					
Long-term senior debt	A1	*(a)*	A	AA-	AA
Subordinated debt	A2	*(a)*	A-	A	AA (low)
Preferred stock	Baa1	*(a)*	BBB	BBB+	A
Outlook – Parent	*(a)*		Stable	Stable	Stable
The Bank of New York Mellon:					
Long-term senior debt	Aa2	*(a)*	AA-	AA	AA (high)
Subordinated debt	NR	*(a)*	A	NR	NR
Long-term deposits	Aa1		AA-	AA+	AA (high)
Short-term deposits	P1		A-1+	F1+	R-1 (high)
Commercial paper	P1		A-1+	F1+	R-1 (high)
BNY Mellon, N.A.:					
Long-term senior debt	Aa2	*(a)(b)*	AA-	AA *(b)*	AA (high)
Long-term deposits	Aa1		AA-	AA+	AA (high)
Short-term deposits	P1		A-1+	F1+	R-1 (high)
Outlook – Banks	*(a)*		Stable	Stable	Stable

(a) Ratings under review.
(b) Represents senior debt issuer default rating.
NR – Not rated.

During the third quarter of 2023, Moody's Investor Service ("Moody's") placed the long-term issuer ratings, debt ratings, counterparty risk ratings and counterparty risk assessments of the Parent and our rated subsidiaries on review for downgrade. Moody's also affirmed all Prime-1 short-term ratings of the Parent and rated subsidiaries as well as the long-term deposit ratings for The Bank of New York Mellon and BNY Mellon, N.A.

Long-term debt totaled $29.2 billion at Sept. 30, 2023 and $30.5 billion at Dec. 31, 2022. Maturities and repurchases totaling $5.5 billion and a decrease in the fair value of hedged long-term debt were partially offset by issuances of $4.5 billion. Long-term debt of $600 million will mature in the remainder of 2023.

In October, the Parent issued $900 million of fixed to floating rate senior notes maturing in 2029. The annual fixed interest rate is 6.317% from issuance to, but excluding, Oct. 25, 2028, and then an annual interest rate of the compounded secured overnight financing rate ("SOFR") plus 159.8 basis points. The Parent also issued $1.1 billion of fixed to floating rate senior notes maturing in 2034. The annual fixed interest rate is 6.474% from issuance to, but excluding, Oct. 25, 2033, and then an annual interest rate of the compounded SOFR plus 184.5 basis points.

The Bank of New York Mellon may issue notes and certificates of deposit ("CDs"). At Sept. 30, 2023 and Dec. 31, 2022, $1.3 billion and $780 million, respectively, of notes were outstanding. At Sept. 30, 2023 and Dec. 31, 2022, $387 million and $122 million, respectively, of CDs were outstanding.

The Bank of New York Mellon also issues commercial paper that matures within 397 days from the date of issue and is not redeemable prior to maturity or subject to voluntary prepayment. There was no commercial paper outstanding at Sept. 30, 2023 and Dec. 31, 2022. The average commercial paper outstanding was $4 million for the first nine months of 2023 and $5 million for the first nine months of 2022.

Subsequent to Sept. 30, 2023, our U.S. bank subsidiaries could declare dividends to the Parent of approximately $2.2 billion, without the need for a regulatory waiver. In addition, at Sept. 30, 2023, nonbank subsidiaries of the Parent had liquid assets of approximately $4.4 billion. Restrictions on our ability to obtain funds from our subsidiaries are discussed in more detail in "Supervision and

Regulation – Capital Planning and Stress Testing – Payment of Dividends, Stock Repurchases and Other Capital Distributions" and in Note 19 of the Notes to Consolidated Financial Statements, both in our 2022 Annual Report.

Pershing LLC has one uncommitted line of credit in place for funding purposes that is guaranteed by the Parent for $300 million. Average borrowings under this line were less than $1 million in the third quarter of 2023. Pershing Limited, an indirect UK-based subsidiary of BNY Mellon, has two separate uncommitted lines of credit amounting to $256 million in aggregate. Average borrowings under these lines were $15 million in the third quarter of 2023.

The double leverage ratio is the ratio of our equity investment in subsidiaries divided by our consolidated Parent company equity, which includes our noncumulative perpetual preferred stock. In short, the double leverage ratio measures the extent to which equity in subsidiaries is financed by Parent company debt. As the double leverage ratio increases, this can reflect greater demands on a company's cash flows in order to service interest payments and debt maturities. BNY Mellon's double leverage ratio is managed in a range considering the high level of unencumbered available liquid assets held in its principal subsidiaries (such as central bank deposit placements and government securities), the Company's cash generating fee-based business model, with fee revenue representing 74% of total revenue in the third quarter of 2023, and the dividend capacity of our banking subsidiaries. Our double leverage ratio was 118.7% at Sept. 30, 2023 and 120.5% at Dec. 31, 2022, and within the range targeted by management.

Uses of funds

The Parent's major uses of funds are repurchases of common stock, payment of dividends, principal and interest payments on its borrowings, acquisitions and additional investments in its subsidiaries.

In August 2023, a quarterly dividend of $0.42 per common share was paid to common shareholders. Our common stock dividend payout ratio was 35% for the third quarter of 2023.

In the third quarter of 2023, we repurchased 10.0 million common shares at an average price of $45.03 per common share, for a total cost of $450 million.

Liquidity coverage ratio ("LCR")

U.S. regulators have established an LCR that requires certain banking organizations, including BNY Mellon, to maintain a minimum amount of unencumbered high-quality liquid assets ("HQLA") sufficient to withstand the net cash outflow under a hypothetical standardized acute liquidity stress scenario for a 30-day time horizon.

The following table presents BNY Mellon's consolidated HQLA, and the average HQLA and average LCR.

Consolidated HQLA and LCR *(dollars in billions)*	**Sept. 30, 2023**	June 30, 2023
Cash *(a)*	**$ 107**	$ 118
Securities *(b)*	**70**	93
Total consolidated HQLA *(c)*	**$ 177**	$ 211
Total consolidated HQLA – average *(c)*	**$ 180**	$ 198
Average consolidated LCR	**121 %**	120 %

(a) Primarily includes cash on deposit with central banks.

(b) Primarily includes securities of U.S. government-sponsored enterprises, the U.S. Treasury, sovereigns and U.S. agencies.

(c) Consolidated HQLA presented before adjustments. After haircuts and the impact of trapped liquidity, consolidated HQLA totaled $140 billion at Sept. 30, 2023 and $151 billion at June 30, 2023, and averaged $129 billion for the third quarter of 2023 and $141 billion for the second quarter of 2023.

BNY Mellon and each of our affected domestic bank subsidiaries were compliant with the U.S. LCR requirements of at least 100% throughout the third quarter of 2023.

Net stable funding ratio ("NSFR")

The NSFR is a liquidity requirement applicable to large U.S. banking organizations, including BNY Mellon. The NSFR is expressed as a ratio of the available stable funding to the required stable funding amount over a one-year horizon. Our average consolidated NSFR was 136% for the third quarter of 2023 and 136% for the second quarter of 2023.

BNY Mellon and each of our affected domestic bank subsidiaries were compliant with the NSFR requirement of at least 100% throughout the third quarter of 2023.

Statement of cash flows

The following summarizes the activity reflected on the consolidated statement of cash flows. While this information may be helpful to highlight certain macro trends and business strategies, the cash flow analysis may not be as relevant when analyzing changes in our net earnings and net assets. We believe that in addition to the traditional cash flow analysis, the discussion related to liquidity and dividends and asset/liability management herein may provide more useful context in evaluating our liquidity position and related activity.

Net cash provided by operating activities was $8.0 billion in the nine months ended Sept. 30, 2023, compared with $12.1 billion in the nine months ended Sept. 30, 2022. In the nine months ended Sept. 30, 2023, cash flows provided by operations primarily resulted from earnings and changes in accruals and other, net. In the nine months ended Sept. 30, 2022, cash flows provided by operations primarily resulted from changes in trading assets and liabilities and earnings.

Net cash used for investing activities was $4.5 billion in the nine months ended Sept. 30, 2023, compared with $5.3 billion in the nine months ended Sept. 30, 2022. In the nine months ended Sept. 30, 2023, net cash used for investing activities primarily resulted from changes in interest-bearing deposits with the Federal Reserve and other central banks and changes in federal funds sold and securities purchased under resale agreements, partially offset by changes in investment securities. In the nine months ended Sept. 30, 2022, net cash used for investing activities primarily resulted from changes in interest-bearing deposits with the Federal Reserve and other central banks, partially offset by changes in federal funds sold and securities purchased under resale agreements.

Net cash used for financing activities was $7.3 billion in the nine months ended Sept. 30, 2023, compared with $7.5 billion in the nine months ended Sept. 30, 2022. In the nine months ended Sept. 30, 2023, net cash used for financing activities primarily resulted from changes in payables to customers and broker-dealers and repayments, redemptions and repurchases of long-term debt, partially offset by the net proceeds from the issuance of long-term debt. In the nine months ended Sept. 30, 2022, net cash used for financing activities primarily resulted from changes in deposits, repayments of long-term debt and changes in payables to customers and broker-dealers, partially offset by proceeds from the issuance of long-term debt.

Capital

Capital data *(dollars in millions, except per share amounts; common shares in thousands)*	**Sept. 30, 2023**	June 30, 2023	Dec. 31, 2022
BNY Mellon shareholders' equity to total assets ratio	**10.1 %**	9.5 %	10.0 %
BNY Mellon common shareholders' equity to total assets ratio	**8.9 %**	8.4 %	8.8 %
Total BNY Mellon shareholders' equity	**$ 40,966**	$ 40,933	$ 40,734
Total BNY Mellon common shareholders' equity	**$ 36,128**	$ 36,095	$ 35,896
BNY Mellon tangible common shareholders' equity – Non-GAAP *(a)*	**$ 18,964**	$ 18,821	$ 18,686
Book value per common share	**$ 46.98**	$ 46.35	$ 44.40
Tangible book value per common share – Non-GAAP *(a)*	**$ 24.66**	$ 24.17	$ 23.11
Closing stock price per common share	**$ 42.65**	$ 44.52	$ 45.52
Market capitalization	**$ 32,801**	$ 34,671	$ 36,800
Common shares outstanding	**769,073**	778,782	808,445
Cash dividends per common share	**$ 0.42**	$ 0.37	$ 0.37
Common dividend payout ratio	**35 %**	29 %	60 %
Common dividend yield *(annualized)*	**3.9 %**	3.3 %	3.2 %

(a) See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 43 for a reconciliation of GAAP to Non-GAAP measures.

The Bank of New York Mellon Corporation total shareholders' equity increased to $41.0 billion at Sept. 30, 2023 from $40.7 billion at Dec. 31, 2022. The increase primarily reflects earnings, partially offset by common stock repurchase activity and dividends.

The unrealized loss (after-tax) on our available-for-sale securities portfolio, net of hedges, included in accumulated other comprehensive income was $2.3 billion at Sept. 30, 2023, compared with $2.4 billion at Dec. 31, 2022. Net unrealized loss, including the impact of hedges, decreased as securities moved closer to maturity, partially offset by the impact of higher interest rates.

In the first nine months of 2023, we repurchased 45.8 million common shares at an average price of $47.06 per common share for a total of $2.2 billion.

In January 2023, we announced a share repurchase program approved by our Board of Directors providing for the repurchase of up to $5.0 billion of common shares beginning Jan. 1, 2023. This new share repurchase plan replaced all previously authorized share repurchase plans.

In July 2023, our Board of Directors approved a 14% increase in the quarterly cash dividend on common stock, from $0.34 to $0.42 per share. The increased quarterly cash dividend was paid on Aug. 10, 2023.

Capital adequacy

Regulators establish certain levels of capital for bank holding companies ("BHCs") and banks, including BNY Mellon and our bank subsidiaries, in accordance with established quantitative measurements. For the Parent to maintain its status as a financial holding company, our U.S. bank subsidiaries and BNY Mellon must, among other things, qualify as "well capitalized." As of Sept. 30, 2023 and Dec. 31, 2022, BNY Mellon and our U.S. bank subsidiaries were "well capitalized." Failure to satisfy regulatory standards, including "well capitalized" status or capital adequacy rules more generally, could result in limitations on our activities and adversely affect our financial condition. See the discussion of these matters in "Supervision and Regulation – Regulated Entities of BNY Mellon and Ancillary Regulatory Requirements" and "Risk Factors – Capital and Liquidity Risk – Failure to satisfy regulatory standards, including "well capitalized" and "well managed" status or capital adequacy and liquidity rules more generally, could result in limitations on our activities and adversely affect our business and financial condition," both of which are in our 2022 Annual Report.

The U.S. banking agencies' capital rules are based on the framework adopted by the Basel Committee on Banking Supervision, as amended from time to time. For additional information on these capital requirements, see "Supervision and Regulation" in our 2022 Annual Report.

The table below presents our consolidated and largest bank subsidiary regulatory capital ratios.

Consolidated and largest bank subsidiary regulatory capital ratios	Sept. 30, 2023			June 30, 2023	Dec. 31, 2022
	Well capitalized	Minimum required *(a)*	Capital ratios	Capital ratios	Capital ratios
Consolidated regulatory capital ratios: *(b)*					
Advanced Approaches:					
CET1 ratio	N/A *(c)*	8.5 %	**11.4 %**	11.1 %	11.2 %
Tier 1 capital ratio	6 %	10	**14.4**	14.0	14.1
Total capital ratio	10	12	**15.2**	14.8	14.9
Standardized Approach:					
CET1 ratio	N/A *(c)*	8.5 %	**11.9 %**	11.8 %	11.3 %
Tier 1 capital ratio	6 %	10	**15.1**	15.0	14.4
Total capital ratio	10	12	**16.1**	16.0	15.3
Tier 1 leverage ratio	N/A *(c)*	4	**6.1**	5.7	5.8
SLR *(d)*	N/A *(c)*	5	**7.2**	7.0	6.8
The Bank of New York Mellon regulatory capital ratios: *(b)*					
Advanced Approaches:					
CET1 ratio	6.5 %	7 %	**15.8 %**	15.6 %	15.6 %
Tier 1 capital ratio	8	8.5	**15.8**	15.6	15.6
Total capital ratio	10	10.5	**15.9**	15.7	15.7
Tier 1 leverage ratio	5	4	**6.6**	6.2	6.2
SLR *(d)*	6	3	**8.3**	8.2	7.7

(a) Minimum requirements for Sept. 30, 2023 include minimum thresholds plus currently applicable buffers. The U.S. global systemically important banks ("G-SIB") surcharge is 1.5%. The countercyclical capital buffer is currently set to 0%. The stress capital buffer ("SCB") requirement is 2.5%, equal to the regulatory minimum for Standardized Approach capital ratios.

(b) For our CET1, Tier 1 capital and Total capital ratios, our effective capital ratios under U.S. capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches. The Tier 1 leverage ratio is based on Tier 1 capital and quarterly average total assets.

(c) The Federal Reserve's regulations do not establish well capitalized thresholds for these measures for BHCs.

(d) The SLR is based on Tier 1 capital and total leverage exposure, which includes certain off-balance sheet exposures.

N/A – Not applicable.

Our CET1 ratio under the Advanced Approaches was 11.4% at Sept. 30, 2023 and 11.2% at Dec. 31, 2022. The increase was primarily driven by capital generated through earnings and lower RWAs, partially offset by capital deployed through common stock repurchases and dividends.

The Tier 1 leverage ratio was 6.1% at Sept. 30, 2023 and 5.8% at Dec. 31, 2022. The increase primarily reflects lower average assets.

Risk-based capital ratios vary depending on the size of the balance sheet at period end and the levels and types of investments in assets, and leverage ratios vary based on the average size of the balance sheet over the quarter. The balance sheet size fluctuates from period to period based on levels of customer and market activity. In general, when servicing clients are more actively trading securities, deposit balances and the balance sheet as a whole are higher. In addition, when markets experience significant volatility or stress, our balance sheet size may increase considerably as client deposit levels increase.

Our capital ratios are necessarily subject to, among other things, anticipated compliance with all necessary enhancements to model calibration, approval by regulators of certain models used as part of RWA calculations, other refinements, further implementation guidance from regulators, market practices and standards and any changes BNY Mellon may make to its businesses. As a consequence of these factors, our capital ratios may materially change, and may be volatile over time and from period to period.

Under the Advanced Approaches, our operational loss risk model is informed by external losses, including fines and penalties levied against institutions in the financial services industry, particularly those that relate to businesses in which we operate, and as a result, external losses have impacted and could in the

future impact the amount of capital that we are required to hold.

The following table presents our capital components and RWAs.

Capital components and risk-weighted assets			
(in millions)	**Sept. 30, 2023**	June 30, 2023	Dec. 31, 2022
CET1:			
Common shareholders' equity	**$ 36,128**	$ 36,095	$ 35,896
Adjustments for:			
Goodwill and intangible assets *(a)*	**(17,164)**	(17,274)	(17,210)
Net pension fund assets	**(353)**	(350)	(317)
Embedded goodwill	**(273)**	(278)	(279)
Deferred tax assets	**(63)**	(58)	(56)
Other	**(11)**	(8)	(2)
Total CET1	**18,264**	18,127	18,032
Other Tier 1 capital:			
Preferred stock	**4,838**	4,838	4,838
Other	**(9)**	(8)	(14)
Total Tier 1 capital	**$ 23,093**	$ 22,957	$ 22,856
Tier 2 capital:			
Subordinated debt	**$ 1,248**	$ 1,248	$ 1,248
Allowance for credit losses	**325**	323	291
Other	**(6)**	(6)	(11)
Total Tier 2 capital – Standardized Approach	**1,567**	1,565	1,528
Excess of expected credit losses	**78**	61	50
Less: Allowance for credit losses	**325**	323	291
Total Tier 2 capital – Advanced Approaches	**$ 1,320**	$ 1,303	$ 1,287
Total capital:			
Standardized Approach	**$ 24,660**	$ 24,522	$ 24,384
Advanced Approaches	**$ 24,413**	$ 24,260	$ 24,143
Risk-weighted assets:			
Standardized Approach	**$ 153,363**	$ 153,359	$ 159,096
Advanced Approaches:			
Credit Risk	**$ 86,836**	$ 89,894	$ 90,243
Market Risk	**3,072**	2,629	2,979
Operational Risk	**70,550**	71,013	68,450
Total Advanced Approaches	**$ 160,458**	$ 163,536	$ 161,672
Average assets for Tier 1 leverage ratio	**$ 379,630**	$ 403,206	$ 396,643
Total leverage exposure for SLR	**$ 318,865**	$ 326,215	$ 336,049

(a) Reduced by deferred tax liabilities associated with intangible assets and tax-deductible goodwill.

The table below presents the factors that impacted CET1 capital.

CET1 generation	
(in millions)	**3Q23**
CET1 – Beginning of period	**$ 18,127**
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	**956**
Goodwill and intangible assets, net of related deferred tax liabilities	**110**
Gross CET1 generated	**1,066**
Capital deployed:	
Common stock repurchases	**(450)**
Common stock dividends *(a)*	**(333)**
Total capital deployed	**(783)**
Other comprehensive gain (loss):	
Unrealized (loss) on assets available-for-sale	**(15)**
Foreign currency translation	**(185)**
Defined benefit plans	**(3)**
Total other comprehensive (loss)	**(203)**
Additional paid-in capital *(b)*	**67**
Other additions (deductions):	
Net pension fund assets	**(3)**
Embedded goodwill	**5**
Deferred tax assets	**(5)**
Other	**(7)**
Total other (deductions)	**(10)**
Net CET1 generated	**137**
CET1 – End of period	**$ 18,264**

(a) Includes dividend equivalents on share-based awards.
(b) Primarily related to stock awards and stock issued for employee benefit plans.

The following table shows the impact on the consolidated capital ratios at Sept. 30, 2023 of a $100 million increase or decrease in common equity, or a $1 billion increase or decrease in RWAs, quarterly average assets or total leverage exposure.

Sensitivity of consolidated capital ratios at Sept. 30, 2023		
	Increase or decrease of	
(in basis points)	$100 million in common equity	$1 billion in RWA, quarterly average assets or total leverage exposure
CET1:		
Standardized Approach	7 bps	8 bps
Advanced Approaches	6	7
Tier 1 capital:		
Standardized Approach	7	10
Advanced Approaches	6	9
Total capital:		
Standardized Approach	7	11
Advanced Approaches	6	10
Tier 1 leverage	3	2
SLR	3	2

Stress capital buffer

In July 2023, the Federal Reserve announced that BNY Mellon's SCB requirement would remain at 2.5%, equal to the regulatory floor, for the period from Oct. 1, 2023 through Sept. 30, 2024. The SCB replaced the static 2.5% capital conservation buffer for Standardized Approach capital ratios for CCAR BHCs. The SCB does not apply to bank subsidiaries, which remain subject to the static 2.5% capital conservation buffer. See "Supervision and Regulation" in our 2022 Annual Report for additional information.

The SCB final rule generally eliminates the requirement for prior approval of common stock repurchases in excess of the distributions in a firm's capital plan, provided that such distributions are consistent with applicable capital requirements and buffers, including the SCB.

Total Loss-Absorbing Capacity ("TLAC")

The following summarizes the minimum requirements for BNY Mellon's external TLAC and external long-term debt ("LTD") ratios, plus currently applicable buffers.

	As a % of RWAs *(a)*	**As a % of total leverage exposure**
Eligible external TLAC ratios	Regulatory minimum of 18% plus a buffer *(b)* equal to the sum of 2.5%, the method 1 G-SIB surcharge (currently 1%), and the countercyclical capital buffer, if any	Regulatory minimum of 7.5% plus a buffer *(c)* equal to 2%
Eligible external LTD ratios	Regulatory minimum of 6% plus the greater of the method 1 or method 2 G-SIB surcharge (currently 1.5%)	4.5%

(a) RWA is the greater of Standardized Approach and Advanced Approaches.
(b) Buffer to be met using only CET1.
(c) Buffer to be met using only Tier 1 capital.

External TLAC consists of the Parent's Tier 1 capital and eligible unsecured LTD issued by it that has a remaining term to maturity of at least one year and satisfies certain other conditions. Eligible LTD consists of the unpaid principal balance of eligible unsecured debt securities, subject to haircuts for amounts due to be paid within two years, that satisfy certain other conditions. Debt issued prior to Dec. 31, 2016 has been permanently grandfathered to the extent these instruments otherwise would be ineligible only due to containing impermissible acceleration rights or being governed by foreign law.

The following table presents our external TLAC and external LTD ratios.

TLAC and LTD ratios	**Sept. 30, 2023**		
	Minimum required	Minimum ratios with buffers	Ratios
Eligible external TLAC:			
As a percentage of RWA	18.0 %	21.5 %	30.6 %
As a percentage of total leverage exposure	7.5 %	9.5 %	15.4 %
Eligible external LTD:			
As a percentage of RWA	7.5 %	N/A	14.6 %
As a percentage of total leverage exposure	4.5 %	N/A	7.3 %

N/A – Not applicable.

If BNY Mellon maintains risk-based ratio or leverage TLAC measures above the minimum required level, but with a risk-based ratio or leverage below the minimum level with buffers, we will face constraints on dividends, equity repurchases and discretionary executive compensation based on the amount of the shortfall and eligible retained income.

Trading activities and risk management

Our trading activities are focused on acting as a market-maker for our customers, facilitating customer trades and risk-mitigating hedging in compliance with the Volcker Rule. The risk from market-making activities for customers is managed by our traders and limited in total exposure through a system of position limits, value-at-risk ("VaR") methodology and other market sensitivity measures. VaR is the potential loss in value due to adverse market movements over a defined time horizon with a specified confidence level. The calculation of our VaR used by management and presented below assumes a one-day holding period, utilizes a 99% confidence level and incorporates non-linear product characteristics. VaR facilitates comparisons across portfolios of different risk characteristics. VaR also captures the diversification of aggregated risk at the firm-wide level.

VaR represents a key risk management measure, and it is important to note the inherent limitations to VaR, which include:

- VaR does not estimate potential losses over longer time horizons where moves may be extreme;
- VaR does not take into account the potential variability of market liquidity; and
- Previous moves in market risk factors may not produce accurate predictions of all future market moves.

See Note 17 of the Notes to Consolidated Financial Statements for additional information on the VaR methodology.

The following tables indicate the calculated VaR amounts for the trading portfolio for the designated periods using the historical simulation VaR model.

VaR *(a)*	**3Q23**			**Sept. 30, 2023**
(in millions)	**Average**	**Minimum**	**Maximum**	
Interest rate	**$ 2.6**	**$ 1.9**	**$ 4.6**	**$ 2.4**
Foreign exchange	**2.5**	**2.0**	**3.2**	**2.1**
Equity	**0.1**	**—**	**0.3**	**0.2**
Credit	**1.2**	**0.9**	**1.7**	**1.3**
Diversification	**(4.3)**	**N/M**	**N/M**	**(4.1)**
Overall portfolio	**2.1**	**1.3**	**3.2**	**1.9**

VaR *(a)*	2Q23			June 30, 2023
(in millions)	Average	Minimum	Maximum	
Interest rate	$ 3.1	$ 2.0	$ 5.1	$ 2.6
Foreign exchange	3.0	2.0	4.5	2.3
Equity	0.1	—	0.3	0.1
Credit	1.4	1.0	2.0	1.3
Diversification	(4.6)	N/M	N/M	(4.0)
Overall portfolio	3.0	1.8	4.9	2.3

VaR *(a)*	3Q22			Sept. 30, 2022
(in millions)	Average	Minimum	Maximum	
Interest rate	$ 4.1	$ 2.6	$ 7.5	$ 3.3
Foreign exchange	3.9	2.7	7.1	4.7
Equity	0.2	0.1	0.5	0.2
Credit	1.9	1.0	4.4	3.9
Diversification	(5.6)	N/M	N/M	(7.1)
Overall portfolio	4.5	2.5	7.7	5.0

VaR *(a)*	**YTD23**		
(in millions)	**Average**	**Minimum**	**Maximum**
Interest rate	**$ 3.2**	**$ 1.9**	**$ 7.6**
Foreign exchange	**3.0**	**2.0**	**5.7**
Equity	**0.1**	**—**	**0.3**
Credit	**1.4**	**0.7**	**3.5**
Diversification	**(4.7)**	**N/M**	**N/M**
Overall portfolio	**3.0**	**1.3**	**8.9**

VaR *(a)*	YTD22		
(in millions)	Average	Minimum	Maximum
Interest rate	$ 4.4	$ 1.6	$ 9.3
Foreign exchange	3.6	2.2	10.2
Equity	0.3	—	0.9
Credit	1.9	1.0	4.4
Diversification	(4.8)	N/M	N/M
Overall portfolio	5.4	2.5	11.4

(a) VaR exposure does not include the impact of the Company's consolidated investment management funds and seed capital investments.

N/M – Because the minimum and maximum may occur on different days for different risk components, it is not meaningful to compute a minimum and maximum portfolio diversification effect.

The interest rate component of VaR represents instruments whose values are predominantly driven by interest rate levels. These instruments include, but are not limited to, U.S. Treasury securities, swaps, swaptions, forward rate agreements, exchange-traded futures and options, and other interest rate derivative products.

The foreign exchange component of VaR represents instruments whose values predominantly vary with the level or volatility of currency exchange rates or interest rates. These instruments include, but are not limited to, currency balances, spot and forward transactions, currency options and other currency derivative products.

The equity component of VaR consists of instruments that represent an ownership interest in the form of domestic and foreign common stock or other equity-linked instruments. These instruments include, but are not limited to, common stock, exchange-traded funds, preferred stock, listed equity options (puts and calls), OTC equity options, equity total return swaps, equity index futures and other equity derivative products.

The credit component of VaR represents instruments whose values are predominantly driven by credit spread levels, i.e., idiosyncratic default risk. These instruments include, but are not limited to, single issuer credit default swaps, and securities with exposures from corporate and municipal credit spreads.

The diversification component of VaR is the risk reduction benefit that occurs when combining portfolios and offsetting positions, and from the correlated behavior of risk factor movements.

During the third quarter of 2023, interest rate risk generated 41% of average gross VaR, foreign exchange risk generated 39% of average gross VaR, equity risk generated 1% of average gross VaR and credit risk generated 19% of average gross VaR. During the third quarter of 2023, our daily trading loss did not exceed our calculated VaR amount of the overall portfolio.

The following table of total daily trading revenue or loss illustrates the number of trading days in which our trading revenue or loss fell within particular ranges during the past five quarters.

Distribution of trading revenue (loss) *(a)*

	Quarter ended				
(dollars in millions)	**Sept. 30, 2023**	June 30, 2023	March 31, 2023	Dec. 31, 2022	Sept. 30, 2022
Revenue range:	Number of days				
Less than $(2.5)	**—**	—	—	2	—
$(2.5) – $0	**5**	2	1	4	3
$0 – $2.5	**14**	15	20	13	10
$2.5 – $5.0	**24**	37	26	24	32
More than $5.0	**20**	9	15	20	19

(a) Trading revenue (loss) includes realized and unrealized gains and losses primarily related to spot and forward foreign exchange transactions, derivatives and securities trades for our customers and excludes any associated commissions, underwriting fees and net interest revenue.

Trading assets include debt and equity instruments and derivative assets, primarily foreign exchange and interest rate contracts, not designated as hedging instruments. Trading assets were $10.7 billion at Sept. 30, 2023 and $9.9 billion at Dec. 31, 2022.

Trading liabilities include debt and equity instruments and derivative liabilities, primarily foreign exchange and interest rate contracts, not designated as hedging instruments. Trading liabilities were $7.4 billion at Sept. 30, 2023 and $5.4 billion at Dec. 31, 2022.

Under our fair value methodology for derivative contracts, an initial "risk-neutral" valuation is performed on each position assuming time discounting based on a AA credit curve. In addition, we consider credit risk in arriving at the fair value of our derivatives.

We reflect external credit ratings as well as observable credit default swap spreads for both ourselves and our counterparties when measuring the fair value of our derivative positions. Accordingly, the valuation of our derivative positions is sensitive to the current changes in our own credit spreads, as well as those of our counterparties.

At Sept. 30, 2023, our OTC derivative assets, including those in hedging relationships, of $2.7 billion included a credit valuation adjustment ("CVA") deduction of $12 million. Our OTC derivative liabilities, including those in hedging relationships, of $3.2 billion included a debit valuation adjustment ("DVA") of $8 million related to our own credit spread. Net of hedges, the CVA decreased by less than $1 million and the DVA increased by less than $1 million in the third quarter of 2023, which increased investment and other revenue – other trading revenue by less than $1 million. The net impact decreased investment and other revenue – other trading revenue by less than $1 million in the second quarter of 2023 and increased investment and other revenue – other trading revenue by $3 million in the third quarter of 2022.

The table below summarizes our exposure, net of collateral related to our derivative counterparties, as determined on an internal risk management basis. Significant changes in counterparty credit ratings could alter the level of credit risk faced by BNY Mellon.

Foreign exchange and other trading counterparty risk-rating profile

	Sept. 30, 2023		Dec. 31, 2022	
(dollars in millions)	Exposure, net of collateral	Percentage of exposure, net of collateral	Exposure, net of collateral	Percentage of exposure, net of collateral
Investment grade	**$ 2,056**	**96 %**	$ 2,553	98 %
Non-investment grade	**82**	**4 %**	63	2 %
Total	**$ 2,138**	**100 %**	$ 2,616	100 %

Asset/liability management

Our diversified business activities include processing securities, accepting deposits, investing in securities, lending, raising money as needed to fund assets and other transactions. The market risks from these activities include interest rate risk and foreign exchange risk. Our primary market risk is exposure to movements in U.S. dollar interest rates and certain foreign currency interest rates. We actively manage interest rate sensitivity and use earnings simulation and discounted cash flow models to identify interest rate exposures.

An earnings simulation model is the primary tool used to assess changes in pre-tax net interest revenue between a baseline scenario and hypothetical interest rate scenarios. Interest rate sensitivity is quantified by calculating the change in pre-tax net interest revenue between the scenarios over a 12-month measurement period.

The baseline scenario incorporates the market's forward rate expectations and management's assumptions regarding client deposit rates, credit spreads, changes in the prepayment behavior of loans and securities and the impact of derivative financial instruments used for interest rate risk management purposes as of each respective quarter-end. These assumptions have been developed through a combination of historical analysis and future expected pricing behavior and are inherently uncertain. Actual results may differ materially from projected results due to timing, magnitude and frequency of interest rate changes, and changes in market conditions and management's strategies, among other factors. Client deposit levels and mix are key assumptions impacting net interest revenue in the baseline as well as the hypothetical interest rate scenarios. The earnings simulation model assumes static deposit levels and mix, and it also assumes that no management actions will be taken to mitigate the effects of interest rate changes. Typically, the baseline scenario uses the average deposit balances of the quarter.

In the table below, we use the earnings simulation model to assess the impact of various hypothetical interest rate scenarios compared to the baseline scenario. In each of the scenarios, all currencies' interest rates are instantaneously shifted higher or lower at the start of the forecast. Long-term interest rates are defined as all tenors equal to or greater than three years and short-term interest rates are defined as all tenors equal to or less than three months. Interim term points are interpolated where applicable. The impact of interest rate shifts may not be linear. The results of this earnings simulation should therefore not be extrapolated for more severe interest rate scenarios than those presented in the table below.

The following table shows net interest revenue sensitivity for BNY Mellon.

Estimated changes in net interest revenue *(in millions)*	**Sept. 30, 2023**	June 30, 2023	Sept. 30, 2022
Up 100 bps rate shock vs. baseline	**$ 166**	$ 324	$ 267
Long-term up 100 bps, short-term unchanged	**13**	7	(17)
Short-term up 100 bps, long-term unchanged	**153**	317	283
Long-term down 100 bps, short-term unchanged *(a)*	**(14)**	(13)	14
Short-term down 100 bps, long-term unchanged	**(214)**	(346)	(408)
Down 100 bps rate shock vs. baseline	**(228)**	(358)	(394)

(a) Prior periods have been updated to reflect the impact of a 100 basis point decrease in long-term rates while short-term rates were unchanged.

At Sept. 30, 2023, the impact of a 100 bps upward shift in rates on net interest revenue decreased compared with June 30, 2023. The primary driver is lower deposit balances in the most recent quarter, which reduce the benefit of rising interest rates.

While the net interest revenue sensitivity scenario calculations assume static deposit balances to facilitate consistent period-over-period comparisons, net interest revenue is impacted by changes in deposit balances. Noninterest-bearing deposits are particularly sensitive to changes in short-term rates.

To illustrate the net interest revenue sensitivity to deposit run-off, we estimate that a $5 billion instantaneous reduction/increase in U.S. dollar-denominated noninterest-bearing deposits would reduce/increase the net interest revenue sensitivity results in the up 100 basis point scenario in the table above by approximately $320 million. The impact would be smaller if the run-off was assumed to be a mixture of interest-bearing and noninterest-bearing deposits.

Additionally, during periods of low short-term interest rates, money market mutual fund fees and other similar fees are typically waived to protect investors from negative returns. See "Fee and other revenue" in our 2022 Annual Report for additional details on money market fee waivers.

For a discussion of factors impacting the growth or contraction of deposits, see "Risk Factors – Capital and Liquidity Risk – Our business, financial condition and results of operations could be adversely affected if we do not effectively manage our liquidity" in our 2022 Annual Report.

Supplemental information – Explanation of GAAP and Non-GAAP financial measures

BNY Mellon has included in this Form 10-Q certain Non-GAAP financial measures on a tangible basis as a supplement to GAAP information, which exclude goodwill and intangible assets, net of deferred tax liabilities. We believe that the return on tangible common equity – Non-GAAP is additional useful information for investors because it presents a measure of those assets that can generate income, and the tangible book value per common share – Non-GAAP is additional useful information because it presents the level of tangible assets in relation to shares of common stock outstanding.

BNY Mellon has presented revenue measures excluding notable items, including disposal gains. Expense measures, excluding notable items, including goodwill impairment, severance expense and litigation reserves, are also presented. Litigation reserves represent accruals for loss contingencies that are both probable and reasonably estimable, but exclude standard business-related legal fees. Total revenue, noninterest expense, net income applicable to common shareholders of The Bank of New York Mellon Corporation, diluted earnings per share and the effective tax rate, excluding the notable items mentioned above, are also provided. These measures are provided to permit investors to view financial measures on a basis consistent with how management views the business.

The presentation of the growth rates of investment management and performance fees on a constant currency basis permits investors to assess the significance of changes in foreign currency exchange rates. Growth rates on a constant currency basis were determined by applying the current period foreign currency exchange rates to the prior period revenue. We believe that this presentation, as a supplement to GAAP information, gives investors a clearer picture of the related revenue results without the variability caused by fluctuations in foreign currency exchange rates.

BNY Mellon has also included the adjusted pre-tax operating margin – Non-GAAP, which is the pre-tax operating margin for the Investment and Wealth Management business segment, net of distribution and servicing expense that was passed to third parties who distribute or service our managed funds. We believe that this measure is useful when evaluating the performance of the Investment and Wealth Management business segment relative to industry competitors.

The following table presents the reconciliation of the return on common equity and tangible common equity.

Return on common equity and tangible common equity reconciliation *(dollars in millions)*	**3Q23**	2Q23	3Q22	**YTD23**	YTD22
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	**$ 956**	$ 1,031	$ 319	**$ 2,892**	$ 1,853
Add: Amortization of intangible assets	**15**	14	17	**43**	51
Less: Tax impact of amortization of intangible assets	**3**	4	4	**10**	12
Adjusted net income applicable to common shareholders of The Bank of New York Mellon Corporation, excluding amortization of intangible assets – Non-GAAP	**$ 968**	$ 1,041	$ 332	**$ 2,925**	$ 1,892
Average common shareholders' equity	**$ 35,983**	$ 35,769	$ 35,942	**$ 35,787**	$ 36,483
Less: Average goodwill	**16,237**	16,219	17,189	**16,206**	17,341
Average intangible assets	**2,875**	2,888	2,922	**2,887**	2,950
Add: Deferred tax liability – tax deductible goodwill	**1,197**	1,193	1,175	**1,197**	1,175
Deferred tax liability – intangible assets	**657**	660	660	**657**	660
Average tangible common shareholders' equity – Non-GAAP	**$ 18,725**	$ 18,515	$ 17,666	**$ 18,548**	$ 18,027
Return on common equity *(annualized)* – GAAP	**10.5 %**	11.6 %	3.5 %	**10.8 %**	6.8 %
Return on tangible common equity *(annualized)* – Non-GAAP	**20.5 %**	22.6 %	7.5 %	**21.1 %**	14.0 %

The following table presents the reconciliation of book value and tangible book value per common share.

Book value and tangible book value per common share reconciliation *(dollars in millions, except per share amounts and unless otherwise noted)*	**Sept. 30, 2023**	June 30, 2023	Dec. 31, 2022	Sept. 30, 2022
BNY Mellon shareholders' equity at period end – GAAP	**$ 40,966**	$ 40,933	$ 40,734	$ 39,737
Less: Preferred stock	**4,838**	4,838	4,838	4,838
BNY Mellon common shareholders' equity at period end – GAAP	**36,128**	36,095	35,896	34,899
Less: Goodwill	**16,159**	16,246	16,150	16,412
Intangible assets	**2,859**	2,881	2,901	2,902
Add: Deferred tax liability – tax deductible goodwill	**1,197**	1,193	1,181	1,175
Deferred tax liability – intangible assets	**657**	660	660	660
BNY Mellon tangible common shareholders' equity at period end – Non-GAAP	**$ 18,964**	$ 18,821	$ 18,686	$ 17,420
Period-end common shares outstanding *(in thousands)*	**769,073**	778,782	808,445	808,280
Book value per common share – GAAP	**$ 46.98**	$ 46.35	$ 44.40	$ 43.18
Tangible book value per common share – Non-GAAP	**$ 24.66**	$ 24.17	$ 23.11	$ 21.55

The following table presents the reconciliation of growth in total revenue, noninterest expense, net income applicable to common shareholders and diluted earnings per common share.

Reconciliation of Non-GAAP measures, excluding notable items *(dollars in millions, except per share amounts)*	**3Q23**	3Q22	**3Q23 vs. 3Q22**	**YTD23**	YTD22	**YTD23 vs. YTD22**
Total revenue – GAAP	**$ 4,374**	$ 4,279	**2 %**			
Less: Disposal gain (reflected in investment and other revenue)	**2**	37				
Adjusted total revenue – Non-GAAP	**$ 4,372**	$ 4,242	**3 %**			
Noninterest expense – GAAP	**$ 3,089**	$ 3,679	**(16)%**	**$ 9,300**	$ 9,797	**(5)%**
Less: Severance	**41**	32		67	32	
Litigation reserves	**5**	2		46	105	
Goodwill impairment	**—**	680		—	680	
Adjusted noninterest expense – Non-GAAP	**$ 3,043**	$ 2,965	**3 %**	**$ 9,187**	$ 8,980	**2 %**
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	**$ 956**	$ 319	**200 %**			
Less: Disposal gain (reflected in investment and other revenue)	**—**	28				
Less: Severance	**(32)**	(25)				
Litigation reserves	**(4)**	(2)				
Goodwill impairment	**—**	(665)				
Adjusted net income applicable to common shareholders of The Bank of New York Mellon Corporation – Non-GAAP	**$ 992**	$ 983	**1 %**			
Diluted earnings per common share	**$ 1.22**	$ 0.39	**213 %**			
Less: Disposal gain (loss) (reflected in investment and other revenue)	**—**	0.03				
Less: Severance	**(0.04)**	(0.03)				
Litigation reserves	**(0.01)**	—				
Goodwill impairment	**—**	(0.82)				
Total diluted earnings per share common share impact of notable items	**(0.05)**	(0.81) *(a)*				
Adjusted diluted earnings per common share – Non-GAAP	**$ 1.27**	$ 1.21	**5 %**			

(a) Does not foot due to rounding.

The following table presents the reconciliation of the effective tax rate.

Effective tax rate reconciliation	
(dollars in millions)	**3Q22**
Provision for income taxes – GAAP	**$ 242**
Less: Disposal gain (reflected in investment and other revenue)	**9**
Less: Severance	**(7)**
Litigation reserves	**—**
Goodwill impairment	**(15)**
Adjusted provision for income taxes – Non-GAAP	**$ 255**
Income before taxes – GAAP	**$ 630**
Less: Disposal gain (reflected in investment and other revenue)	**37**
Less: Severance	**(32)**
Litigation reserves	**(2)**
Goodwill impairment	**(680)**
Adjusted income before taxes – Non-GAAP	**$ 1,307**
Effective tax rate – GAAP	**38.4 %**
Adjusted effective tax rate – Non-GAAP	**19.5 %**

The following table presents the impact of changes in foreign currency exchange rates on our consolidated investment management and performance fees.

Constant currency reconciliation – Consolidated			**3Q23 vs.**
(dollars in millions)	**3Q23**	3Q22	**3Q22**
Investment management and performance fees – GAAP	**$ 777**	$ 800	**(3)%**
Impact of changes in foreign currency exchange rates	**—**	15	
Adjusted investment management and performance fees – Non-GAAP	**$ 777**	$ 815	**(5)%**

The following table presents the impact of changes in foreign currency exchange rates on investment management and performance fees reported in the Investment and Wealth Management business segment.

Constant currency reconciliation – Investment and Wealth Management business segment			**3Q23 vs.**
(dollars in millions)	**3Q23**	3Q22	**3Q22**
Investment management and performance fees – GAAP	**$ 776**	$ 798	**(3)%**
Impact of changes in foreign currency exchange rates	**—**	15	
Adjusted investment management and performance fees – Non-GAAP	**$ 776**	$ 813	**(5)%**

The following tables present the reconciliations of noninterest expense, income before income taxes and the pre-tax operating margin for the Investment and Wealth Management business segment.

Reconciliation of Non-GAAP measures – Investment and Wealth Management business segment					
(dollars in millions)	**3Q23**	3Q22	**3Q23 vs. 3Q22**	YTD22	
Noninterest expense – GAAP	**$ 672**	$ 1,356		$ 2,802	
Less: Severance	**5**	(1)		(1)	
Goodwill impairment	**—**	680		680	
Adjusted noninterest expense – Non-GAAP	**$ 667**	$ 677		$ 2,123	
Income (loss) before income taxes – GAAP	**$ 164**	$ (497)	**N/M**	$ (77)	
Less: Severance	**(5)**	1		1	
Goodwill impairment	**—**	(680)		(680)	
Adjusted income before income taxes – Non-GAAP	**$ 169**	$ 182	**(7)%**	$ 602	
Total revenue – GAAP		$ 862		$ 2,725	
Less: Distribution and servicing expense		88		258	
Adjusted total revenue, net of distribution and servicing expense – Non-GAAP		$ 774		$ 2,467	
Pre-tax operating margin – GAAP *(a)*		(57)%		(3)%	
Adjusted pre-tax operating margin, net of distribution and servicing expense – Non-GAAP *(a)*		(64)%		(3)%	
Adjusted pre-tax operating margin, net of distribution and servicing expense and excluding notable items – Non-GAAP *(a)*		24 %		24 %	

(a) Income before income taxes divided by total revenue.

Pre-tax operating margin reconciliation – Investment and Wealth Management business segment					
(dollars in millions)	**3Q23**	2Q23	1Q23	4Q22	**YTD23**
Income before income taxes – GAAP	**$ 164**	$ 129	$ 93	$ 125	**$ 386**
Total revenue – GAAP	**$ 827**	$ 813	$ 827	$ 825	**$ 2,467**
Less: Distribution and servicing expense	**87**	93	86	87	**266**
Adjusted total revenue, net of distribution and servicing expense – Non-GAAP	**$ 740**	$ 720	$ 741	$ 738	**$ 2,201**
Pre-tax operating margin – GAAP *(a)*	**20 %**	16 %	11 %	15 %	**16 %**
Adjusted pre-tax operating margin, net of distribution and servicing expense – Non-GAAP *(a)*	**22 %**	18 %	13 %	17 %	**18 %**

(a) Income before income taxes divided by total revenue.

Recent accounting and regulatory developments

Recent accounting developments

The following accounting guidance issued by the Financial Accounting Standards Board ("FASB") has not yet been adopted as of Sept. 30, 2023.

Accounting Standards Update ("ASU") 2023-02, Investments—Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method

In March 2023, the FASB issued ASU 2023-02, *Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method*, which permits reporting entities to elect to account for their tax equity investments, regardless of the tax credit program from which the income tax credits are received, using the proportional amortization method if certain conditions are met. Under the proportional amortization method, an entity amortizes the initial cost of the investment in proportion to the income tax credits and other income tax benefits received, and recognizes the net amortization and income tax credits and other income tax benefits in the income statement as a component of the provision for income taxes.

This ASU is effective Jan. 1, 2024 with early adoption permitted. BNY Mellon is currently evaluating this guidance with respect to our investments in renewable energy projects, which historically have not been eligible to apply the proportional amortization method. These investments currently generate losses in investment and other revenue that are more than offset by benefits and credits recorded to the provision for income taxes. The impact of adopting this new guidance for our renewable energy investments that meet the eligibility criteria would be an increase in investment and other revenue and an increase in the provision for income taxes on the consolidated income statement.

Recent regulatory and other developments

For a summary of additional regulatory matters relevant to our operations, see "Recent regulatory developments" in our Form 10-Q for the quarters ended March 31, 2023 and June 30, 2023, and "Supervision and Regulation" in our 2022 Annual Report. The following discussion summarizes certain regulatory, legislative and other developments that may affect BNY Mellon.

Federal Deposit Insurance Corporation ("FDIC") Special Assessment

On May 11, 2023, the FDIC proposed a rule to impose a special assessment on insured depository institutions ("IDIs") to recover losses to the Deposit Insurance Fund ("DIF") associated with the closures of Silicon Valley Bank and Signature Bank. Under the proposal, the FDIC would collect from each IDI a special assessment at an annual rate of approximately 12.5 basis points of the IDI's estimated uninsured deposits (excluding the first $5 billion of estimated uninsured deposits), as of Dec. 31, 2022. For an IDI that is part of a holding company containing multiple IDIs, the $5 billion deduction would be apportioned based on the IDI's estimated uninsured deposits as a percentage of total estimated uninsured deposits held by all IDI affiliates in the consolidated banking organization. The special assessment would be collected during an initial special assessment period of eight quarters, with the first quarterly assessment period beginning on Jan. 1, 2024, subject to potential extension and a potential one-time final special assessment for any shortfall to the DIF. If the assessment is finalized as proposed, we estimate a noninterest expense of approximately $470 million to be recorded in the quarter in which the rule is finalized, which would significantly affect the results of operations for that quarter.

U.S. Regulatory Capital Requirements

On July 27, 2023, the Federal Reserve, the Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation proposed substantial revisions to the capital requirements applicable to large banking organizations and to banking organizations with significant trading activity, including BNY Mellon. The proposed revisions would implement international capital standards issued by the Basel Committee on Banking Supervision in December 2017 to finalize the Basel III reforms, as well as the Basel Committee's revised standard for market risk capital requirements finalized in February 2019. In addition, on July 27, 2023, the Federal Reserve proposed amendments to its rule regarding risk-based capital surcharges for GSIBs, including BNY Mellon. The period to submit comments on the proposals has been extended to Jan.

16, 2024. We continue to assess the potential impact of the proposals.

European Central Bank ("ECB") remuneration on minimum reserves

On July 27, 2023, the Governing Council of the ECB established 0% as the remuneration of minimum reserves credit institutions are required to hold with their Eurosystem national central bank on average over a maintenance period. The change became effective as of the beginning of the reserve maintenance period starting Sept. 20, 2023.

FDIC Long-Term Debt and Clean Holding Company Requirements

On Aug. 29, 2023, the Federal Reserve proposed amendments to its total loss-absorbing capacity ("TLAC") rule applicable to G-SIBs, including BNY Mellon. Among other requirements, the proposal would (i) require a $400,000 minimum denomination for newly issued long-term debt of G-SIBs used to satisfy TLAC and long-term debt requirements and (ii) subject to notice and comment procedures, require a G-SIB to maintain an amount of eligible TLAC or long-term debt instruments greater or less than generally required under the rule. The proposal would also exempt certain agreements from the scope of the TLAC rule's clean holding company prohibitions with respect to qualified financial contracts with third parties. Comments on the proposed rule are due by Nov. 30, 2023. We are evaluating the potential impact of the proposed rule.

FDIC Resolution Planning for Large Banks

On Aug. 29, 2023, the FDIC proposed revisions to the resolution plan rule applicable to covered IDIs. The proposed amendment would expand certain IDI resolution plan content requirements, adjust the frequency of resolution plan submissions from a 3-year cycle to a 2-year cycle, and require supplemental submissions of information in the interim period between filing years. Comments on the proposed rule are due by Nov. 30, 2023. We are evaluating the potential impact of the proposed rule.

SEC Naming Convention Rules for Funds

On Sept. 20, 2023, the SEC adopted amendments expanding the scope of terms that the SEC considers materially deceptive and misleading in a fund's name without a corresponding policy and related controls to invest at least 80% of the fund's net asset value (plus certain borrowings) in the manner suggested by the fund's name ("80% Policy"), including names that reference "growth" or "value," or a name indicating that investment decisions incorporate any environmental, social and governance factors. The amendments will become effective 60 days after publication in the Federal Register and fund groups will have either 24 months or 30 months to come into compliance, depending upon their net asset size.

SEC Money Market Fund Reforms

On July 12, 2023, the SEC adopted amendments to rules that govern money market funds. The amendments became effective Oct. 2, 2023, with tiered compliance dates. The amendments include, among other things: (i) a mandatory liquidity fee for institutional prime and institutional tax-exempt money market funds, which will apply when a fund experiences daily net redemptions that exceed 5% of net assets (effective Oct. 2, 2023); (ii) maintenance of a fund board's ability to impose liquidity fees (not to exceed 2% of the value of the shares redeemed) on a discretionary basis for non-government money market funds (effective April 2, 2024), (iii) substantially increasing the required minimum levels of daily and weekly liquid assets for all money market funds from 10% and 30%, to 25% and 50%, respectively (effective April 2, 2024), and (iv) removal of a money market fund's ability to impose temporary "gates" to suspend redemptions in order to prevent dilution and remove the link between a money market fund's liquidity level and its imposition of liquidity fees (effective Oct. 2, 2023).

California Climate Disclosure Laws

On Oct. 7, 2023, California enacted three climate-related bills imposing extensive new climate-related disclosure obligations applicable to companies doing business in California. The Climate Corporate Data Accountability Act (SB 253) requires covered companies with total annual revenues of $1 billion or more to disclose annually their Scope 1 (owned and controlled sources) and Scope 2 (from energy purchased and used) greenhouse gas emissions beginning in 2026, and Scope 3 (up and down value chain) greenhouse gas emissions beginning in 2027. The Climate-Related Financial Risk Act (SB 261) requires covered companies with total annual revenues of $500 million or more to publish biennial

reports disclosing climate-related financial risks and the measures adopted to mitigate the disclosed risks by Jan. 1, 2026. The Voluntary Carbon Market Disclosures Act (AB 1305), effective Jan. 1, 2024, requires companies making certain claims, including regarding carbon neutrality or reduction of greenhouse gas emissions, and companies purchasing carbon offsets in addition to making such claims, to disclose information on the determination of accuracy of the claim, interim progress measures, third-party verification and, if applicable, information on the carbon offsets purchased and emissions data. The laws may be modified by future legislation. We are assessing the potential impact of the climate disclosure laws.

Federal Reserve Novel Activities Supervisory Program

On Aug. 8, 2023, the Federal Reserve issued a Supervision and Regulation Letter (SR 23-7) announcing the establishment of its Novel Activities Supervision Program ("NAS Program") to complement its existing supervision and oversight of supervised banking organizations, including BNY Mellon. The NAS Program will encompass risk-based monitoring and examination and focus on novel activities related to crypto-assets, distributed ledger technology, and complex, technology-driven partnerships with nonbank providers of banking products and services to customers. We are evaluating the potential impact of the NAS Program.

Website information

Our website is www.bnymellon.com. We currently make available the following information under the Investor Relations portion of our website. With respect to filings with the Securities and Exchange Commission ("SEC"), we post such information as soon as reasonably practicable after we electronically file such materials with, or furnish them to, the SEC.

- All of our SEC filings, including annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to these reports, as well as proxy statements and SEC Forms 3, 4 and 5;
- Our earnings materials and selected management conference calls and presentations;
- Other regulatory disclosures, including: Pillar 3 Disclosures (and Market Risk Disclosure contained therein); Liquidity Coverage Ratio Disclosures; Net Stable Funding Ratio Disclosures; Federal Financial Institutions Examination Council – Consolidated Reports of Condition and Income for a Bank With Domestic and Foreign Offices; Consolidated Financial Statements for Bank Holding Companies; and the Dodd-Frank Act Stress Test Results for BNY Mellon and The Bank of New York Mellon; and
- Our Corporate Governance Guidelines, Amended and Restated By-Laws, Directors' Code of Conduct and the Charters of the Audit, Finance, Corporate Governance, Nominating and Social Responsibility, Human Resources and Compensation, Risk and Technology Committees of our Board of Directors.

We may use our website, our X (formerly known as Twitter) account (@BNYMellon) and other social media channels as additional means of disclosing information to the public. The information disclosed through those channels may be considered to be material. The contents of our website or social media channels referenced herein are not incorporated by reference into this Quarterly Report on Form 10-Q.

Consolidated Income Statement (unaudited)

	Quarter ended			Year-to-date	
(in millions)	**Sept. 30, 2023**	June 30, 2023	Sept. 30, 2022	**Sept. 30, 2023**	Sept. 30, 2022
Fee and other revenue					
Investment services fees	**$ 2,230**	$ 2,252	$ 2,157	**$ 6,601**	$ 6,356
Investment management and performance fees	**777**	762	800	**2,315**	2,516
Foreign exchange revenue	**154**	158	203	**488**	632
Financing-related fees	**45**	50	43	**147**	132
Distribution and servicing fees	**39**	35	33	**107**	97
Total fee revenue	**3,245**	3,257	3,236	**9,658**	9,733
Investment and other revenue	**113**	97	117	**289**	278
Total fee and other revenue	**3,358**	3,354	3,353	**9,947**	10,011
Net interest revenue					
Interest revenue	**5,519**	5,224	1,984	**14,685**	3,921
Interest expense	**4,503**	4,124	1,058	**11,441**	1,473
Net interest revenue	**1,016**	1,100	926	**3,244**	2,448
Total revenue	**4,374**	4,454	4,279	**13,191**	12,459
Provision for credit losses	**3**	5	(30)	**35**	19
Noninterest expense					
Staff	**1,755**	1,718	1,673	**5,264**	4,998
Software and equipment	**452**	450	421	**1,331**	1,225
Professional, legal and other purchased services	**368**	378	363	**1,121**	1,112
Net occupancy	**140**	121	124	**380**	371
Sub-custodian and clearing	**121**	119	124	**358**	373
Distribution and servicing	**87**	93	88	**265**	257
Business development	**36**	47	34	**122**	107
Bank assessment charges	**37**	41	35	**118**	107
Goodwill impairment	**—**	—	680	**—**	680
Amortization of intangible assets	**15**	14	17	**43**	51
Other	**78**	130	120	**298**	516
Total noninterest expense	**3,089**	3,111	3,679	**9,300**	9,797
Income					
Income before income taxes	**1,282**	1,338	630	**3,856**	2,643
Provision for income taxes	**241**	270	242	**771**	626
Net income	**1,041**	1,068	388	**3,085**	2,017
Net (income) loss attributable to noncontrolling interests related to consolidated investment management funds	**(3)**	(1)	—	**(4)**	13
Net income applicable to shareholders of The Bank of New York Mellon Corporation	**1,038**	1,067	388	**3,081**	2,030
Preferred stock dividends	**(82)**	(36)	(69)	**(189)**	(177)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	**$ 956**	$ 1,031	$ 319	**$ 2,892**	$ 1,853

Consolidated Income Statement (unaudited) (continued)

Net income applicable to common shareholders of The Bank of New York Mellon Corporation used for the earnings per share calculation	Quarter ended			Year-to-date	
(in millions)	**Sept. 30, 2023**	June 30, 2023	Sept. 30, 2022	**Sept. 30, 2023**	Sept. 30, 2022
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	**$ 956**	$ 1,031	$ 319	**$ 2,892**	$ 1,853
Less: Earnings allocated to participating securities	**—**	—	—	**—**	—
Net income applicable to common shareholders of The Bank of New York Mellon Corporation after required adjustment for the calculation of basic and diluted earnings per common share	**$ 956**	$ 1,031	$ 319	**$ 2,892**	$ 1,853

Average common shares and equivalents outstanding of The Bank of New York Mellon Corporation	Quarter ended			Year-to-date	
(in thousands)	**Sept. 30, 2023**	June 30, 2023	Sept. 30, 2022	**Sept. 30, 2023**	Sept. 30, 2022
Basic	**777,813**	787,718	811,304	**789,609**	810,703
Common stock equivalents	**4,058**	3,097	3,311	**3,848**	3,713
Less: Participating securities	**(90)**	(90)	(99)	**(93)**	(202)
Diluted	**781,781**	790,725	814,516	**793,364**	814,214
Anti-dilutive securities *(a)*	**1,305**	7,059	3,306	**5,559**	3,294

(a) Represents stock options, restricted stock, restricted stock units and participating securities outstanding but not included in the computation of diluted average common shares because their effect would be anti-dilutive.

Earnings per share applicable to common shareholders of The Bank of New York Mellon Corporation	Quarter ended			Year-to-date	
(in dollars)	**Sept. 30, 2023**	June 30, 2023	Sept. 30, 2022	**Sept. 30, 2023**	Sept. 30, 2022
Basic	**$ 1.23**	$ 1.31	$ 0.39	**$ 3.66**	$ 2.29
Diluted	**$ 1.22**	$ 1.30	$ 0.39	**$ 3.65**	$ 2.28

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Comprehensive Income Statement (unaudited)

	Quarter ended			Year-to-date	
(in millions)	**Sept. 30, 2023**	June 30, 2023	Sept. 30, 2022	**Sept. 30, 2023**	Sept. 30, 2022
Net income	**$ 1,041**	$ 1,068	$ 388	**$ 3,085**	$ 2,017
Other comprehensive income (loss), net of tax:					
Foreign currency translation adjustments	**(185)**	97	(442)	**15**	(1,150)
Unrealized gain (loss) on assets available-for-sale:					
Unrealized (loss) gain arising during the period	**(29)**	(157)	(908)	**131**	(3,321)
Reclassification adjustment	**14**	—	(1)	**15**	(4)
Total unrealized (loss) gain on assets available-for-sale	**(15)**	(157)	(909)	**146**	(3,325)
Defined benefit plans:					
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost	**(3)**	(2)	13	**(8)**	44
Total defined benefit plans	**(3)**	(2)	13	**(8)**	44
Net unrealized gain (loss) on cash flow hedges	**—**	3	(1)	**8**	(8)
Total other comprehensive (loss) income, net of tax *(a)*	**(203)**	(59)	(1,339)	**161**	(4,439)
Total comprehensive income (loss)	**838**	1,009	(951)	**3,246**	(2,422)
Net (income) loss attributable to noncontrolling interests	**(3)**	(1)	—	**(4)**	13
Other comprehensive loss attributable to noncontrolling interests	**—**	—	19	**—**	25
Comprehensive income (loss) applicable to shareholders of The Bank of New York Mellon Corporation	**$ 835**	$ 1,008	$ (932)	**$ 3,242**	$ (2,384)

(a) Other comprehensive income (loss) attributable to The Bank of New York Mellon Corporation shareholders was $(203) million for the quarter ended Sept. 30, 2023, $(59) million for the quarter ended June 30, 2023, $(1,320) million for the quarter ended Sept. 30, 2022, $161 million for the nine months ended Sept. 30, 2023 and $(4,414) million for the nine months ended Sept. 30, 2022.

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Balance Sheet (unaudited)

(dollars in millions, except per share amounts)	Sept. 30, 2023	Dec. 31, 2022
Assets		
Cash and due from banks, net of allowance for credit losses of $23 and $29	**$ 4,904**	$ 5,030
Interest-bearing deposits with the Federal Reserve and other central banks	**107,419**	91,655
Interest-bearing deposits with banks, net of allowance for credit losses of $2 and $4 (includes restricted of $3,084 and $6,499)	**12,999**	17,169
Federal funds sold and securities purchased under resale agreements	**26,299**	24,298
Securities:		
Held-to-maturity, at amortized cost, net of allowance for credit losses of $1 and less than $1 (fair value of $44,211 and $49,992)	**51,007**	56,194
Available-for-sale, at fair value (amortized cost of $83,074 and $92,484, net of allowance for credit losses of less than $1 and $1)	**77,218**	86,622
Total securities	**128,225**	142,816
Trading assets	**10,699**	9,908
Loans	**66,290**	66,063
Allowance for credit losses	**(211)**	(176)
Net loans	**66,079**	65,887
Premises and equipment	**3,234**	3,256
Accrued interest receivable	**1,141**	858
Goodwill	**16,159**	16,150
Intangible assets	**2,859**	2,901
Other assets, net of allowance for credit losses on accounts receivable of $3 and $4 (includes $1,561 and $971, at fair value)	**25,231**	25,855
Total assets	**$ 405,248**	$ 405,783
Liabilities		
Deposits:		
Noninterest-bearing (principally U.S. offices)	**$ 60,571**	$ 78,017
Interest-bearing deposits in U.S. offices	**132,245**	108,362
Interest-bearing deposits in non-U.S. offices	**84,651**	92,591
Total deposits	**277,467**	278,970
Federal funds purchased and securities sold under repurchase agreements	**14,771**	12,335
Trading liabilities	**7,358**	5,385
Payables to customers and broker-dealers	**17,441**	23,435
Other borrowed funds	**728**	397
Accrued taxes and other expenses	**5,389**	5,410
Other liabilities (including allowance for credit losses on lending-related commitments of $85 and $78, also includes $23 and $221, at fair value)	**11,758**	8,543
Long-term debt	**29,205**	30,458
Total liabilities	**364,117**	364,933
Temporary equity		
Redeemable noncontrolling interests	**109**	109
Permanent equity		
Preferred stock – par value $0.01 per share; authorized 100,000,000 shares; issued 48,826 and 48,826 shares	**4,838**	4,838
Common stock – par value $0.01 per share; authorized 3,500,000,000 shares; issued 1,402,122,865 and 1,395,725,198 shares	**14**	14
Additional paid-in capital	**28,793**	28,508
Retained earnings	**39,822**	37,864
Accumulated other comprehensive loss, net of tax	**(5,805)**	(5,966)
Less: Treasury stock of 633,049,587 and 587,280,598 common shares, at cost	**(26,696)**	(24,524)
Total The Bank of New York Mellon Corporation shareholders' equity	**40,966**	40,734
Nonredeemable noncontrolling interests of consolidated investment management funds	**56**	7
Total permanent equity	**41,022**	40,741
Total liabilities, temporary equity and permanent equity	**$ 405,248**	$ 405,783

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Statement of Cash Flows (unaudited)

(in millions)	Nine months ended Sept. 30, 2023	2022
Operating activities		
Net income	**$ 3,085**	$ 2,017
Net (income) loss attributable to noncontrolling interests	**(4)**	13
Net income applicable to shareholders of The Bank of New York Mellon Corporation	**3,081**	2,030
Adjustments to reconcile net income to net cash provided by (used for) operating activities:		
Provision for credit losses	**35**	19
Pension plan contributions	**(4)**	(2)
Depreciation and amortization	**1,122**	1,255
Goodwill impairment	**—**	680
Deferred tax (benefit) expense	**(42)**	255
Net securities losses (gains)	**20**	(5)
Change in trading assets and liabilities	**1,015**	6,945
Change in accruals and other, net	**2,753**	967
Net cash provided by operating activities	**7,980**	12,144
Investing activities		
Change in interest-bearing deposits with banks	**453**	2,937
Change in interest-bearing deposits with the Federal Reserve and other central banks	**(16,667)**	(12,186)
Purchases of securities held-to-maturity	**(273)**	(2,144)
Paydowns of securities held-to-maturity	**3,540**	5,851
Maturities of securities held-to-maturity	**1,715**	1,423
Purchases of securities available-for-sale	**(15,779)**	(26,007)
Sales of securities available-for-sale	**9,449**	11,303
Paydowns of securities available-for-sale	**2,794**	4,205
Maturities of securities available-for-sale	**12,988**	8,392
Net change in loans	**(243)**	(2,517)
Change in federal funds sold and securities purchased under resale agreements	**(2,002)**	6,109
Net change in seed capital investments	**18**	24
Purchases of premises and equipment/capitalized software	**(951)**	(989)
Proceeds from the sale of premises and equipment	**—**	45
Disposition, net of cash	**—**	51
Other, net	**494**	(1,747)
Net cash (used for) investing activities	**(4,464)**	(5,250)
Financing activities		
Change in deposits	**81**	(8,202)
Change in federal funds purchased and securities sold under repurchase agreements	**2,538**	(129)
Change in payables to customers and broker-dealers	**(5,983)**	(1,108)
Change in other borrowed funds	**342**	(347)
Net proceeds from the issuance of long-term debt	**4,493**	6,684
Repayments, redemptions and repurchases of long-term debt	**(5,466)**	(3,250)
Proceeds from the exercise of stock options	**—**	9
Issuance of common stock	**12**	10
Treasury stock acquired	**(2,154)**	(122)
Common cash dividends paid	**(934)**	(860)
Preferred cash dividends paid	**(189)**	(177)
Other, net	**—**	(12)
Net cash (used for) financing activities	**(7,260)**	(7,504)
Effect of exchange rate changes on cash	**203**	327
Change in cash and due from banks and restricted cash		
Change in cash and due from banks and restricted cash	**(3,541)**	(283)
Cash and due from banks and restricted cash at beginning of period	**11,529**	9,883
Cash and due from banks and restricted cash at end of period	**$ 7,988**	$ 9,600
Cash and due from banks and restricted cash		
Cash and due from banks at end of period (unrestricted cash)	**$ 4,904**	$ 4,707
Restricted cash at end of period	**3,084**	4,893
Cash and due from banks and restricted cash at end of period	**$ 7,988**	$ 9,600
Supplemental disclosures		
Interest paid	**$ 11,196**	$ 1,355
Income taxes paid	**653**	319
Income taxes refunded	**13**	7

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Statement of Changes in Equity (unaudited)

(in millions, except per share amount)	The Bank of New York Mellon Corporation shareholders						Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity	Redeemable non-controlling interests/ temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss), net of tax	Treasury stock			
Balance at June 30, 2023	$ 4,838	$ 14	$ 28,726	$ 39,199	$ (5,602)	$ (26,242)	$ 65	$ 40,998 *(a)*	$ 104
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	**10**
Other net changes in noncontrolling interests	—	—	**1**	—	—	—	**(12)**	**(11)**	**(2)**
Net income	—	—	—	**1,038**	—	—	**3**	**1,041**	—
Other comprehensive (loss)	—	—	—	—	**(203)**	—	—	**(203)**	—
Dividends:									
Common stock at $0.42 per share *(b)*	—	—	—	**(333)**	—	—	—	**(333)**	—
Preferred stock	—	—	—	**(82)**	—	—	—	**(82)**	—
Repurchase of common stock	—	—	—	—	—	**(450)**	—	**(450)**	—
Common stock issued under employee benefit plans	—	—	**5**	—	—	—	—	**5**	—
Stock-based compensation	—	—	**61**	—	—	—	—	**61**	—
Excise tax on share repurchases	—	—	—	—	—	**(4)**	—	**(4)**	—
Other	—	—	—	—	—	—	—	—	**(3)**
Balance at Sept. 30, 2023	**$ 4,838**	**$ 14**	**$ 28,793**	**$ 39,822**	**$ (5,805)**	**$ (26,696)**	**$ 56**	**$ 41,022** *(a)*	**$ 109**

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $36,095 million at June 30, 2023 and $36,128 million at Sept. 30, 2023.
(b) Includes dividend equivalents on share-based awards.

(in millions, except per share amount)	The Bank of New York Mellon Corporation shareholders						Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity	Redeemable non-controlling interests/ temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss), net of tax	Treasury stock			
Balance at March 31, 2023	$ 4,838	$ 14	$ 28,650	$ 38,465	$ (5,543)	$ (25,790)	$ 72	$ 40,706 *(a)*	$ 96
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	7
Other net changes in noncontrolling interests	—	—	2	—	—	—	(8)	(6)	(1)
Net income	—	—	—	1,067	—	—	1	1,068	—
Other comprehensive (loss)	—	—	—	—	(59)	—	—	(59)	—
Dividends:									
Common stock at $0.37 per share *(b)*	—	—	—	(297)	—	—	—	(297)	—
Preferred stock	—	—	—	(36)	—	—	—	(36)	—
Repurchase of common stock	—	—	—	—	—	(448)	—	(448)	—
Common stock issued under employee benefit plans	—	—	5	—	—	—	—	5	—
Stock-based compensation	—	—	69	—	—	—	—	69	—
Excise tax of share repurchases	—	—	—	—	—	(4)	—	(4)	—
Other	—	—	—	—	—	—	—	—	2
Balance at June 30, 2023	$ 4,838	$ 14	$ 28,726	$ 39,199	$ (5,602)	$ (26,242)	$ 65	$ 40,998 *(a)*	$ 104

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $35,796 million at March 31, 2023 and $36,095 million at June 30, 2023.
(b) Includes dividend equivalents on share-based awards.

Consolidated Statement of Changes in Equity (unaudited) (continued)

(in millions, except per share amount)	The Bank of New York Mellon Corporation shareholders						Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity		Redeemable non-controlling interests/ temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss), net of tax	Treasury stock				
Balance at June 30, 2022	$ 4,838	$ 14	$ 28,316	$ 37,644	$ (5,307)	$ (24,521)	$ 7	$ 40,991	*(a)*	$ 154
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—		17
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—		(1)
Other net changes in noncontrolling interests	—	—	2	—	—	—	—	2		1
Net income	—	—	—	388	—	—	—	388		—
Other comprehensive (loss)	—	—	—	—	(1,320)	—	—	(1,320)		(19)
Dividends:										
Common stock at $0.37 per share *(b)*	—	—	—	(303)	—	—	—	(303)		—
Preferred stock	—	—	—	(69)	—	—	—	(69)		—
Repurchase of common stock	—	—	—	—	—	(1)	—	(1)		—
Common stock issued under employee benefit plans	—	—	5	—	—	—	—	5		—
Stock awards and options exercised	—	—	51	—	—	—	—	51		—
Balance at Sept. 30, 2022	$ 4,838	$ 14	$ 28,374	$ 37,660	$ (6,627)	$ (24,522)	$ 7	$ 39,744	*(a)*	$ 152

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $36,146 million at June 30, 2022 and $34,899 million at Sept. 30, 2022.
(b) Includes dividend equivalents on share-based awards.

(in millions, except per share amount)	The Bank of New York Mellon Corporation shareholders						Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity		Redeemable non-controlling interests/ temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss) income, net of tax	Treasury stock				
Balance at Dec. 31, 2022	$ 4,838	$ 14	$ 28,508	$ 37,864	$ (5,966)	$ (24,524)	$ 7	$ 40,741	*(a)*	$ 109
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—		**27**
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—		**(34)**
Other net changes in noncontrolling interests	—	—	**(5)**	—	—	—	**45**	**40**		**6**
Net income	—	—	—	**3,081**	—	—	**4**	**3,085**		—
Other comprehensive income	—	—	—	—	**161**	—	—	**161**		—
Dividends:										
Common stock at $1.16 per share *(b)*	—	—	—	**(934)**	—	—	—	**(934)**		—
Preferred stock	—	—	—	**(189)**	—	—	—	**(189)**		—
Repurchase of common stock	—	—	—	—	—	**(2,154)**	—	**(2,154)**		—
Common stock issued under employee benefit plans	—	—	**15**	—	—	—	—	**15**		—
Stock-based compensation	—	—	**275**	—	—	—	—	**275**		—
Excise tax on share repurchases	—	—	—	—	—	**(18)**	—	**(18)**		—
Other	—	—	—	—	—	—	—	—		**1**
Balance at Sept. 30, 2023	**$ 4,838**	**$ 14**	**$ 28,793**	**$ 39,822**	**$ (5,805)**	**$ (26,696)**	**$ 56**	**$ 41,022**	*(a)*	**$ 109**

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $35,896 million at Dec. 31, 2022 and $36,128 million at Sept. 30, 2023.
(b) Includes dividend equivalents on share-based awards.

Consolidated Statement of Changes in Equity (unaudited) (continued)

(in millions, except per share amount)	The Bank of New York Mellon Corporation shareholders						Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity		Redeemable non-controlling interests/ temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss), net of tax	Treasury stock				
Balance at Dec. 31, 2021	$ 4,838	$ 14	$ 28,128	$ 36,667	$ (2,213)	$ (24,400)	$ 196	$ 43,230	*(a)*	$ 161
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—		26
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—		(15)
Other net changes in noncontrolling interests	—	—	(3)	—	—	—	(176)	(179)		5
Net income (loss)	—	—	—	2,030	—	—	(13)	2,017		—
Other comprehensive (loss)	—	—	—	—	(4,414)	—	—	(4,414)		(25)
Dividends:										
Common stock at $1.05 per share *(b)*	—	—	—	(860)	—	—	—	(860)		—
Preferred stock	—	—	—	(177)	—	—	—	(177)		—
Repurchase of common stock	—	—	—	—	—	(122)	—	(122)		—
Common stock issued under employee benefit plans	—	—	15	—	—	—	—	15		—
Stock awards and options exercised	—	—	234	—	—	—	—	234		—
Balance at Sept. 30, 2022	$ 4,838	$ 14	$ 28,374	$ 37,660	$ (6,627)	$ (24,522)	$ 7	$ 39,744	*(a)*	$ 152

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $38,196 million at Dec. 31, 2021 and $34,899 million at Sept. 30, 2022.

(b) Includes dividend equivalents on share-based awards.

See accompanying unaudited Notes to Consolidated Financial Statements.

Note 1–Basis of presentation

In this Quarterly Report on Form 10-Q, references to "our," "we," "us," "BNY Mellon," the "Company" and similar terms refer to The Bank of New York Mellon Corporation and its consolidated subsidiaries. The term "Parent" refers to The Bank of New York Mellon Corporation but not to its subsidiaries.

Basis of presentation

The accounting and financial reporting policies of BNY Mellon, a global financial services company, conform to U.S. generally accepted accounting principles ("GAAP") and prevailing industry practices. For information on our significant accounting and reporting policies, see Note 1 of the Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended Dec. 31, 2022 (the "2022 Annual Report").

The accompanying consolidated financial statements are unaudited. In the opinion of management, all adjustments necessary, consisting of normal recurring adjustments, for a fair presentation of financial position, results of operations and cash flows for the periods presented have been made. These financial statements should be read in conjunction with our Consolidated Financial Statements included in our 2022 Annual Report. Certain additional immaterial reclassifications have been made to prior periods to place them on a basis comparable with the current period presentation.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates based upon assumptions about future economic and market conditions which affect reported amounts and related disclosures in our financial statements. Although our current estimates contemplate current conditions and how we expect them to change in the future, it is reasonably possible that actual conditions could be worse than anticipated in those estimates, which could materially affect our results of operations and financial condition.

Note 2–New accounting guidance

The following accounting guidance was adopted in the first quarter of 2023.

Accounting Standards Update ("ASU") 2022-01, Derivatives and Hedging (Topic 815): Fair Value Hedging – Portfolio Layer Method

In March 2022, the FASB issued ASU 2022-01, *Derivatives and Hedging (Topic 815): Fair Value Hedging – Portfolio Layer Method*, which provides guidance that expands the ability to hedge interest rate risk by permitting the use of multiple hedged layers of a single closed portfolio of assets and will (1) Allow multiple layer hedging within the same closed portfolio, (2) Expand the scope of the portfolio layer method to include non-prepayable assets, (3) Expand the eligible hedging instruments to be utilized in a single-layer hedge, and (4) Permit held-to-maturity debt securities to be transferred to available-for-sale at the date of adoption, provided such transferred securities are designated in a portfolio layer method hedge within 30 days of the adoption date.

The standard also provides further guidance and disclosure requirements with respect to hedge basis adjustments related to portfolio layer method hedges.

We adopted this guidance as of Jan. 1, 2023. The Company did not choose to make the one-time election to reclassify securities classified as held-to-maturity to available-for-sale as of Jan. 1, 2023 and can choose to prospectively apply portfolio layer method hedging.

ASU 2022-02, Financial Instruments – Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures

In March 2022, the FASB issued ASU 2022-02, *Financial Instruments – Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures*, which provides post-implementation guidance related to the adoption of ASU 2016-13, *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments*, which was effective Jan. 1, 2020. This ASU amends the guidance related to two issues: Troubled Debt Restructurings ("TDRs") and disclosure requirements for the credit profile of the loan portfolio. This ASU eliminates the accounting guidance for TDRs by creditors, while enhancing disclosure requirements for certain loan refinancings and restructurings by creditors when a borrower is experiencing financial difficulty. An entity must apply the loan refinancing and restructuring guidance to determine whether a

modification results in a new loan or a continuation of an existing loan.

This ASU also requires that an entity disclose current-period gross write-offs by year of origination for financing receivables and net investments in leases within the scope of Subtopic 326-20, *Financial Instruments – Credit Losses – Measured at Amortized Cost*.

We adopted the revised guidance related to loan modifications on Jan. 1, 2023. The impact was immaterial. The updated disclosures are included in Note 5.

Note 3–Acquisitions and dispositions

We sometimes structure our acquisitions and divestitures with both an initial payment or receipt and later contingent payments or receipts tied to post-closing revenue or income growth. Contingent payments totaled $5 million in the first nine months of 2023. There were no contingent receipts in the first nine months of 2023. At Sept. 30, 2023, we are potentially obligated to pay additional consideration which, using reasonable assumptions and estimates, could range from $25 million to $40 million over the next two years. At Sept. 30, 2023, we could potentially receive additional consideration which, using reasonable assumptions and estimates, could be up to $390 million over the next five years.

See Note 3 of the Notes to Consolidated Financial Statements in our 2022 Annual Report for information related to the 2022 transactions.

Note 4–Securities

The following tables present the amortized cost, the gross unrealized gains and losses and the fair value of securities at Sept. 30, 2023 and Dec. 31, 2022.

Securities at Sept. 30, 2023 *(in millions)*	Amortized cost	Gross unrealized Gains	Gross unrealized Losses	Fair value
Available-for-sale:				
U.S. Treasury	$ 23,212	$ 67	$ 2,381	$ 20,898
Agency residential mortgage-backed securities ("RMBS")	10,581	93	687	9,987
Sovereign debt/sovereign guaranteed	9,192	2	504	8,690
Supranational	7,988	1	421	7,568
Agency commercial mortgage-backed securities ("MBS")	8,233	69	770	7,532
Foreign covered bonds	6,364	3	257	6,110
Collateralized loan obligations ("CLOs")	5,965	4	34	5,935
Non-agency commercial MBS	3,315	1	399	2,917
U.S. government agencies	3,014	43	295	2,762
Foreign government agencies/local governments	2,256	—	97	2,159
Non-agency RMBS	1,927	31	221	1,737
Other asset-backed securities ("ABS")	1,026	—	104	922
Other debt securities	1	—	—	1
Total securities available-for-sale *(a)(b)*	**$ 83,074**	**$ 314**	**$ 6,170**	**$ 77,218**
Held-to-maturity:				
Agency RMBS	$ 30,760	$ 1	$ 4,898	$ 25,863
U.S. Treasury	9,477	—	835	8,642
U.S. government agencies	4,199	—	543	3,656
Agency commercial MBS	3,506	—	407	3,099
Sovereign debt/sovereign guaranteed	1,456	—	73	1,383
CLOs	983	—	10	973
Supranational	510	—	24	486
Foreign government agencies	78	—	5	73
Non-agency RMBS	26	1	1	26
State and political subdivisions	12	—	2	10
Total securities held-to-maturity	**$ 51,007**	**$ 2**	**$ 6,798**	**$ 44,211**
Total securities	**$ 134,081**	**$ 316**	**$ 12,968**	**$ 121,429**

(a) The amortized cost of available-for-sale is net of the allowance for credit losses of less than $1 million. The allowance for credit loss relates to non-agency RMBS.

(b) Includes gross unrealized gains of $272 million and gross unrealized losses of $153 million recorded in accumulated other comprehensive income related to securities that were transferred from available-for-sale to held-to-maturity. The unrealized gains primarily relate to agency RMBS, agency commercial MBS and U.S. Treasury securities. The unrealized losses primarily relate to agency RMBS and U.S. Treasury securities. The unrealized gains and losses will be amortized into net interest revenue over the contractual lives of the securities.

Securities at Dec. 31, 2022 *(in millions)*	Amortized cost	Gross unrealized Gains	Gross unrealized Losses	Fair value
Available-for-sale:				
U.S. Treasury	$ 32,103	$ 93	$ 2,663	$ 29,533
Sovereign debt/sovereign guaranteed	10,906	5	547	10,364
Agency RMBS	9,388	113	544	8,957
Agency commercial MBS	8,656	89	685	8,060
Supranational	8,129	4	399	7,734
Foreign covered bonds	6,041	3	286	5,758
CLOs	5,446	1	104	5,343
Non-agency commercial MBS	3,334	—	357	2,977
U.S. government agencies	2,465	52	223	2,294
Foreign government agencies/local governments	2,363	1	123	2,241
Non-agency RMBS	2,197	43	211	2,029
Other ABS	1,443	—	124	1,319
State and political subdivisions	12	—	—	12
Other debt securities	1	—	—	1
Total securities available-for-sale *(a)(b)*	$ 92,484	$ 404	$ 6,266	$ 86,622
Held-to-maturity:				
Agency RMBS	$ 34,188	$ 1	$ 4,229	$ 29,960
U.S. Treasury	10,863	—	895	9,968
U.S. government agencies	4,206	—	534	3,672
Agency commercial MBS	4,014	—	411	3,603
Sovereign debt/sovereign guaranteed	1,388	—	76	1,312
CLOs	983	—	26	957
Supranational	443	—	25	418
Foreign government agencies	66	—	6	60
Non-agency RMBS	30	2	1	31
State and political subdivisions	13	—	2	11
Total securities held-to-maturity	$ 56,194	$ 3	$ 6,205	$ 49,992
Total securities	$ 148,678	$ 407	$ 12,471	$ 136,614

(a) The amortized cost of available-for-sale securities is net of the allowance for credit losses of $1 million. The allowance for credit loss primarily relates to non-agency RMBS.

(b) Includes gross unrealized gains of $347 million and gross unrealized losses of $179 million recorded in accumulated other comprehensive income related to securities that were transferred from available-for-sale to held-to-maturity. The unrealized gains primarily relate to agency RMBS, U.S. Treasury securities and agency commercial MBS. The unrealized losses primarily relate to agency RMBS and U.S. Treasury securities. The unrealized gains and losses will be amortized into net interest revenue over the contractual lives of the securities.

The following table presents the realized gains and losses, on a gross basis.

Net securities gains (losses) *(in millions)*	**3Q23**	2Q23	3Q22	**YTD23**	YTD22
Realized gross gains	**$ 1**	$ 4	$ 9	**$ 19**	$ 89
Realized gross losses	**(20)**	(4)	(8)	**(39)**	(84)
Total net securities (losses) gains	**$ (19)**	$ —	$ 1	**$ (20)**	$ 5

The following table presents pre-tax net securities gains (losses) by type.

Net securities gains (losses) *(in millions)*	**3Q23**	2Q23	3Q22	**YTD23**	YTD22
Non-agency RMBS	**$ —**	$ —	$ —	**$ 2**	$ 49
U.S. Treasury	**(19)**	—	—	**(27)**	12
State and political subdivisions	**—**	—	—	**—**	(13)
Corporate bonds	**—**	—	—	**—**	(51)
Other	**—**	—	1	**5**	8
Total net securities (losses) gains	**$ (19)**	$ —	$ 1	**$ (20)**	$ 5

Allowance for credit losses – Securities

The allowance for credit losses related to securities was $1 million at Sept. 30, 2023 and $1 million at Dec. 31, 2022, and relates to state and political subdivision and non-agency RMBS securities.

Credit quality indicators – Securities

At Sept. 30, 2023, the gross unrealized losses on the securities portfolio were primarily attributable to an increase in interest rates from the date of purchase, and for certain securities that were transferred from available-for-sale to held-to-maturity, an increase in interest rates through the date they were transferred. Specifically, $153 million of the unrealized losses at Sept. 30, 2023 and $179 million at Dec. 31, 2022 reflected in the tables below relate to certain securities that were previously transferred from available-for-sale to held-to-maturity. The unrealized losses will be amortized into net interest revenue over the contractual lives of the securities. The transfer created a new cost basis for the securities. As a result, if these securities have experienced unrealized losses since the date of transfer, the corresponding unrealized losses would be reflected in the held-to-maturity securities portfolio in the following tables. We do not intend to sell these securities, and it is not more likely than not that we will have to sell these securities.

The following tables show the aggregate fair value of available-for-sale securities with a continuous unrealized loss position for less than 12 months and those that have been in a continuous unrealized loss position for 12 months or more without an allowance for credit losses.

Available-for-sale securities in an unrealized loss position without an allowance for credit losses at Sept. 30, 2023	Less than 12 months		12 months or more		Total	
(in millions)	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
U.S. Treasury	$ 749	$ 64	$ 20,149	$ 2,317	$ 20,898	$ 2,381
Agency RMBS	2,975	108	6,848	579	9,823	687
Sovereign debt/sovereign guaranteed	1,686	27	5,988	477	7,674	504
Agency commercial MBS	474	23	6,925	747	7,399	770
Supranational	2,555	58	4,499	363	7,054	421
Foreign covered bonds	1,449	18	3,606	239	5,055	257
CLOs	459	1	4,233	33	4,692	34
Non-agency commercial MBS	139	1	2,632	398	2,771	399
U.S. government agencies	837	25	1,685	270	2,522	295
Foreign government agencies/local governments	587	10	1,512	87	2,099	97
Non-agency RMBS	53	2	1,288	219	1,341	221
Other ABS	—	—	858	104	858	104
Total securities available-for-sale *(a)*	**$ 11,963**	**$ 337**	**$ 60,223**	**$ 5,833**	**$ 72,186**	**$ 6,170**

(a) Includes $153 million of gross unrealized losses for 12 months or more recorded in accumulated other comprehensive income related to securities that were transferred from available-for-sale to held-to-maturity. There were no gross unrealized losses for less than 12 months. The unrealized losses are primarily related to agency RMBS and U.S. Treasury securities and will be amortized into net interest revenue over the contractual lives of the securities.

Available-for-sale securities in an unrealized loss position without an allowance for credit losses at Dec. 31, 2022	Less than 12 months		12 months or more		Total	
(in millions)	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
U.S. Treasury	$ 14,058	$ 824	$ 15,236	$ 1,839	$ 29,294	$ 2,663
Agency RMBS	7,929	376	789	168	8,718	544
Agency commercial MBS	6,088	389	1,878	296	7,966	685
Sovereign debt/sovereign guaranteed	4,176	184	3,788	363	7,964	547
Supranational	3,451	109	2,571	290	6,022	399
CLOs	4,806	94	403	10	5,209	104
Foreign covered bonds	2,830	83	1,977	203	4,807	286
Non-agency commercial MBS	1,914	201	932	156	2,846	357
Foreign government agencies/local governments	1,148	43	1,013	80	2,161	123
U.S. government agencies	1,710	186	208	37	1,918	223
Non-agency RMBS	588	16	1,148	193	1,736	209
Other ABS	333	18	876	106	1,209	124
State and political subdivisions	—	—	12	—	12	—
Total securities available-for-sale *(a)*	$ 49,031	$ 2,523	$ 30,831	$ 3,741	$ 79,862	$ 6,264

(a) Includes $120 million of gross unrealized losses for less than 12 months and $59 million of gross unrealized losses for 12 months or more recorded in accumulated other comprehensive income related to securities that were transferred from available-for-sale to held-to-maturity. The unrealized losses are primarily related to agency RMBS and U.S. Treasury securities and will be amortized into net interest revenue over the contractual lives of the securities.

The following tables show the credit quality of the held-to-maturity securities. We have included certain credit ratings information because the information can indicate the degree of credit risk to which we are exposed. Significant changes in ratings classifications could indicate increased credit risk for us and could be accompanied by an increase in the allowance for credit losses and/or a reduction in the fair value of our securities portfolio.

Held-to-maturity securities portfolio at Sept. 30, 2023			Ratings *(a)*				
(dollars in millions)	Amortized cost	Net unrealized gain (loss)	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Agency RMBS	$ 30,760	$ (4,897)	100 %	— %	— %	— %	— %
U.S. Treasury	9,477	(835)	100	—	—	—	—
U.S. government agencies	4,199	(543)	100	—	—	—	—
Agency commercial MBS	3,506	(407)	100	—	—	—	—
Sovereign debt/sovereign guaranteed *(b)*	1,456	(73)	100	—	—	—	—
CLOs	983	(10)	100	—	—	—	—
Supranational	510	(24)	100	—	—	—	—
Foreign government agencies	78	(5)	100	—	—	—	—
Non-agency RMBS	26	—	27	52	2	17	2
State and political subdivisions	12	(2)	—	—	3	—	97
Total held-to-maturity securities	**$ 51,007**	**$ (6,796)**	**100 %**	**— %**	**— %**	**— %**	**— %**

(a) Represents ratings by Standard & Poor's ("S&P") or the equivalent.
(b) Primarily consists of exposure to Germany, France, UK and the Netherlands.

Held-to-maturity securities portfolio at Dec. 31, 2022			Ratings *(a)*				
(dollars in millions)	Amortized cost	Net unrealized gain (loss)	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Agency RMBS	$ 34,188	$ (4,228)	100 %	— %	— %	— %	— %
U.S. Treasury	10,863	(895)	100	—	—	—	—
U.S. government agencies	4,206	(534)	100	—	—	—	—
Agency commercial MBS	4,014	(411)	100	—	—	—	—
Sovereign debt/sovereign guaranteed *(b)*	1,388	(76)	100	—	—	—	—
CLOs	983	(26)	100	—	—	—	—
Supranational	443	(25)	100	—	—	—	—
Foreign government agencies	66	(6)	100	—	—	—	—
Non-agency RMBS	30	1	22	58	2	17	1
State and political subdivisions	13	(2)	2	2	3	—	93
Total held-to-maturity securities	$ 56,194	$ (6,202)	100 %	— %	— %	— %	— %

(a) Represents ratings by S&P or the equivalent.
(b) Primarily consists of exposure to Germany, UK and France.

Maturity distribution

The following table shows the maturity distribution by carrying amount and yield (on a tax equivalent basis) of our securities portfolio.

Maturity distribution and yields on securities at Sept. 30, 2023	Within 1 year		1-5 years		5-10 years		After 10 years		Total	
(dollars in millions)	Amount	Yield *(a)*	Amount	Yield *(a)*	Amount	Yield *(a)*	Amount	Yield *(a)*	Amount	Yield *(a)*
Available-for-sale:										
U.S. Treasury	$ 5,957	0.87 %	$ 12,059	1.15 %	$ 1,055	1.35 %	$ 1,827	2.92 %	**$ 20,898**	**1.27 %**
Sovereign debt/sovereign guaranteed	2,850	2.29	4,934	1.95	841	1.31	65	3.55	**8,690**	**2.00**
Supranational	530	1.33	5,438	2.88	1,570	3.28	30	3.42	**7,568**	**2.86**
Foreign covered bonds	748	1.47	4,969	3.50	393	1.05	—	—	**6,110**	**3.08**
Foreign government agencies/local governments	348	2.12	1,682	2.63	129	3.68	—	—	**2,159**	**2.61**
U.S. government agencies	20	2.98	1,605	3.37	1,033	2.90	104	2.73	**2,762**	**3.15**
Other debt securities	—	—	—	—	—	—	1	4.85	**1**	**4.85**
Mortgage-backed securities:										
Agency RMBS									**9,987**	**4.94**
Non-agency RMBS									**1,737**	**4.50**
Agency commercial MBS									**7,532**	**3.03**
Non-agency commercial MBS									**2,917**	**3.56**
CLOs									**5,935**	**6.83**
Other ABS									**922**	**2.21**
Total securities available-for-sale	$ 10,453	1.37 %	$ 30,687	2.13 %	$ 5,021	2.26 %	$ 2,027	2.93 %	**$ 77,218**	**2.97 %**
Held-to-maturity:										
U.S. Treasury	$ 1,307	1.99 %	$ 7,256	1.21 %	$ 914	1.24 %	$ —	— %	**$ 9,477**	**1.32 %**
U.S. government agencies	294	1.32	2,629	1.48	1,063	1.48	213	1.99	**4,199**	**1.49**
Sovereign debt/sovereign guaranteed	573	1.17	810	0.99	73	0.59	—	—	**1,456**	**1.04**
Supranational	—	—	510	1.42	—	—	—	—	**510**	**1.42**
Foreign government agencies	—	—	78	1.16	—	—	—	—	**78**	**1.16**
State and political subdivisions	—	—	—	—	12	4.75	—	—	**12**	**4.75**
Mortgage-backed securities:										
Agency RMBS									**30,760**	**2.32**
Non-agency RMBS									**26**	**2.75**
Agency commercial MBS									**3,506**	**2.40**
CLOs									**983**	**6.73**
Total securities held-to-maturity	$ 2,174	1.69 %	$ 11,283	1.27 %	$ 2,062	1.36 %	$ 213	1.99 %	**$ 51,007**	**2.11 %**
Total securities	$ 12,627	1.42 %	$ 41,970	1.91 %	$ 7,083	2.02 %	$ 2,240	2.86 %	**$ 128,225**	**2.64 %**

(a) Yields are based upon the amortized cost of securities and consider the contractual coupon, amortization of premiums and accretion of discounts, excluding the effect of related hedging derivatives.

Pledged assets

At Sept. 30, 2023, BNY Mellon had pledged assets of $127 billion, including $95 billion pledged as collateral for potential borrowings at the Federal Reserve Discount Window and $9 billion pledged as collateral for borrowing at the Federal Home Loan Bank. The components of the assets pledged at Sept. 30, 2023 included $109 billion of securities, $13 billion of loans, $4 billion of trading assets and $1 billion of interest-bearing deposits with banks.

If there has been no borrowing at the Federal Reserve Discount Window, the Federal Reserve generally allows banks to freely move assets in and out of their pledged assets account to sell or repledge the assets for other purposes. BNY Mellon regularly moves assets in and out of its pledged assets account at the Federal Reserve as there have been no borrowings.

At Dec. 31, 2022, BNY Mellon had pledged assets of $138 billion, including $106 billion pledged as collateral for potential borrowing at the Federal Reserve Discount Window and $8 billion pledged as collateral for borrowing at the Federal Home Loan Bank. The components of the assets pledged at Dec. 31, 2022 included $121 billion of securities, $12 billion of loans, $4 billion of trading assets and $1 billion of interest-bearing deposits with banks.

At Sept. 30, 2023 and Dec. 31, 2022, pledged assets included $23 billion and $24 billion, respectively, for

which the recipients were permitted to sell or repledge the assets delivered.

We also obtain securities as collateral, including receipts under resale agreements, securities borrowed, derivative contracts and custody agreements, on terms which permit us to sell or repledge the securities to others. At Sept. 30, 2023 and Dec. 31, 2022, the market value of the securities received that can be sold or repledged was $191 billion and $115 billion, respectively. We routinely sell or repledge these securities through delivery to third parties. As of Sept. 30, 2023 and Dec. 31, 2022, the market value of securities collateral sold or repledged was $163 billion and $78 billion, respectively.

Restricted cash and securities

Cash and securities may be segregated under federal and other regulations or requirements. At Sept. 30, 2023 and Dec. 31, 2022, cash segregated under federal and other regulations or requirements was $3 billion and $7 billion, respectively. Restricted cash is primarily included in interest-bearing deposits with banks on the consolidated balance sheet. Securities segregated under federal and other regulations or requirements were $3 billion at Sept. 30, 2023 and $3 billion at Dec. 31, 2022. Restricted securities were sourced from securities purchased under resale agreements and are included in federal funds sold and securities purchased under resale agreements on the consolidated balance sheet.

Note 5–Loans and asset quality

Loans

The table below provides the details of our loan portfolio.

Loans *(in millions)*	**Sept. 30, 2023**	Dec. 31, 2022
Commercial	**$ 1,944**	$ 1,732
Commercial real estate	**6,730**	6,226
Financial institutions	**10,441**	9,684
Lease financings	**633**	657
Wealth management loans	**9,415**	10,302
Wealth management mortgages	**9,130**	8,966
Other residential mortgages	**972**	345
Capital call financing	**3,410**	3,438
Other	**2,804**	2,941
Overdrafts	**3,628**	4,839
Margin loans	**17,183**	16,933
Total loans *(a)*	**$ 66,290**	$ 66,063

(a) Net of unearned income of $270 million at Sept. 30, 2023 and $225 million at Dec. 31, 2022 primarily related to lease financings.

We disclose information related to our loans and asset quality by the class of the financing receivable in the following tables.

Allowance for credit losses

Activity in the allowance for credit losses on loans and lending-related commitments is presented below. This does not include activity in the allowance for credit losses related to other financial instruments, including cash and due from banks, interest-bearing deposits with banks, federal funds sold and securities purchased under resale agreements, available-for-sale securities, held-to-maturity securities and accounts receivable.

Allowance for credit losses activity for the quarter ended Sept. 30, 2023

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans	Wealth management mortgages	Other residential mortgages	Capital call financing	Total
Beginning balance	$ 21	$ 199	$ 32	$ 1	$ 1	$ 15	$ 9	$ 4	$ 282
Charge-offs	—	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	—	—	—
Net (charge-offs) recoveries	—	—	—	—	—	—	—	—	—
Provision *(a)*	11	23	(10)	—	—	(6)	(3)	(1)	14
Ending balance	**$ 32**	**$ 222**	**$ 22**	**$ 1**	**$ 1**	**$ 9**	**$ 6**	**$ 3**	**$ 296**
Allowance for:									
Loan losses	$ 17	$ 166	$ 10	$ 1	$ 1	$ 8	$ 6	$ 2	$ 211
Lending-related commitments	15	56	12	—	—	1	—	1	85
Individually evaluated for impairment:									
Loan balance *(b)*	$ —	$ 102	$ —	$ —	$ —	$ 14	$ 1	$ —	$ 117
Allowance for loan losses	—	2	—	—	—	—	—	—	2

(a) Does not include the provision for credit losses benefit related to other financial instruments of $11 million for the quarter ended Sept. 30, 2023.
(b) Includes collateral-dependent loans of $117 million with $198 million of collateral at fair value.

Allowance for credit losses activity for the quarter ended June 30, 2023

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans	Wealth management mortgages	Other residential mortgages	Capital call financing	Total
Beginning balance	$ 21	$ 177	$ 24	$ 1	$ 1	$ 14	$ 9	$ 6	$ 253
Charge-offs	—	—	—	—	—	—	(3)	—	(3)
Recoveries	—	—	—	—	—	—	2	—	2
Net (charge-offs)	—	—	—	—	—	—	(1)	—	(1)
Provision *(a)*	—	22	8	—	—	1	1	(2)	30
Ending balance	$ 21	$ 199	$ 32	$ 1	$ 1	$ 15	$ 9	$ 4	$ 282
Allowance for:									
Loan losses	$ 4	$ 143	$ 17	$ 1	$ 1	$ 14	$ 9	$ 2	$ 191
Lending-related commitments	17	56	15	—	—	1	—	2	91
Individually evaluated for impairment:									
Loan balance *(b)*	$ —	$ 101	$ —	$ —	$ —	$ 11	$ 1	$ —	$ 113
Allowance for loan losses	—	3	—	—	—	—	—	—	3

(a) Does not include the provision for credit losses benefit related to other financial instruments of $25 million for the quarter ended June 30, 2023.
(b) Includes collateral-dependent loans of $113 million with $167 million of collateral at fair value.

Allowance for credit losses activity for the quarter ended Sept. 30, 2022

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans	Wealth management mortgages	Other residential mortgages	Capital call financing	Total
Beginning balance	$ 16	$ 184	$ 21	$ 1	$ 1	$ 7	$ 7	$ 6	$ 243
Charge-offs	—	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	1	—	1
Net recoveries	—	—	—	—	—	—	1	—	1
Provision *(a)*	1	(8)	(1)	—	—	2	—	(2)	(8)
Ending balance	$ 17	$ 176	$ 20	$ 1	$ 1	$ 9	$ 8	$ 4	$ 236
Allowance for:									
Loan losses	$ 4	$ 130	$ 9	$ 1	$ 1	$ 8	$ 8	$ 3	$ 164
Lending-related commitments	13	46	11	—	—	1	—	1	72
Individually evaluated for impairment:									
Loan balance *(b)*	$ —	$ 75	$ —	$ —	$ —	$ 14	$ 1	$ —	$ 90
Allowance for loan losses	—	1	—	—	—	—	—	—	1

(a) Does not include the provision for credit losses benefit related to other financial instruments of $22 million for the quarter ended Sept. 30, 2022.
(b) Includes collateral-dependent loans of $90 million with $135 million of collateral at fair value.

Allowance for credit losses activity for the nine months ended Sept. 30, 2023

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans	Wealth management mortgages	Other residential mortgages	Capital call financing	Total
Beginning balance	$ 18	$ 184	$ 24	$ 1	$ 1	$ 12	$ 8	$ 6	$ 254
Charge-offs	—	—	—	—	—	—	(3)	—	(3)
Recoveries	1	—	—	—	—	—	2	—	3
Net recoveries (charge-offs)	1	—	—	—	—	—	(1)	—	—
Provision *(a)*	13	38	(2)	—	—	(3)	(1)	(3)	42
Ending balance	**$ 32**	**$ 222**	**$ 22**	**$ 1**	$ 1	$ 9	**$ 6**	$ 3	**$ 296**

(a) Does not include provision for credit losses benefit related to other financial instruments of $7 million for the nine months ended Sept. 30, 2023.

Allowance for credit losses activity for the nine months ended Sept. 30, 2022

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans	Wealth management mortgages	Other residential mortgages	Capital call financing	Total
Beginning balance	$ 12	$ 199	$ 13	$ 1	$ 1	$ 6	$ 7	$ 2	$ 241
Charge-offs	—	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	3	—	3
Net recoveries	—	—	—	—	—	—	3	—	3
Provision *(a)*	5	(23)	7	—	—	3	(2)	2	(8)
Ending balance	$ 17	$ 176	$ 20	$ 1	$ 1	$ 9	$ 8	$ 4	$ 236

(a) Does not include provision for credit losses related to other financial instruments of $27 million for the nine months ended Sept. 30, 2022.

Nonperforming assets

The table below presents our nonperforming assets.

Nonperforming assets	**Sept. 30, 2023**			Dec. 31, 2022		
	Recorded investment			Recorded investment		
(in millions)	With an allowance	Without an allowance	Total	With an allowance	Without an allowance	Total
Nonperforming loans:						
Other residential mortgages	**$ 23**	**$ 1**	**24**	$ 30	$ 1	$ 31
Wealth management mortgages	**7**	**15**	**22**	8	14	22
Commercial real estate	**—**	**—**	**—**	—	54	54
Total nonperforming loans	**30**	**16**	**46**	38	69	107
Other assets owned	**—**	**2**	**2**	—	2	2
Total nonperforming assets	**$ 30**	**$ 18**	**48**	$ 38	$ 71	$ 109

Past due loans

The table below presents our past due loans.

Past due loans and still accruing interest	**Sept. 30, 2023**				Dec. 31, 2022			
	Days past due			Total	Days past due			Total
(in millions)	30-59	60-89	≥90	past due	30-59	60-89	≥90	past due
Wealth management loans	**$ 40**	**$ 1**	**$ —**	**41**	$ 43	$ 1	$ —	44
Commercial real estate	**9**	**4**	**—**	**13**	11	—	—	11
Other residential mortgages	**6**	**2**	**—**	**8**	5	—	—	5
Wealth management mortgages	**1**	**2**	—	**3**	54	1	—	55
Total past due loans	**$ 56**	**$ 9**	**$ —**	**65**	$ 113	$ 2	$ —	115

Loan modifications

Modified loans are evaluated to determine whether a modification or restructuring with a borrower experiencing financial difficulty results in principal forgiveness, an interest rate reduction, an other-than-insignificant payment delay, or a term extension. The modification could result in a new loan or a continuation of the existing loan.

In the third quarter of 2023, we modified one other residential mortgage loan, with an aggregate recorded investment of less than $1 million, by providing payment modifications.

In the second quarter of 2023, we modified one commercial real estate exposure, with a recorded investment of $59 million and an unfunded lending commitment of $15 million, by extending the maturity date. We also modified two other residential mortgage loans, with an aggregate recorded investment of less than $1 million, by extending the maturity dates and reducing the interest rates.

We modified one commercial real estate loan in the first quarter of 2023, with a recorded investment of $12 million, by extending the maturity date.

Loans modified prior to 2023 are considered to be TDRs if the debtor is experiencing financial difficulties and the creditor grants a concession to the debtor that would not otherwise be considered. A TDR may include a transfer of real estate or other assets from the debtor to the creditor, or a modification of the term of the loan. Not all modified loans are considered TDRs.

We modified eight loans in the first nine months of 2022 with an aggregate recorded investment of $13 million. The modifications of the other residential and commercial real estate loans in the first nine months of 2022 consisted of reducing the stated interest rates and, in certain cases, forbearance of default and extending the maturity dates.

Credit quality indicators

Our credit strategy is to focus on investment-grade clients that are active users of our non-credit services. Each customer is assigned an internal credit rating, which is mapped to an external rating agency grade equivalent, if possible, based upon a number of dimensions, which are continually evaluated and may change over time. The tables below provide information about the credit profile of the loan portfolio by the period of origination.

Credit profile of the loan portfolio								**Sept. 30, 2023**			
								Revolving loans			
	Originated, at amortized cost										
(in millions)	**YTD23**	2022	2021	2020	2019	Prior to 2019		Amortized cost	Converted to term loans – Amortized cost	Total *(a)*	Accrued interest receivable
Commercial:											
Investment grade	**$ 128**	$ 121	$ 69	$ —	$ —	$ 45		**$ 1,440**	**$ —**	**$ 1,803**	
Non-investment grade	**56**	18	—	—	—	—		**67**	**—**	**141**	
Total commercial	**184**	139	69	—	—	45		**1,507**	**—**	**1,944**	**$ 2**
Commercial real estate:											
Investment grade	**1,538**	882	585	153	307	894		**187**	**22**	**4,568**	
Non-investment grade	**1,098**	634	154	43	30	142		**61**	**—**	**2,162**	
Total commercial real estate	**2,636**	1,516	739	196	337	1,036		**248**	**22**	**6,730**	**29**
Financial institutions:											
Investment grade	**579**	86	58	—	—	10		**7,390**	**—**	**8,123**	
Non-investment grade	**4**	10	—	—	—	—		**2,304**	**—**	**2,318**	
Total financial institutions	**583**	96	58	—	—	10		**9,694**	**—**	**10,441**	**103**
Wealth management loans:											
Investment grade	**36**	32	61	22	8	164		**8,949**	**100**	**9,372**	
Non-investment grade	**—**	2	—	—	—	—		**41**	**—**	**43**	
Total wealth management loans	**36**	34	61	22	8	164		**8,990**	**100**	**9,415**	**69**
Wealth management mortgages	**692**	1,709	1,931	873	742	3,163		**20**	**—**	**9,130**	**21**
Lease financings	**167**	—	—	42	8	416		**—**	**—**	**633**	**—**
Other residential mortgages *(b)*	**1**	547	196	5	—	223		**—**	**—**	**972**	**3**
Capital call financing	**—**	—	—	—	—	—		**3,410**	**—**	**3,410**	**14**
Other loans	**—**	—	—	—	—	—		**2,804**	**—**	**2,804**	**6**
Margin loans	**6,452**	—	—	—	—	—		**10,731**	**—**	**17,183**	**36**
Total loans	**$ 10,751**	$ 4,041	$ 3,054	$ 1,138	$ 1,095	$ 5,057		**$ 37,404**	**$ 122**	**$ 62,662**	**$ 283**

(a) Excludes overdrafts of $3,628 million. Overdrafts occur on a daily basis primarily in the custody and securities clearance business and are generally repaid within two business days.
(b) The gross write-offs related to other residential mortgage loans were $3 million in the third quarter of 2023.

Credit profile of the loan portfolio	Dec. 31, 2022									
	Originated, at amortized cost						Revolving loans			
(in millions)	2022	2021	2020	2019	2018	Prior to 2018	Amortized cost	Converted to term loans – Amortized cost	Total *(a)*	Accrued interest receivable
Commercial:										
Investment grade	$ 379	$ 148	$ —	$ —	$ 43	$ 45	$ 963	$ —	$ 1,578	
Non-investment grade	78	6	—	—	—	—	70	—	154	
Total commercial	457	154	—	—	43	45	1,033	—	1,732	$ 2
Commercial real estate:										
Investment grade	1,265	973	407	739	204	904	183	—	4,675	
Non-investment grade	431	511	145	323	93	6	20	22	1,551	
Total commercial real estate	1,696	1,484	552	1,062	297	910	203	22	6,226	25
Financial institutions:										
Investment grade	126	389	—	—	—	25	7,216	—	7,756	
Non-investment grade	20	—	—	—	—	—	1,896	12	1,928	
Total financial institutions	146	389	—	—	—	25	9,112	12	9,684	78
Wealth management loans:										
Investment grade	45	57	22	45	—	217	9,887	—	10,273	
Non-investment grade	—	—	—	—	—	—	29	—	29	
Total wealth management loans	45	57	22	45	—	217	9,916	—	10,302	49
Wealth management mortgages	1,775	1,976	918	775	485	3,012	25	—	8,966	20
Lease financings	17	—	49	11	7	573	—	—	657	—
Other residential mortgages	27	70	—	—	—	248	—	—	345	1
Capital call financing	—	—	—	—	—	—	3,438	—	3,438	17
Other loans	—	—	—	—	—	—	2,941	—	2,941	6
Margin loans	5,984	—	—	—	—	—	10,949	—	16,933	33
Total loans	$ 10,147	$ 4,130	$ 1,541	$ 1,893	$ 832	$ 5,030	$ 37,617	$ 34	$ 61,224	$ 231

(a) Excludes overdrafts of $4,839 million. Overdrafts occur on a daily basis primarily in the custody and securities clearance business and are generally repaid within two business days.

Commercial loans

The commercial loan portfolio is divided into investment grade and non-investment grade categories based on the assigned internal credit ratings, which are generally consistent with those of the public rating agencies. Customers with ratings consistent with BBB- (S&P)/Baa3 (Moody's) or better are considered to be investment grade. Those clients with ratings lower than this threshold are considered to be non-investment grade.

Commercial real estate

Our income-producing commercial real estate facilities are focused on experienced owners and are structured with moderate leverage based on existing cash flows. Our commercial real estate lending activities also include construction and renovation facilities.

Financial institutions

Financial institution exposures are high quality, with 94% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at Sept. 30, 2023. In addition, 64% of the financial institutions exposure is secured. For example, securities industry clients and asset managers often borrow against marketable securities held in custody. The exposure to financial institutions is generally short term, with 84% expiring within one year.

Wealth management loans

Wealth management loans are not typically rated by external rating agencies. A majority of the wealth management loans are secured by the customers' investment management accounts or custody accounts. Eligible assets pledged for these loans are typically investment grade fixed-income securities, equities and/or mutual funds. Internal ratings for this portion of the wealth management loan portfolio, therefore, would equate to investment grade external ratings. Wealth management loans are provided to select customers based on the pledge of other types of assets. For the loans collateralized by other assets, the credit quality of the obligor is carefully analyzed,

but we do not consider this portion of our wealth management loan portfolio to be investment grade.

Wealth management mortgages

Credit quality indicators for wealth management mortgages are not correlated to external ratings. Wealth management mortgages are typically loans to high-net-worth individuals, which are secured primarily by residential property. These loans are primarily interest-only, adjustable-rate mortgages with a weighted-average loan-to-value ratio of 61% at origination. Delinquency rate is a key indicator of credit quality in our wealth management portfolio. At Sept. 30, 2023, less than 1% of the mortgages were past due.

At Sept. 30, 2023, the wealth management mortgage portfolio consisted of the following geographic concentrations: California – 21%; New York – 14%; Florida – 11%; Massachusetts – 8%; and other – 46%.

Lease financings

At Sept. 30, 2023, the lease financings portfolio consisted of exposures backed by well-diversified assets, primarily real estate and large-ticket transportation equipment. The largest components of our lease residual value exposure relate to freight-related rail cars and aircraft. Assets are both domestic and foreign-based, with primary concentrations in Germany and the U.S.

Other residential mortgages

The other residential mortgages portfolio primarily consists of 1-4 family residential mortgage loans and totaled $1.0 billion at Sept. 30, 2023 and $345 million at Dec. 31, 2022. Included in this portfolio at Sept. 30, 2023 were $750 million of fixed-rate jumbo mortgage loans, purchased primarily in the first quarter of 2023, with a weighted-average loan-to-value ratio of 73% at origination. These loans are not typically correlated to external ratings.

Capital call financing

Capital call financing includes loans to private equity funds that are secured by the fund investors' capital commitments and the funds' right to call capital.

Other loans

Other loans primarily include loans to consumers that are fully collateralized with equities, mutual funds and fixed-income securities.

Margin loans

We had $17.2 billion of secured margin loans at Sept. 30, 2023, compared with $16.9 billion at Dec. 31, 2022. Margin loans are collateralized with marketable securities, and borrowers are required to maintain a daily collateral margin in excess of 100% of the value of the loan. We have rarely suffered a loss on these types of loans.

Overdrafts

Overdrafts primarily relate to custody and securities clearance clients and totaled $3.6 billion at Sept. 30, 2023 and $4.8 billion at Dec. 31, 2022. Overdrafts occur on a daily basis and are generally repaid within two business days.

Reverse repurchase agreements

Reverse repurchase agreements at Sept. 30, 2023 and Dec. 31, 2022 were fully secured with high-quality collateral. As a result, there was no allowance for credit losses related to these assets at Sept. 30, 2023 and Dec. 31, 2022.

Note 6–Goodwill and intangible assets

Goodwill

The tables below provide a breakdown of goodwill by business segment.

Goodwill by business segment *(in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management	Consolidated
Balance at Dec. 31, 2022				
Goodwill	$ 6,973	$ 1,424	$ 8,433	$ 16,830
Accumulated impairment losses	—	—	(680)	(680)
Net goodwill	$ 6,973	$ 1,424	$ 7,753	$ 16,150
Foreign currency translation	(7)	1	15	9
Balance at Sept. 30, 2023				
Goodwill	$ 6,966	$ 1,425	$ 8,448	$ 16,839
Accumulated impairment losses	—	—	(680)	(680)
Net goodwill	**$ 6,966**	**$ 1,425**	**$ 7,768**	**$ 16,159**

Goodwill by business segment *(in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management	Consolidated
Balance at Dec. 31, 2021	$ 7,062	$ 1,435	$ 9,015	$ 17,512
Impairment loss	—	—	(680)	(680)
Dispositions	(13)	—	—	(13)
Foreign currency translation	(142)	(18)	(247)	(407)
Balance at Sept. 30, 2022				
Goodwill	$ 6,907	$ 1,417	$ 8,768	$ 17,092
Accumulated impairment losses	—	—	(680)	(680)
Net goodwill	$ 6,907	$ 1,417	$ 8,088	$ 16,412

Goodwill impairment testing

The goodwill impairment test is performed at least annually at the reporting unit level. An interim test is performed when events or circumstances occur that may indicate that it is more likely than not that the fair value of any reporting unit may be less than its carrying value.

In the third quarter of 2023, due to the results of the second quarter 2023 interim goodwill impairment test and macroeconomic conditions, we performed an interim goodwill impairment test of the Investment Management reporting unit, which had $6.0 billion of allocated goodwill. No additional goodwill impairment was recognized.

Intangible assets

The tables below provide a breakdown of intangible assets by business segment.

Intangible assets – net carrying amount by business segment *(in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Consolidated
Balance at Dec. 31, 2022	$ 193	$ 384	$ 1,475	$ 849	$ 2,901
Amortization	(23)	(5)	(15)	—	(43)
Foreign currency translation	—	—	1	—	1
Balance at Sept. 30, 2023	**$ 170**	**$ 379**	**$ 1,461**	**$ 849**	**$ 2,859**

Intangible assets – net carrying amount by business segment *(in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Consolidated
Balance at Dec. 31, 2021	$ 230	$ 392	$ 1,520	$ 849	$ 2,991
Amortization	(25)	(6)	(20)	—	(51)
Foreign currency translation	(8)	—	(30)	—	(38)
Balance at Sept. 30, 2022	$ 197	$ 386	$ 1,470	$ 849	$ 2,902

The table below provides a breakdown of intangible assets by type.

Intangible assets	**Sept. 30, 2023**				Dec. 31, 2022		
(dollars in millions)	Gross carrying amount	Accumulated amortization	Net carrying amount	Remaining weighted-average amortization period	Gross carrying amount	Accumulated amortization	Net carrying amount
Subject to amortization: *(a)*							
Customer contracts – Securities Services	**$ 727**	**$ (558)**	**$ 169**	**10 years**	$ 731	$ (539)	$ 192
Customer contracts – Market and Wealth Services	**280**	**(271)**	**9**	**3 years**	280	(267)	13
Customer relationships – Investment and Wealth Management	**553**	**(475)**	**78**	**8 years**	553	(461)	92
Other	**41**	**(11)**	**30**	**13 years**	41	(9)	32
Total subject to amortization	**$ 1,601**	**$ (1,315)**	**$ 286**	**10 years**	$ 1,605	$ (1,276)	$ 329
Not subject to amortization: *(b)*							
Tradename	**$ 1,290**	**N/A**	**$ 1,290**	**N/A**	$ 1,290	N/A	$ 1,290
Customer relationships	**1,283**	**N/A**	**1,283**	**N/A**	1,282	N/A	1,282
Total not subject to amortization	**$ 2,573**	**N/A**	**$ 2,573**	**N/A**	$ 2,572	N/A	$ 2,572
Total intangible assets	**$ 4,174**	**$ (1,315)**	**$ 2,859**	**N/A**	$ 4,177	$ (1,276)	$ 2,901

(a) Excludes fully amortized intangible assets.
(b) Intangible assets not subject to amortization have an indefinite life.
N/A – Not applicable.

Estimated annual amortization expense for current intangibles for the next five years is as follows:

For the year ended Dec. 31,	Estimated amortization expense *(in millions)*
2023	**$ 57**
2024	**49**
2025	**43**
2026	**34**
2027	**28**

Intangible asset impairment testing

Intangible assets not subject to amortization are tested for impairment annually or more often if events or circumstances indicate they may be impaired.

Note 7–Other assets

The following table provides the components of other assets presented on the consolidated balance sheet.

Other assets *(in millions)*	**Sept. 30, 2023**	Dec. 31, 2022
Corporate/bank-owned life insurance	**$ 5,449**	$ 5,417
Accounts receivable	**5,054**	4,924
Software	**2,385**	2,260
Fails to deliver	**2,163**	2,569
Prepaid pension assets	**1,943**	1,651
Qualified affordable housing project investments	**1,225**	1,298
Cash collateral receivable on derivative transactions	**881**	1,014
Equity method investments	**873**	803
Prepaid expense	**809**	764
Renewable energy investments	**711**	871
Other equity investments *(a)*	**694**	695
Fair value of hedging derivatives	**589**	319
Assets of consolidated investment management funds	**541**	209
Federal Reserve Bank stock	**485**	478
Income taxes receivable	**475**	481
Seed capital *(b)*	**191**	218
Other *(c)*	**763**	1,884
Total other assets	**$ 25,231**	$ 25,855

(a) Includes strategic equity, private equity and other investments.
(b) Includes investments in BNY Mellon funds that hedge deferred incentive awards.
(c) At Sept. 30, 2023 and Dec. 31, 2022, other assets include $7 million and $6 million, respectively, of Federal Home Loan Bank stock, at cost.

Non-readily marketable equity securities

Non-readily marketable equity securities do not have readily determinable fair values. These investments are valued using a measurement alternative where the investments are carried at cost, less any impairment, and plus or minus changes resulting from observable price changes in orderly transactions for an identical or similar investment of the same issuer. The observable price changes are recorded in investment and other revenue on the consolidated income statement. Our non-readily marketable equity securities totaled $420 million at Sept. 30, 2023 and $445 million at Dec. 31, 2022, and are included in other equity investments in the table above.

The following table presents the adjustments on the non-readily marketable equity securities.

Adjustments on non-readily marketable equity securities *(in millions)*	**3Q23**	2Q23	3Q22	**YTD23**	YTD22	Life-to-date
Upward adjustments	**$ —**	$ 5	$ 3	**$ 5**	$ 125	$ 288
Downward adjustments	**(21)**	(1)	—	**(40)**	(7)	(52)
Net adjustments	**$ (21)**	$ 4	$ 3	**$ (35)**	$ 118	$ 236

Qualified affordable housing project investments

We invest in affordable housing projects primarily to satisfy the Company's requirements under the Community Reinvestment Act. Our total investment in qualified affordable housing projects totaled $1.2 billion at Sept. 30, 2023 and $1.3 billion at Dec. 31, 2022. Commitments to fund future investments in qualified affordable housing projects totaled $589 million at Sept. 30, 2023 and $614 million at Dec. 31, 2022 and are recorded in other liabilities on the consolidated balance sheet. A summary of the commitments to fund future investments is as follows: remainder of 2023 – $175 million; 2024 – $137 million; 2025 – $183 million; 2026 – $24 million; 2027 – $28 million; and 2028 and thereafter – $42 million.

Tax credits and other tax benefits recognized were $45 million in the third quarter of 2023, $45 million in the second quarter of 2023, $38 million in the third quarter of 2022, $135 million in the first nine months of 2023 and $114 million in the first nine months of 2022.

Amortization expense included in the provision for income taxes was $38 million in the third quarter of 2023, $38 million in the second quarter of 2023, $32 million in the third quarter of 2022, $114 million in the first nine months of 2023 and $97 million in the first nine months of 2022.

Investments valued using net asset value ("NAV") per share

In our Investment and Wealth Management business segment, we make seed capital investments in certain funds we manage. We also hold private equity investments, primarily small business investment companies ("SBICs"), which are compliant with the Volcker Rule, and certain other corporate

investments. Seed capital, private equity and other corporate investments are included in other assets on the consolidated balance sheet. The fair value of certain of these investments was estimated using the NAV per share for our ownership interest in the funds.

The table below presents information on our investments valued using NAV.

Investments valued using NAV	**Sept. 30, 2023**		Dec. 31, 2022	
(in millions)	Fair value	Unfunded commitments	Fair value	Unfunded commitments
Seed capital *(a) (b)*	**$ 3**	**$ —**	$ 3	$ —
Private equity investments *(c)*	**144**	**47**	130	53
Other	**7**	**—**	5	—
Total	**$ 154**	**$ 47**	$ 138	$ 53

(a) Seed capital investments at Sept. 30, 2023 are generally redeemable on request. Distributions are received as the underlying investments in the funds, which have redemption notice periods of seven days, are liquidated.

(b) Includes investments in funds that relate to deferred compensation arrangements with employees.

(c) Private equity investments primarily include Volcker Rule-compliant investments in SBICs that invest in various sectors of the economy. Private equity investments do not have redemption rights. Distributions from such investments will be received as the underlying investments in the private equity investments, which have a life of 10 years, are liquidated.

Note 8–Contract revenue

Fee and other revenue in the Securities Services, Market and Wealth Services and Investment and Wealth Management business segments is primarily variable, based on levels of assets under custody and/or administration, assets under management and the level of client-driven transactions, as specified in the fee schedules. See Note 10 of the Notes to Consolidated Financial Statements in our 2022 Annual Report for information on the nature of our services and revenue recognition. See Note 24 of the Notes to Consolidated Financial Statements in our 2022 Annual Report for additional information on our principal business segments — Securities Services, Market and Wealth Services and Investment and Wealth Management — and the primary services provided.

Disaggregation of contract revenue

Contract revenue is included in fee and other revenue on the consolidated income statement. The following tables present fee and other revenue related to contracts with customers, disaggregated by type of fee revenue, for each business segment. Business segment data has been determined on an internal management basis of accounting, rather than GAAP, which is used for consolidated financial reporting.

Disaggregation of contract revenue by business segment

	Quarter ended									
	Sept. 30, 2023					Sept. 30, 2022				
(in millions)	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Total	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Total
Fee and other revenue – contract revenue:										
Investment services fees	**$ 1,259**	**$ 952**	**$ 27**	**$ (19)**	**$ 2,219**	$ 1,233	$ 903	$ 26	$ (16)	$ 2,146
Investment management and performance fees	**—**	**4**	**774**	**(2)**	**776**	—	5	800	(3)	802
Financing-related fees	**7**	**2**	**—**	**—**	**9**	7	3	—	1	11
Distribution and servicing fees	**2**	**(25)**	**62**	**—**	**39**	1	(23)	55	—	33
Investment and other revenue	**58**	**52**	**(81)**	**—**	**29**	56	49	(76)	(1)	28
Total fee and other revenue – contract revenue	**1,326**	**985**	**782**	**(21)**	**3,072**	1,297	937	805	(19)	3,020
Fee and other revenue – not in scope of Accounting Standards Codification ("ASC") 606 *(a)(b)*	**163**	**58**	**7**	**55**	**283**	239	52	—	42	333
Total fee and other revenue	**$ 1,489**	**$ 1,043**	**$ 789**	**$ 34**	**$ 3,355**	$ 1,536	$ 989	$ 805	$ 23	$ 3,353

(a) Primarily includes investment services fees, foreign exchange revenue, financing-related fees and investment and other revenue, all of which are accounted for using other accounting guidance.

(b) The Investment and Wealth Management business segment is net of income (loss) attributable to noncontrolling interests related to consolidated investment management funds of $3 million in the third quarter of 2023 and $— million in the third quarter of 2022.

Disaggregation of contract revenue by business segment

(in millions)	Quarter ended June 30, 2023				
	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Total
Fee and other revenue – contract revenue:					
Investment services fees	$ 1,299	$ 932	$ 23	$ (14)	$ 2,240
Investment management and performance fees	—	5	760	(4)	761
Financing-related fees	10	4	—	1	15
Distribution and servicing fees	1	(23)	58	(1)	35
Investment and other revenue	60	50	(79)	—	31
Total fee and other revenue – contract revenue	1,370	968	762	(18)	3,082
Fee and other revenue – not in scope of ASC 606 *(a)(b)*	202	57	12	—	271
Total fee and other revenue	$ 1,572	$ 1,025	$ 774	$ (18)	$ 3,353

(a) Primarily includes investment services fees, foreign exchange revenue, financing-related fees and investment and other revenue, all of which are accounted for using other accounting guidance.
(b) The Investment and Wealth Management business segment is net of income (loss) attributable to noncontrolling interests related to consolidated investment management funds of $1 million in the second quarter of 2023.

Disaggregation of contract revenue by business segment

(in millions)	Year-to-date									
	Sept. 30, 2023					Sept. 30, 2022				
	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Total	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Total
Fee and other revenue – contract revenue:										
Investment services fees	**$ 3,734**	**$ 2,809**	**$ 74**	**$ (48)**	**$ 6,569**	$ 3,657	$ 2,647	$ 75	$ (50)	$ 6,329
Investment management and performance fees	**—**	**14**	**2,315**	**(9)**	**2,320**	—	17	2,509	(11)	2,515
Financing-related fees	**30**	**11**	**—**	**1**	**42**	21	21	—	1	43
Distribution and servicing fees	**3**	**(71)**	**175**	**—**	**107**	3	(44)	138	—	97
Investment and other revenue	**178**	**152**	**(240)**	**1**	**91**	157	96	(169)	(1)	83
Total fee and other revenue – contract revenue	**3,945**	**2,915**	**2,324**	**(55)**	**9,129**	3,838	2,737	2,553	(61)	9,067
Fee and other revenue – not in scope of ASC 606 *(a)(b)*	**566**	**167**	**21**	**60**	**814**	650	132	(4)	179	957
Total fee and other revenue	**$ 4,511**	**$ 3,082**	**$ 2,345**	**$ 5**	**$ 9,943**	$ 4,488	$ 2,869	$ 2,549	$ 118	$ 10,024

(a) Primarily includes investment services fees, foreign exchange revenue, financing-related fees and investment and other revenue, all of which are accounted for using other accounting guidance.
(b) The Investment and Wealth Management business segment is net of income (loss) income attributable to noncontrolling interests related to consolidated investment management funds of $4 million in the first nine months of 2023 and $(13) million in the first nine months of 2022.

Contract balances

Our clients are billed based on fee schedules that are agreed upon in each customer contract. Receivables from customers were $2.6 billion at Sept. 30, 2023 and Dec. 31, 2022.

Contract assets represent accrued revenues that have not yet been billed to customers due to certain contractual terms other than the passage of time and were $49 million at Sept. 30, 2023 and $48 million at Dec. 31, 2022. Accrued revenues recorded as contract assets are usually billed on an annual basis.

Both receivables from customers and contract assets are included in other assets on the consolidated balance sheet.

Contract liabilities represent payments received in advance of providing services under certain contracts and were $205 million at Sept. 30, 2023 and $164 million at Dec. 31, 2022. Contract liabilities are included in other liabilities on the consolidated balance sheet. Revenue recognized in the first nine months of 2023 relating to contract liabilities as of Dec. 31, 2022 was $104 million. Revenue recognized in the third quarter of 2023 relating to contract liabilities as of June 30, 2023 was $77 million.

Changes in contract assets and liabilities primarily relate to either party's performance under the contracts.

Contract costs

Incremental costs for obtaining contracts that are deemed recoverable are capitalized as contract costs. Such costs result from the payment of sales incentives, primarily in the Wealth Management business, and totaled $51 million at Sept. 30, 2023 and $58 million at Dec. 31, 2022. Capitalized sales incentives are amortized based on the transfer of goods or services to which the assets relate. The amortization of capitalized sales incentives, which is included in staff expense on the consolidated income statement, totaled $4 million in the third quarter of 2023, $5 million in the third quarter of 2022, $4 million in the second quarter of 2023, $12 million in the first nine months of 2023 and $14 million in the first nine months of 2022.

Costs to fulfill a contract are capitalized when they relate directly to an existing contract or a specific anticipated contract, generate or enhance resources that will be used to fulfill performance obligations, and are recoverable. Such costs generally represent set-up costs, which include any direct cost incurred at the inception of a contract which enables the fulfillment of the performance obligation, and totaled $88 million at Sept. 30, 2023 and $77 million at Dec. 31, 2022. These capitalized costs are amortized on a straight-line basis over the expected contract period.

Unsatisfied performance obligations

We do not have any unsatisfied performance obligations other than those that are subject to a practical expedient election under ASC 606, *Revenue From Contracts With Customers*. The practical expedient election applies to (i) contracts with an original expected length of one year or less, and (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed.

Note 9–Net interest revenue

The following table provides the components of net interest revenue presented on the consolidated income statement.

Net interest revenue	Quarter ended			Year-to-date	
(in millions)	**Sept. 30, 2023**	June 30, 2023	Sept. 30, 2022	**Sept. 30, 2023**	Sept. 30, 2022
Interest revenue					
Deposits with the Federal Reserve and other central banks	**$ 1,153**	$ 1,241	$ 288	**$ 3,247**	$ 389
Deposits with banks	**125**	128	67	**393**	114
Federal funds sold and securities purchased under resale agreements	**2,066**	1,776	321	**4,833**	474
Loans	**1,029**	957	581	**2,852**	1,211
Securities:					
Taxable	**1,069**	1,042	683	**3,133**	1,626
Exempt from federal income taxes	**1**	—	9	**1**	29
Total securities	**1,070**	1,042	692	**3,134**	1,655
Trading securities	**76**	80	35	**226**	78
Total interest revenue	**5,519**	5,224	1,984	**14,685**	3,921
Interest expense					
Deposits	**1,911**	1,739	488	**5,016**	541
Federal funds purchased and securities sold under repurchase agreements	**1,956**	1,729	250	**4,577**	339
Trading liabilities	**48**	43	23	**121**	37
Other borrowed funds	**6**	32	1	**41**	6
Customer payables	**147**	143	48	**418**	57
Long-term debt	**435**	438	248	**1,268**	493
Total interest expense	**4,503**	4,124	1,058	**11,441**	1,473
Net interest revenue	**1,016**	1,100	926	**3,244**	2,448
Provision for credit losses	**3**	5	(30)	**35**	19
Net interest revenue after provision for credit losses	**$ 1,013**	$ 1,095	$ 956	**$ 3,209**	$ 2,429

Note 10–Employee benefit plans

The components of net periodic benefit (credit) cost are presented below. The service cost component is reflected in staff expense, whereas the remaining components are reflected in other expense.

Net periodic benefit (credit) cost	Quarter ended								
	Sept. 30, 2023			June 30, 2023			Sept. 30, 2022		
(in millions)	Domestic pension benefits	Foreign pension benefits	Health care benefits	Domestic pension benefits	Foreign pension benefits	Health care benefits	Domestic pension benefits	Foreign pension benefits	Health care benefits
Service cost	**$ —**	**$ 3**	**$ —**	$ —	$ 2	$ —	$ —	$ 3	$ —
Interest cost	**47**	**9**	**1**	47	9	2	35	6	1
Expected return on assets	**(95)**	**(23)**	**(2)**	(95)	(22)	(3)	(78)	(8)	(2)
Other	**2**	**(4)**	**(3)**	3	(4)	(3)	17	1	(1)
Net periodic benefit (credit) cost	**$ (46)**	**$ (15)**	**(4)**	$ (45)	$ (15)	$ (4)	$ (26)	$ 2	$ (2)

Net periodic benefit (credit) cost	Year-to-date					
	Sept. 30, 2023			Sept. 30, 2022		
(in millions)	Domestic pension benefits	Foreign pension benefits	Health care benefits	Domestic pension benefits	Foreign pension benefits	Health care benefits
Service cost	**$ —**	**$ 8**	**$ —**	$ —	$ 9	$ —
Interest cost	**142**	**26**	**4**	105	21	3
Expected return on assets	**(285)**	**(67)**	**(7)**	(234)	(27)	(5)
Other	**7**	**(11)**	**(9)**	51	3	(3)
Net periodic benefit (credit) cost	**$ (136)**	**$ (44)**	**(12)**	$ (78)	$ 6	$ (5)

Note 11–Income taxes

BNY Mellon recorded an income tax provision of $241 million (18.8% effective tax rate) in the third quarter of 2023. The income tax provision was $242 million (38.4% effective tax rate) in the third quarter of 2022, which includes approximately 19% impact due to the goodwill impairment. The income tax provision was $270 million (20.2% effective tax rate) in the second quarter of 2023.

Our total tax reserves as of Sept. 30, 2023 were $109 million, compared with $106 million at Dec. 31, 2022. If these tax reserves were unnecessary, $109 million would affect the effective tax rate in future periods. We recognize accrued interest and penalties, if applicable, related to income taxes in income tax expense. Included in the balance sheet at Sept. 30, 2023 is accrued interest, where applicable, of $36 million. The additional tax expense related to interest for the nine months ended Sept. 30, 2023 was $3 million, compared with $3 million for the nine months ended Sept. 30, 2022.

It is reasonably possible the total reserve for uncertain tax positions could decrease within the next 12 months by approximately $9 million as a result of adjustments related to tax years that are still subject to examination.

Our federal income tax returns are closed to examination through 2016. Our New York State and New York City income tax returns are closed to examination through 2014. Our UK income tax returns are closed to examination through 2020.

Note 12–Variable interest entities

We have variable interests in variable interest entities (“VIEs”), which include investments in retail, institutional and alternative investment funds.

We earn management fees from these funds, as well as performance fees in certain funds, and may also provide start-up capital for new funds. The funds are primarily financed by our customers’ investments in the funds’ equity or debt.

Additionally, we invest in qualified affordable housing and renewable energy projects, which are designed to generate a return primarily through the realization of tax credits. The projects, which are structured as limited partnerships and limited liability companies, are also VIEs, but are not consolidated.

The following table presents the incremental assets and liabilities included on the consolidated balance sheet as of Sept. 30, 2023 and Dec. 31, 2022. The net assets of any consolidated VIE are solely available to settle the liabilities of the VIE and to settle any investors' ownership liquidation requests, including any seed capital we invested in the VIE.

Consolidated investment management funds

(in millions)	**Sept. 30, 2023**	Dec. 31, 2022
Trading assets	**$ 529**	$ 203
Other assets	**12**	6
Total assets *(a)*	**$ 541**	$ 209
Other liabilities	**$ 7**	$ 1
Total liabilities *(b)*	**$ 7**	$ 1
Nonredeemable noncontrolling interests *(c)*	**$ 56**	$ 7

(a) Includes voting model entities ("VMEs") with assets of $113 million at Sept. 30, 2023 and $86 million at Dec. 31, 2022.
(b) Includes VMEs with liabilities of $1 million at Sept. 30, 2023 and $1 million at Dec. 31, 2022.
(c) Includes VMEs with nonredeemable noncontrolling interests of $16 million at Sept. 30, 2023 and $7 million at Dec. 31, 2022.

We have not provided financial or other support that was not otherwise contractually required to be provided to our VIEs. Additionally, creditors of any consolidated VIEs do not have any recourse to the general credit of BNY Mellon.

Non-consolidated VIEs

As of Sept. 30, 2023 and Dec. 31, 2022, assets and liabilities related to the VIEs where we are not the primary beneficiary were included in other assets and other liabilities on the consolidated balance sheet and primarily related to accounting for our investments in qualified affordable housing and renewable energy projects.

The maximum loss exposure indicated in the following table relates solely to our investments in, and unfunded commitments to, the VIEs.

Non-consolidated VIEs

(in millions)	**Sept. 30, 2023**	Dec. 31, 2022
Other assets	**$ 2,005**	$ 2,235
Other liabilities	**589**	614
Maximum loss exposure	**2,595**	2,850

Note 13–Preferred stock

The Parent has 100 million authorized shares of preferred stock with a par value of $0.01 per share. The following table summarizes the Parent's preferred stock issued and outstanding at Sept. 30, 2023 and Dec. 31, 2022.

Preferred stock summary *(a)*		Total shares issued and outstanding		Carrying value *(b)* *(in millions)*	
	Per annum dividend rate *(c)*	**Sept. 30, 2023**	Dec. 31, 2022	**Sept. 30, 2023**	Dec. 31, 2022
Series A	Greater of (i) SOFR plus 0.565% and (ii) 4.000%	**5,001**	5,001	**$ 500**	$ 500
Series D	SOFR plus 2.46%	**5,000**	5,000	**494**	494
Series F	4.625% to but excluding Sept. 20, 2026, then SOFR plus 3.131%	**10,000**	10,000	**990**	990
Series G	4.700% to but excluding Sept. 20, 2025, then a floating rate equal to the five-year treasury rate plus 4.358%	**10,000**	10,000	**990**	990
Series H	3.700% to but excluding March 20, 2026, then a floating rate equal to the five-year treasury rate plus 3.352%	**5,825**	5,825	**577**	577
Series I	3.750% to but excluding Dec. 20, 2026, then a floating rate equal to the five-year treasury rate plus 2.630%	**13,000**	13,000	**1,287**	1,287
Total		**48,826**	48,826	**$ 4,838**	$ 4,838

(a) All outstanding preferred stock is noncumulative perpetual preferred stock with a liquidation preference of $100,000 per share.
(b) The carrying value of the Series D, Series F, Series G, Series H and Series I preferred stock is recorded net of issuance costs.
(c) References to SOFR are to a floating rate equal to the three-month CME Term SOFR (plus a spread adjustment of 0.26161% per annum).

The table below presents the Parent's preferred dividends.

Preferred dividends *(dollars in millions, except per share amounts)*	Depositary shares per share	**3Q23** Per share	**3Q23** Total dividend	2Q23 Per share	2Q23 Total dividend	3Q22 Per share	3Q22 Total dividend	**YTD23** Per share	**YTD23** Total dividend	YTD22 Per share	YTD22 Total dividend
Series A	100 *(a)*	**$ 1,552.50**	**$ 8**	$ 1,412.60	$ 7	$ 1,011.11	$ 5	**$ 4,292.82**	**$ 22**	$ 3,044.44	$ 15
Series D	100	**2,036.78**	**10**	2,250.00	11	—	—	**4,286.78**	**21**	2,250.00	11
Series F	100	**2,312.50**	**23**	—	—	2,312.50	23	**4,625.00**	**46**	4,625.00	46
Series G	100	**2,350.00**	**23**	—	—	2,350.00	23	**4,700.00**	**47**	4,700.00	47
Series H	100	**925.00**	**6**	925.00	6	925.00	6	**2,775.00**	**17**	2,775.00	17
Series I	100	**937.50**	**12**	937.50	12	937.50	12	**2,812.50**	**36**	3,145.83	41
Total			**$ 82**		$ 36		$ 69		**$ 189**		$ 177

(a) Represents Normal Preferred Capital Securities.

All of the outstanding shares of the Series A preferred stock are owned by Mellon Capital IV, a 100% owned finance subsidiary of the Parent, which will pass through any dividend on the Series A preferred stock to the holders of its Normal Preferred Capital Securities. The Parent's obligations under the trust and other agreements relating to Mellon Capital IV have the effect of providing a full and unconditional guarantee, on a subordinated basis, of payments due on the Normal Preferred Capital Securities. No other subsidiary of the Parent guarantees the securities of Mellon Capital IV.

For additional information on our preferred stock, see Note 15 of the Notes to Consolidated Financial Statements in our 2022 Annual Report.

Note 14–Other comprehensive income (loss)

Components of other comprehensive income (loss) *(in millions)*	Quarter ended **Sept. 30, 2023** Pre-tax amount	**Sept. 30, 2023** Tax (expense) benefit	**Sept. 30, 2023** After-tax amount	June 30, 2023 Pre-tax amount	June 30, 2023 Tax (expense) benefit	June 30, 2023 After-tax amount	Sept. 30, 2022 Pre-tax amount	Sept. 30, 2022 Tax (expense) benefit	Sept. 30, 2022 After-tax amount
Foreign currency translation:									
Foreign currency translation adjustments arising during the period *(a)*	**$ (106)**	**$ (79)**	**$ (185)**	$ 61	$ 36	$ 97	$ (292)	$ (150)	$ (442)
Total foreign currency translation	**(106)**	**(79)**	**(185)**	61	36	97	(292)	(150)	(442)
Unrealized gain (loss) on assets available-for-sale:									
Unrealized (loss) arising during period	**(38)**	**9**	**(29)**	(202)	45	(157)	(1,205)	297	(908)
Reclassification adjustment *(b)*	**19**	**(5)**	**14**	—	—	—	(1)	—	(1)
Net unrealized (loss) on assets available-for-sale	**(19)**	**4**	**(15)**	(202)	45	(157)	(1,206)	297	(909)
Defined benefit plans:									
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost *(b)*	**(5)**	**2**	**(3)**	(4)	2	(2)	17	(4)	13
Total defined benefit plans	**(5)**	**2**	**(3)**	(4)	2	(2)	17	(4)	13
Unrealized gain (loss) on cash flow hedges:									
Unrealized hedge (loss) gain arising during period	**(1)**	**1**	**—**	3	(1)	2	(5)	1	(4)
Reclassification of net loss to net income:									
FX contracts – investment and other revenue	**2**	**(1)**	**1**	1	—	1	1	—	1
Foreign exchange ("FX") contracts – staff expense	**(2)**	**1**	**(1)**	—	—	—	3	(1)	2
Total reclassifications to net income	**—**	**—**	**—**	1	—	1	4	(1)	3
Net unrealized (loss) gain on cash flow hedges	**(1)**	**1**	**—**	4	(1)	3	(1)	—	(1)
Total other comprehensive (loss) income	**$ (131)**	**$ (72)**	**$ (203)**	$ (141)	$ 82	$ (59)	$ (1,482)	$ 143	$ (1,339)

(a) Includes the impact of hedges of net investments in foreign subsidiaries. See Note 17 for additional information.
(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains (losses), which is included in investment and other revenue on the consolidated income statement. The amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost is recorded as other expense on the consolidated income statement.

Components of other comprehensive income (loss)	Year-to-date					
	Sept. 30, 2023			Sept. 30, 2022		
(in millions)	Pre-tax amount	Tax (expense) benefit	After-tax amount	Pre-tax amount	Tax (expense) benefit	After-tax amount
Foreign currency translation:						
Foreign currency translation adjustments arising during the period *(a)*	**$ 32**	**$ (17)**	**$ 15**	$ (848)	$ (302)	$ (1,150)
Total foreign currency translation	**32**	**(17)**	**15**	(848)	(302)	(1,150)
Unrealized gain (loss) on assets available-for-sale:						
Unrealized gain (loss) arising during period	**179**	**(48)**	**131**	(4,393)	1,072	(3,321)
Reclassification adjustment *(b)*	**20**	**(5)**	**15**	(5)	1	(4)
Net unrealized gain (loss) on assets available-for-sale	**199**	**(53)**	**146**	(4,398)	1,073	(3,325)
Defined benefit plans:						
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost *(b)*	**(13)**	**5**	**(8)**	51	(7)	44
Total defined benefit plans	**(13)**	**5**	**(8)**	51	(7)	44
Unrealized gain (loss) on cash flow hedges:						
Unrealized hedge gain (loss) arising during period	**6**	**(1)**	**5**	(16)	4	(12)
Reclassification of net loss to net income:						
FX contracts – staff expense	**1**	**—**	**1**	4	(1)	3
FX contracts – investment and other revenue	**3**	**(1)**	**2**	1	—	1
Total reclassifications to net income	**4**	**(1)**	**3**	5	(1)	4
Net unrealized gain (loss) on cash flow hedges	**10**	**(2)**	**8**	(11)	3	(8)
Total other comprehensive income (loss)	**$ 228**	**$ (67)**	**$ 161**	$ (5,206)	$ 767	$ (4,439)

(a) Includes the impact of hedges of net investments in foreign subsidiaries. See Note 17 for additional information.

(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains, which is included in investment and other revenue on the consolidated income statement. The amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost is recorded as other expense on the consolidated income statement.

Note 15–Fair value measurement

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. A three-level hierarchy for fair value measurements is utilized based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. BNY Mellon's own creditworthiness is considered when valuing liabilities. See Note 20 of the Notes to Consolidated Financial Statements in our 2022 Annual Report for information on how we determine fair value and the fair value hierarchy.

The following tables present the financial instruments carried at fair value at Sept. 30, 2023 and Dec. 31, 2022, by caption on the consolidated balance sheet and by the three-level valuation hierarchy. We have included credit ratings information in certain of the tables because the information indicates the degree of credit risk to which we are exposed, and significant changes in ratings classifications could result in increased risk for us.

Assets and liabilities measured at fair value on a recurring basis at Sept. 30, 2023 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Available-for-sale securities:					
U.S. Treasury	$ 20,898	$ —	$ —	$ —	$ 20,898
Agency RMBS	—	9,987	—	—	9,987
Sovereign debt/sovereign guaranteed	2,583	6,107	—	—	8,690
Supranational	—	7,568	—	—	7,568
Agency commercial MBS	—	7,532	—	—	7,532
Foreign covered bonds	—	6,110	—	—	6,110
CLOs	—	5,935	—	—	5,935
Non-agency commercial MBS	—	2,917	—	—	2,917
U.S. government agencies	—	2,762	—	—	2,762
Foreign government agencies/local governments	—	2,159	—	—	2,159
Non-agency RMBS	—	1,737	—	—	1,737
Other ABS	—	922	—	—	922
Other debt securities	—	1	—	—	1
Total available-for-sale securities	23,481	53,737	—	—	77,218
Trading assets:					
Debt instruments	2,068	2,048	—	—	4,116
Equity instruments	4,431	—	—	—	4,431
Derivative assets not designated as hedging:					
Interest rate	11	1,041	—	(1,052)	—
Foreign exchange	—	7,813	—	(5,734)	2,079
Equity and other contracts	9	126	—	(62)	73
Total derivative assets not designated as hedging	20	8,980	—	(6,848)	2,152
Total trading assets	6,519	11,028	—	(6,848)	10,699
Other assets:					
Derivative assets designated as hedging:					
Interest rate	—	369	—	—	369
Foreign exchange	—	220	—	—	220
Total derivative assets designated as hedging	—	589	—	—	589
Other assets *(b)*	469	349	—	—	818
Total other assets	469	938	—	—	1,407
Assets measured at NAV *(b)*					154
Total assets	**$ 30,469**	**$ 65,703**	**$ —**	**$ (6,848)**	**$ 89,478**
Percentage of total assets prior to netting	32 %	68 %	— %		
Liabilities					
Trading liabilities:					
Debt instruments	$ 4,069	$ 19	$ —	$ —	$ 4,088
Equity instruments	49	—	—	—	49
Derivative liabilities not designated as hedging:					
Interest rate	3	1,483	—	(501)	985
Foreign exchange	2	7,701	—	(5,472)	2,231
Equity and other contracts	—	15	—	(10)	5
Total derivative liabilities not designated as hedging	5	9,199	—	(5,983)	3,221
Total trading liabilities	4,123	9,218	—	(5,983)	7,358
Other liabilities:					
Derivative liabilities designated as hedging:					
Foreign exchange	—	16	—	—	16
Total derivative liabilities designated as hedging	—	16	—	—	16
Other liabilities	—	7	—	—	7
Total other liabilities	—	23	—	—	23
Total liabilities	**$ 4,123**	**$ 9,241**	**$ —**	**$ (5,983)**	**$ 7,381**
Percentage of total liabilities prior to netting	31 %	69 %	— %		

(a) ASC 815, Derivatives and Hedging, permits the netting of derivative receivables and derivative payables under legally enforceable master netting agreements and permits the netting of cash collateral. Netting is applicable to derivatives not designated as hedging instruments included in trading assets or trading liabilities and derivatives designated as hedging instruments included in other assets or other liabilities. Netting is allocated to the derivative products based on the net fair value of each product.

(b) Includes seed capital, private equity investments and other assets.

Assets and liabilities measured at fair value on a recurring basis at Dec. 31, 2022 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Assets					
Available-for-sale securities:					
U.S. Treasury	$ 29,533	$ —	$ —	$ —	$ 29,533
Sovereign debt/sovereign guaranteed	4,237	6,127	—	—	10,364
Agency RMBS	—	8,957	—	—	8,957
Agency commercial MBS	—	8,060	—	—	8,060
Supranational	—	7,734	—	—	7,734
Foreign covered bonds	—	5,758	—	—	5,758
CLOs	—	5,343	—	—	5,343
Non-agency commercial MBS	—	2,977	—	—	2,977
U.S. government agencies	—	2,294	—	—	2,294
Foreign government agencies/local governments	—	2,241	—	—	2,241
Non-agency RMBS	—	2,029	—	—	2,029
Other ABS	—	1,319	—	—	1,319
State and political subdivisions	—	12	—	—	12
Other debt securities	—	1	—	—	1
Total available-for-sale securities	33,770	52,852	—	—	86,622
Trading assets:					
Debt instruments	1,590	1,901	—	—	3,491
Equity instruments	3,791	—	—	—	3,791
Derivative assets not designated as hedging:					
Interest rate	10	1,287	—	(986)	311
Foreign exchange	—	9,433	—	(7,215)	2,218
Equity and other contracts	4	98	—	(5)	97
Total derivative assets not designated as hedging	14	10,818	—	(8,206)	2,626
Total trading assets	5,395	12,719	—	(8,206)	9,908
Other assets*:*					
Derivative assets designated as hedging:					
Interest rate	—	205	—	—	205
Foreign exchange	—	114	—	—	114
Total derivative assets designated as hedging	—	319	—	—	319
Other assets *(b)*	294	220	—	—	514
Total other assets	294	539	—	—	833
Assets measured at NAV *(b)*					138
Total assets	$ 39,459	$ 66,110	$ —	$ (8,206)	$ 97,501
Percentage of total assets prior to netting	37 %	63 %	— %		
Liabilities					
Trading liabilities:					
Debt instruments	$ 2,373	$ 101	$ —	$ —	$ 2,474
Equity instruments	97	—	—	—	97
Derivative liabilities not designated as hedging:					
Interest rate	6	1,578	—	(798)	786
Foreign exchange	—	9,456	—	(7,444)	2,012
Equity and other contracts	—	17	—	(1)	16
Total derivative liabilities not designated as hedging	6	11,051	—	(8,243)	2,814
Total trading liabilities	2,476	11,152	—	(8,243)	5,385
Other liabilities:					
Derivative liabilities designated as hedging:					
Foreign exchange	—	220	—	—	220
Total derivative liabilities designated as hedging	—	220	—	—	220
Other liabilities	—	1	—	—	1
Total other liabilities	—	221	—	—	221
Total liabilities	$ 2,476	$ 11,373	$ —	$ (8,243)	$ 5,606
Percentage of total liabilities prior to netting	18 %	82 %	— %		

(a) ASC 815, Derivatives and Hedging, permits the netting of derivative receivables and derivative payables under legally enforceable master netting agreements and permits the netting of cash collateral. Netting is applicable to derivatives not designated as hedging instruments included in trading assets or trading liabilities and derivatives designated as hedging instruments included in other assets or other liabilities. Netting is allocated to the derivative products based on the net fair value of each product.

(b) Includes seed capital, private equity investments and other assets.

Details of certain available-for-sale securities measured at fair value on a recurring basis	**Sept. 30, 2023**							Dec. 31, 2022					
		Ratings *(a)*						Ratings *(a)*					
(dollars in millions)	Total carrying value *(b)*	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated	Total carrying value *(b)*	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Non-agency RMBS, originated in:												
2008-2023	**$ 1,479**	**100 %**	**— %**	**— %**	**— %**	**— %**	$ 1,728	100 %	— %	— %	— %	— %
2007 and earlier	**258**	**4**	**14**	**1**	**41**	**40**	301	5	13	1	45	36
Total non-agency RMBS	**$ 1,737**	**86 %**	**2 %**	**— %**	**6 %**	**6 %**	$ 2,029	86 %	2 %	— %	7 %	5 %
Non-agency commercial MBS originated in:												
2009-2023	**$ 2,917**	**100 %**	**— %**	**— %**	**— %**	**— %**	$ 2,977	100 %	— %	— %	— %	— %
Foreign covered bonds:												
Canada	**$ 2,476**	**100 %**	**— %**	**— %**	**— %**	**— %**	$ 2,384	100 %	— %	— %	— %	— %
UK	**1,045**	**100**	**—**	**—**	**—**	**—**	1,215	100	—	—	—	—
Australia	**703**	**100**	**—**	**—**	**—**	**—**	696	100	—	—	—	—
Germany	**580**	**100**	**—**	**—**	**—**	**—**	542	100	—	—	—	—
Norway	**266**	**100**	**—**	**—**	**—**	**—**	377	100	—	—	—	—
Other	**1,040**	**100**	**—**	**—**	**—**	**—**	544	100	—	—	—	—
Total foreign covered bonds	**$ 6,110**	**100 %**	**— %**	**— %**	**— %**	**— %**	$ 5,758	100 %	— %	— %	— %	— %
Sovereign debt/sovereign guaranteed:												
Germany	**$ 2,778**	**100 %**	**— %**	**— %**	**— %**	**— %**	$ 3,103	100 %	— %	— %	— %	— %
France	**1,445**	**100**	**—**	**—**	**—**	**—**	1,665	100	—	—	—	—
UK	**1,232**	**100**	**—**	**—**	**—**	**—**	2,225	100	—	—	—	—
Canada	**608**	**100**	**—**	**—**	**—**	**—**	702	100	—	—	—	—
Singapore	**562**	**100**	**—**	**—**	**—**	**—**	797	100	—	—	—	—
Japan	**341**	**—**	**100**	**—**	**—**	**—**	475	—	100	—	—	—
Spain	**287**	**—**	**28**	**72**	**—**	**—**	214	—	40	60	—	—
Hong Kong	**254**	**100**	**—**	**—**	**—**	**—**	273	100	—	—	—	—
Italy	**211**	**—**	**—**	**100**	**—**	**—**	390	—	—	100	—	—
Austria	**197**	**100**	**—**	**—**	**—**	**—**	177	100	—	—	—	—
Other *(c)*	**775**	**80**	**5**	**—**	**15**	**—**	343	55	9	—	36	—
Total sovereign debt/sovereign guaranteed	**$ 8,690**	**89 %**	**5 %**	**5 %**	**1 %**	**— %**	$ 10,364	88 %	6 %	5 %	1 %	— %
Foreign government agencies/local governments:												
Canada	**$ 746**	**85 %**	**15 %**	**— %**	**— %**	**— %**	$ 652	83 %	17 %	— %	— %	— %
Norway	**430**	**100**	**—**	**—**	**—**	**—**	427	100	—	—	—	—
Netherlands	**296**	**100**	**—**	**—**	**—**	**—**	363	100	—	—	—	—
Sweden	**212**	**100**	**—**	**—**	**—**	**—**	260	100	—	—	—	—
France	**18**	**100**	**—**	**—**	**—**	**—**	240	100	—	—	—	—
Other	**457**	**86**	**14**	**—**	**—**	**—**	299	100	—	—	—	—
Total foreign government agencies/local governments	**$ 2,159**	**92 %**	**8 %**	**— %**	**— %**	**— %**	$ 2,241	95 %	5 %	— %	— %	— %

(a) Represents ratings by S&P or the equivalent.

(b) At Sept. 30, 2023 and Dec. 31, 2022, sovereign debt/sovereign guaranteed securities were included in Level 1 and Level 2 in the valuation hierarchy. All other assets in the table are Level 2 assets in the valuation hierarchy.

(c) Includes non-investment grade sovereign debt/sovereign guaranteed securities related to Brazil of $118 million at Sept. 30, 2023 and $123 million at Dec. 31, 2022.

Assets and liabilities measured at fair value on a nonrecurring basis

Under certain circumstances, we make adjustments to the fair value of our assets, liabilities and unfunded lending-related commitments, although they are not measured at fair value on an ongoing basis. The following table presents the carrying value as of Sept. 30, 2023 and Dec. 31, 2022 of financial instruments for which nonrecurring adjustments to fair value have been recorded during 2023 and/or 2022 and all non-readily marketable equity securities carried at cost with upward or downward adjustments by balance sheet caption and level in the fair value hierarchy.

Assets measured at fair value on a nonrecurring basis	**Sept. 30, 2023**				Dec. 31, 2022			
(in millions)	Level 1	Level 2	Level 3	Total carrying value	Level 1	Level 2	Level 3	Total carrying value
Loans *(a)*	**$ — $**	**29 $**	**— $**	**29**	$ — $	33 $	— $	33
Other assets *(b)*	**—**	**421**	**—**	**421**	—	448	—	448
Total assets at fair value on a nonrecurring basis	**$ — $**	**450 $**	**— $**	**450**	$ — $	481 $	— $	481

(a) The fair value of these loans was unchanged in the in the third quarter of 2023 and the fourth quarter of 2022, based on the fair value of the underlying collateral, as required by guidance in ASC 326, Financial Instruments – Credit Losses, with an offset to the allowance for credit losses.
(b) Includes non-readily marketable equity securities carried at cost with upward or downward adjustments and other assets received in satisfaction of debt.

Estimated fair value of financial instruments

The following tables present the estimated fair value and the carrying amount of financial instruments not carried at fair value on the consolidated balance sheet at Sept. 30, 2023 and Dec. 31, 2022, by caption on the consolidated balance sheet and by the valuation hierarchy.

Summary of financial instruments	**Sept. 30, 2023**				
(in millions)	Level 1	Level 2	Level 3	Total estimated fair value	Carrying amount
Assets:					
Interest-bearing deposits with the Federal Reserve and other central banks	$ — $	107,419 $	— $	107,419 $	107,419
Interest-bearing deposits with banks	—	12,995	—	12,995	12,999
Federal funds sold and securities purchased under resale agreements	—	26,299	—	26,299	26,299
Securities held-to-maturity	9,617	34,594	—	44,211	51,007
Loans *(a)*	—	64,309	—	64,309	65,446
Other financial assets	4,904	2,086	—	6,990	6,990
Total	**$ 14,521 $**	**247,702 $**	**— $**	**262,223 $**	**270,160**
Liabilities:					
Noninterest-bearing deposits	$ — $	60,571 $	— $	60,571 $	60,571
Interest-bearing deposits	—	212,309	—	212,309	216,896
Federal funds purchased and securities sold under repurchase agreements	—	14,771	—	14,771	14,771
Payables to customers and broker-dealers	—	17,441	—	17,441	17,441
Borrowings	—	1,487	—	1,487	1,487
Long-term debt	—	27,306	—	27,306	29,205
Total	**$ — $**	**333,885 $**	**— $**	**333,885 $**	**340,371**

(a) Does not include the leasing portfolio.

Summary of financial instruments	Dec. 31, 2022				
(in millions)	Level 1	Level 2	Level 3	Total estimated fair value	Carrying amount
Assets:					
Interest-bearing deposits with the Federal Reserve and other central banks	$ —	$ 91,655	$ —	$ 91,655	$ 91,655
Interest-bearing deposits with banks	—	17,167	—	17,167	17,169
Federal funds sold and securities purchased under resale agreements	—	24,298	—	24,298	24,298
Securities held-to-maturity	10,948	39,044	—	49,992	56,194
Loans *(a)*	—	64,668	—	64,668	65,230
Other financial assets	5,030	1,817	—	6,847	6,847
Total	$ 15,978	$ 238,649	$ —	$ 254,627	$ 261,393
Liabilities:					
Noninterest-bearing deposits	$ —	$ 78,017	$ —	$ 78,017	$ 78,017
Interest-bearing deposits	—	196,258	—	196,258	200,953
Federal funds purchased and securities sold under repurchase agreements	—	12,335	—	12,335	12,335
Payables to customers and broker-dealers	—	23,435	—	23,435	23,435
Borrowings	—	911	—	911	911
Long-term debt	—	28,977	—	28,977	30,458
Total	$ —	$ 339,933	$ —	$ 339,933	$ 346,109

(a) Does not include the leasing portfolio.

Note 16–Fair value option

We elected fair value as an alternative measurement for selected financial assets and liabilities that are not otherwise required to be measured at fair value, including the assets and liabilities of consolidated investment management funds and subordinated notes associated with certain equity investments.

The following table presents the assets and liabilities of consolidated investment management funds, at fair value.

Assets and liabilities of consolidated investment management funds, at fair value		
(in millions)	**Sept. 30, 2023**	Dec. 31, 2022
Assets of consolidated investment management funds:		
Trading assets	**$ 529**	$ 203
Other assets	**12**	6
Total assets of consolidated investment management funds	**$ 541**	$ 209
Liabilities of consolidated investment management funds:		
Other liabilities	**$ 7**	$ 1
Total liabilities of consolidated investment management funds	**$ 7**	$ 1

The assets and liabilities of the consolidated investment management funds are included in other assets and other liabilities on the consolidated balance sheet. We value the assets and liabilities of consolidated investment management funds using quoted prices for identical assets or liabilities in active markets or observable inputs such as quoted prices for similar assets or liabilities. Quoted prices for either identical or similar assets or liabilities in inactive markets may also be used. Accordingly, fair value best reflects the interests BNY Mellon holds in the economic performance of the consolidated investment management funds. Changes in the fair value of the assets and liabilities are recorded as income (loss) from consolidated investment management funds, which is included in investment and other revenue on the consolidated income statement.

We elected the fair value option on subordinated notes associated with certain equity investments. The fair value of these subordinated notes was $8 million at Sept. 30, 2023 and $10 million at Dec. 31, 2022. The subordinated notes were valued using observable market inputs and included in Level 2 of the valuation hierarchy.

Note 17–Derivative instruments

We use derivatives to manage exposure to market risk, including interest rate risk, equity price risk and foreign currency risk, as well as credit risk. Our trading activities are focused on acting as a market-maker for our customers and facilitating customer trades in compliance with the Volcker Rule.

The notional amounts for derivative financial instruments express the dollar volume of the transactions; however, credit risk is much smaller.

We perform credit reviews and enter into netting agreements and collateral arrangements to minimize the credit risk of derivative financial instruments. We enter into offsetting positions to reduce exposure to foreign currency, interest rate and equity price risk.

Use of derivative financial instruments involves reliance on counterparties. Failure of a counterparty to honor its obligation under a derivative contract is a risk we assume whenever we engage in a derivative contract. There were no counterparty default losses recorded in the third quarter of 2023.

Hedging derivatives

We utilize interest rate swap agreements to manage our exposure to interest rate fluctuations. We enter into fair value hedges as an interest rate risk management strategy to reduce fair value variability by converting certain fixed rate interest payments associated with available-for-sale securities and long-term debt to floating interest rates. We also utilize interest rate swaps and forward exchange contracts as cash flow hedges to manage our exposure to interest rate and foreign exchange rate changes.

The available-for-sale securities hedged consist of U.S. Treasury, agency and non-agency commercial MBS, sovereign debt/sovereign guaranteed and foreign covered bonds. At Sept. 30, 2023, $31.4 billion par value of available-for-sale securities were hedged with interest rate swaps designated as fair value hedges that had notional values of $31.4 billion.

The fixed rate long-term debt instruments hedged generally have original maturities of five to 30 years. In fair value hedging relationships, fixed rate debt is hedged with “receive fixed rate, pay variable rate” swaps. At Sept. 30, 2023, $22.7 billion par value of debt was hedged with interest rate swaps designated as fair value hedges that had notional values of $22.7 billion.

In addition, we utilize forward foreign exchange contracts as hedges to mitigate foreign exchange exposures. We use forward foreign exchange contracts as cash flow hedges to convert certain forecasted non-U.S. dollar revenue and expenses into U.S. dollars. We use forward foreign exchange contracts with maturities of 18 months or less as cash flow hedges to hedge our foreign exchange exposure to currencies such as the Indian rupee, Polish zloty, Hong Kong dollar, Singapore dollar, British pound and euro used in revenue and expense transactions for entities that have the U.S. dollar as their functional currency. As of Sept. 30, 2023, the hedged forecasted foreign currency transactions and designated forward foreign exchange contract hedges were $639 million (notional), with a net pre-tax gain of $4 million recorded in accumulated other comprehensive income (“OCI”). This gain will be reclassified to earnings over the next 12 months.

In 2022, we utilized forward foreign exchange contracts as fair value hedges of the foreign exchange risk associated with available-for-sale securities. At Sept. 30, 2023, there were no remaining foreign exchange contracts. Forward points are designated as an excluded component and amortized into earnings over the hedge period.

Forward foreign exchange contracts are also used to hedge the value of our net investments in foreign subsidiaries. These forward foreign exchange contracts have maturities of less than one year. The derivatives employed are designated as hedges of changes in value of our foreign investments due to exchange rates. The change in fair market value of these forward foreign exchange contracts is reported within foreign currency translation adjustments in shareholders’ equity, net of tax. At Sept. 30, 2023, forward foreign exchange contracts with notional amounts totaling $9.4 billion were designated as net investment hedges.

From time to time, we also designate non-derivative financial instruments as hedges of our net investments in foreign subsidiaries. At Sept. 30, 2023, there were no non-derivative financial instruments hedging our net investments in foreign subsidiaries.

The following table presents the pre-tax gains (losses) related to our fair value and cash flow hedging activities recognized in the consolidated income statement.

Income statement impact of fair value and cash flow hedges *(in millions)*	Location of gains (losses)	**3Q23**	2Q23	3Q22	**YTD23**	YTD22
Interest rate fair value hedges of available-for-sale securities						
Derivative	Interest revenue	**$ 439**	$ 388	$ 1,294	**$ 392**	$ 3,644
Hedged item	Interest revenue	**(438)**	(389)	(1,292)	**(393)**	(3,630)
Interest rate fair value hedges of long-term debt						
Derivative	Interest expense	**(281)**	(277)	(540)	**(279)**	(1,573)
Hedged item	Interest expense	**281**	278	539	**280**	1,570
Foreign exchange fair value hedges of available-for-sale securities						
Derivative *(a)*	Foreign exchange revenue	**—**	—	(2)	**—**	(4)
Hedged item	Foreign exchange revenue	**—**	—	2	**—**	5
Cash flow hedges of forecasted FX exposures						
Gain (loss) reclassified from OCI into income	Staff expense	**2**	—	(3)	**(1)**	(4)
(Loss) reclassified from OCI into income	Investment and other revenue	**(2)**	(1)	(1)	**(3)**	(1)
Gain (loss) recognized in the consolidated income statement due to fair value and cash flow hedging relationships		**$ 1**	$ (1)	$ (3)	**$ (4)**	$ 7

(a) There was no amortization associated with the excluded component in the third quarter of 2023, second quarter of 2023 and first nine months of 2023. Includes gains of less than $1 million in the third quarter of 2022 and $1 million in the first nine months of 2022 associated with the amortization of the excluded component.

The following table presents the impact of hedging derivatives used in net investment hedging relationships.

Impact of derivative instruments used in net investment hedging relationships *(in millions)*	Gain or (loss) recognized in accumulated OCI on derivatives					Location of gain or (loss) reclassified from accumulated OCI into income	Gain or (loss) reclassified from accumulated OCI into income				
Derivatives in net investment hedging relationships	**3Q23**	2Q23	3Q22	**YTD23**	YTD22		**3Q23**	2Q23	3Q22	**YTD23**	YTD22
FX contracts	**$ 333**	$ (152)	$ 631	**$ 70**	$ 1,279	Net interest revenue	**$ —**	$ —	$ —	**$ —**	$ —

The following table presents information on the hedged items in fair value hedging relationships.

Hedged items in fair value hedging relationships	Carrying amount of hedged asset or liability		Hedge accounting basis adjustment increase (decrease) *(a)*	
(in millions)	**Sept. 30, 2023**	Dec. 31, 2022	**Sept. 30, 2023**	Dec. 31, 2022
Available-for-sale securities *(b)*	**$ 31,303**	$ 31,370	**$ (2,820)**	$ (2,678)
Long-term debt	**$ 21,236**	$ 23,510	**$ (1,497)**	$ (1,232)

(a) Includes a $464 million decrease and less than $1 million increase of basis adjustment on discontinued hedges associated with available-for-sale securities at Sept. 30, 2023 and Dec. 31, 2022, respectively, and $49 million and $48 million of basis adjustment decreases on discontinued hedges associated with long-term debt at Sept. 30, 2023 and Dec. 31, 2022, respectively.

(b) Carrying amount represents the amortized cost.

The following table summarizes the notional amount and carrying values of our total derivative portfolio.

Impact of derivative instruments on the balance sheet	Notional value		Asset derivatives fair value		Liability derivatives fair value	
(in millions)	**Sept. 30, 2023**	Dec. 31, 2022	**Sept. 30, 2023**	Dec. 31, 2022	**Sept. 30, 2023**	Dec. 31, 2022
Derivatives designated as hedging instruments: *(a)(b)*						
Interest rate contracts	**$ 54,076**	$ 56,142	**$ 369**	$ 205	**$ —**	$ —
Foreign exchange contracts	**10,058**	10,096	**220**	114	**16**	220
Total derivatives designated as hedging instruments			**$ 589**	$ 319	**$ 16**	$ 220
Derivatives not designated as hedging instruments: *(b)(c)*						
Interest rate contracts	**$ 160,712**	$ 190,917	**$ 1,052**	$ 1,297	**$ 1,486**	$ 1,584
Foreign exchange contracts	**895,679**	880,948	**7,813**	9,433	**7,703**	9,456
Equity contracts	**3,801**	2,993	**135**	102	**10**	13
Credit contracts	**220**	200	**—**	—	**5**	4
Total derivatives not designated as hedging instruments			**$ 9,000**	$ 10,832	**$ 9,204**	$ 11,057
Total derivatives fair value *(d)*			**$ 9,589**	$ 11,151	**$ 9,220**	$ 11,277
Effect of master netting agreements *(e)*			**(6,848)**	(8,206)	**(5,983)**	(8,243)
Fair value after effect of master netting agreements			**$ 2,741**	$ 2,945	**$ 3,237**	$ 3,034

(a) The fair value of asset derivatives and liability derivatives designated as hedging instruments is recorded as other assets and other liabilities, respectively, on the consolidated balance sheet.

(b) For derivative transactions settled at clearing organizations, cash collateral exchanged is deemed a settlement of the derivative each day. The settlement reduces the gross fair value of derivative assets and liabilities and results in a corresponding decrease in the effect of master netting agreements, with no impact to the consolidated balance sheet.

(c) The fair value of asset derivatives and liability derivatives not designated as hedging instruments is recorded as trading assets and trading liabilities, respectively, on the consolidated balance sheet.

(d) Fair values are on a gross basis, before consideration of master netting agreements, as required by ASC 815, Derivatives and Hedging.

(e) Effect of master netting agreements includes cash collateral received and paid of $1,909 million and $1,044 million, respectively, at Sept. 30, 2023, and $1,786 million and $1,823 million, respectively, at Dec. 31, 2022.

Trading activities (including trading derivatives)

Our trading activities are focused on acting as a market-maker for our customers, facilitating customer trades and risk-mitigating economic hedging in compliance with the Volcker Rule. The change in the fair value of the derivatives utilized in our trading activities is recorded in foreign exchange revenue and investment and other revenue on the consolidated income statement.

The following table presents our foreign exchange revenue and other trading revenue.

Foreign exchange revenue and other trading revenue					
(in millions)	**3Q23**	2Q23	3Q22	**YTD23**	YTD22
Foreign exchange revenue	**$ 154**	$ 158	$ 203	**$ 488**	$ 632
Other trading revenue	**86**	53	65	**184**	115

Foreign exchange revenue includes income from purchasing and selling foreign currencies, currency forwards, futures and options as well as foreign currency remeasurement. Other trading revenue reflects results from trading in cash instruments, including fixed income and equity securities, and trading and economic hedging activity with non-foreign exchange derivatives.

We also use derivative financial instruments as risk-mitigating economic hedges, which are not formally designated as accounting hedges. This includes hedging the foreign currency, interest rate or market risks inherent in some of our balance sheet exposures, such as seed capital investments and deposits, as well as certain investment management fee revenue streams. We also use total return swaps to economically hedge obligations arising from the Company's deferred compensation plan whereby the participants defer compensation and earn a return linked to the performance of investments they select. The gains or losses on these total return swaps are recorded in staff expense on the consolidated income statement and were losses of $11 million in the third quarter of 2023 and $11 million in the third quarter of 2022, gains of $8 million in the second quarter of 2023 and $4 million in the first nine months of 2023 and a loss of $54 million in the first nine months of 2022.

We manage trading risk through a system of position limits, a value-at-risk ("VaR") methodology based on historical simulation and other market sensitivity

measures. Risk is monitored and reported to senior management by a separate unit, independent from trading, on a daily basis. Based on certain assumptions, the VaR methodology is designed to capture the potential overnight pre-tax dollar loss from adverse changes in fair values of all trading positions. The calculation assumes a one-day holding period, utilizes a 99% confidence level and incorporates non-linear product characteristics. The VaR model is one of several statistical models used to develop economic capital results, which are allocated to lines of business for computing risk-adjusted performance.

VaR methodology does not evaluate risk attributable to extraordinary financial, economic or other occurrences. As a result, the risk assessment process includes a number of stress scenarios based upon the risk factors in the portfolio and management's assessment of market conditions. Additional stress scenarios based upon historical market events are also performed. Stress tests may incorporate the impact of reduced market liquidity and the breakdown of historically observed correlations and extreme scenarios. VaR and other statistical measures, stress testing and sensitivity analysis are incorporated into other risk management materials.

Counterparty credit risk and collateral

We assess the credit risk of our counterparties through regular examination of their financial statements, confidential communication with the management of those counterparties and regular monitoring of publicly available credit rating information. This and other information is used to develop proprietary credit rating metrics used to assess credit quality.

Collateral requirements are determined after a comprehensive review of the credit quality of each counterparty. Collateral is generally held or pledged in the form of cash and/or highly liquid government securities. Collateral requirements are monitored and adjusted daily.

Additional disclosures concerning derivative financial instruments are provided in Note 15.

Disclosure of contingent features in over-the-counter ("OTC") derivative instruments

Certain OTC derivative contracts and/or collateral agreements contain credit risk-contingent features triggered upon a rating downgrade in which the counterparty has the right to request additional collateral or the right to terminate the contracts in a net liability position.

The following table shows the aggregate fair value of OTC derivative contracts in net liability positions that contained credit risk-contingent features and the value of collateral that has been posted.

(in millions)	**Sept. 30, 2023**	Dec. 31, 2022
Aggregate fair value of OTC derivatives in net liability positions *(a)*	**$ 1,479**	$ 3,069
Collateral posted	**$ 1,519**	$ 3,484

(a) Before consideration of cash collateral.

The aggregate fair value of OTC derivative contracts containing credit risk-contingent features can fluctuate from quarter to quarter due to changes in market conditions, composition of counterparty trades, new business or changes to the contingent features.

The Bank of New York Mellon, our largest banking subsidiary, enters into the substantial majority of our OTC derivative contracts and/or collateral agreements. As such, the contingent features may be triggered if The Bank of New York Mellon's long-term issuer rating were downgraded.

The following table shows the fair value of contracts falling under early termination provisions that were in net liability positions for three key ratings triggers.

Potential close-out exposures (fair value) *(a)* *(in millions)*	**Sept. 30, 2023**	Dec. 31, 2022
If The Bank of New York Mellon's rating changed to: *(b)*		
A3/A-	**$ 60**	$ 20
Baa2/BBB	**$ 814**	$ 545
Ba1/BB+	**$ 1,714**	$ 1,803

(a) The amounts represent potential total close-out values if The Bank of New York Mellon's long-term issuer rating were to immediately drop to the indicated levels, and do not reflect collateral posted.
(b) Represents ratings by Moody's/S&P.

If The Bank of New York Mellon's debt rating had fallen below investment grade on Sept. 30, 2023 and Dec. 31, 2022, existing collateral arrangements would have required us to post additional collateral of $378 million and $214 million, respectively.

Offsetting assets and liabilities

The following tables present derivative and financial instruments and their related offsets. There were no derivative instruments or financial instruments subject to a legally enforceable netting agreement for which we are not currently netting.

Offsetting of derivative assets and financial assets at Sept. 30, 2023

(in millions)	Gross assets recognized	Gross amounts offset in the balance sheet	*(a)*	Net assets recognized in the balance sheet	Gross amounts not offset in the balance sheet: Financial instruments	Gross amounts not offset in the balance sheet: Cash collateral received	Net amount
Derivatives subject to netting arrangements:							
Interest rate contracts	**$ 1,297**	**$ 1,052**		**$ 245**	**$ 56**	**$ —**	**$ 189**
Foreign exchange contracts	**7,361**	**5,734**		**1,627**	**46**	**—**	**1,581**
Equity and other contracts	**126**	**62**		**64**	**1**	**—**	**63**
Total derivatives subject to netting arrangements	**8,784**	**6,848**		**1,936**	**103**	**—**	**1,833**
Total derivatives not subject to netting arrangements	**805**	**—**		**805**	**—**	**—**	**805**
Total derivatives	**9,589**	**6,848**		**2,741**	**103**	**—**	**2,638**
Reverse repurchase agreements	**151,944**	**134,691**	*(b)*	**17,253**	**17,204**	**—**	**49**
Securities borrowing	**9,046**	**—**		**9,046**	**8,649**	**—**	**397**
Total	**$ 170,579**	**$ 141,539**		**$ 29,040**	**$ 25,956**	**$ —**	**$ 3,084**

(a) Includes the effect of netting agreements and net cash collateral received. The offset related to the OTC derivatives was allocated to the various types of derivatives based on the net positions.

(b) Offsetting of reverse repurchase agreements relates to our involvement in the Fixed Income Clearing Corporation ("FICC"), where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

Offsetting of derivative assets and financial assets at Dec. 31, 2022

(in millions)	Gross assets recognized	Gross amounts offset in the balance sheet	*(a)*	Net assets recognized in the balance sheet	Gross amounts not offset in the balance sheet: Financial instruments	Gross amounts not offset in the balance sheet: Cash collateral received	Net amount
Derivatives subject to netting arrangements:							
Interest rate contracts	$ 1,208	$ 986		$ 222	$ 33	$ —	$ 189
Foreign exchange contracts	8,920	7,215		1,705	314	—	1,391
Equity and other contracts	95	5		90	—	—	90
Total derivatives subject to netting arrangements	10,223	8,206		2,017	347	—	1,670
Total derivatives not subject to netting arrangements	928	—		928	—	—	928
Total derivatives	11,151	8,206		2,945	347	—	2,598
Reverse repurchase agreements	75,614	60,322	*(b)*	15,292	15,182	—	110
Securities borrowing	9,006	—		9,006	8,531	—	475
Total	$ 95,771	$ 68,528		$ 27,243	$ 24,060	$ —	$ 3,183

(a) Includes the effect of netting agreements and net cash collateral received. The offset related to the OTC derivatives was allocated to the various types of derivatives based on the net positions.

(b) Offsetting of reverse repurchase agreements relates to our involvement in the FICC, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

Offsetting of derivative liabilities and financial liabilities at Sept. 30, 2023

(in millions)	Gross liabilities recognized	Gross amounts offset in the balance sheet	*(a)*	Net liabilities recognized in the balance sheet	Gross amounts not offset in the balance sheet: Financial instruments	Gross amounts not offset in the balance sheet: Cash collateral pledged	Net amount
Derivatives subject to netting arrangements:							
Interest rate contracts	**$ 1,073**	**$ 501**		**$ 572**	**$ 71**	**$ —**	**$ 501**
Foreign exchange contracts	**6,992**	**5,472**		**1,520**	**280**	**—**	**1,240**
Equity and other contracts	**10**	**10**		**—**	**—**	**—**	**—**
Total derivatives subject to netting arrangements	**8,075**	**5,983**		**2,092**	**351**	**—**	**1,741**
Total derivatives not subject to netting arrangements	**1,145**	**—**		**1,145**	**—**	**—**	**1,145**
Total derivatives	**9,220**	**5,983**		**3,237**	**351**	**—**	**2,886**
Repurchase agreements	**147,027**	**134,691**	*(b)*	**12,336**	**12,278**	**58**	**—**
Securities lending	**2,435**	**—**		**2,435**	**2,344**	**—**	**91**
Total	**$ 158,682**	**$ 140,674**		**$ 18,008**	**$ 14,973**	**$ 58**	**$ 2,977**

(a) Includes the effect of netting agreements and net cash collateral paid. The offset related to the OTC derivatives was allocated to the various types of derivatives based on the net positions.

(b) Offsetting of repurchase agreements relates to our involvement in the FICC, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

Offsetting of derivative liabilities and financial liabilities at Dec. 31, 2022

(in millions)	Gross liabilities recognized	Gross amounts offset in the balance sheet	*(a)*	Net liabilities recognized in the balance sheet	Gross amounts not offset in the balance sheet: Financial instruments	Gross amounts not offset in the balance sheet: Cash collateral pledged	Net amount
Derivatives subject to netting arrangements:							
Interest rate contracts	$ 1,306	$ 798		$ 508	$ 67	$ —	$ 441
Foreign exchange contracts	9,261	7,444		1,817	51	—	1,766
Equity and other contracts	15	1		14	—	—	14
Total derivatives subject to netting arrangements	10,582	8,243		2,339	118	—	2,221
Total derivatives not subject to netting arrangements	695	—		695	—	—	695
Total derivatives	11,277	8,243		3,034	118	—	2,916
Repurchase agreements	70,830	60,322	*(b)*	10,508	10,476	31	1
Securities lending	1,827	—		1,827	1,754	—	73
Total	$ 83,934	$ 68,565		$ 15,369	$ 12,348	$ 31	$ 2,990

(a) Includes the effect of netting agreements and net cash collateral paid. The offset related to the OTC derivatives was allocated to the various types of derivatives based on the net positions.

(b) Offsetting of repurchase agreements relates to our involvement in the FICC, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

Secured borrowings

The following table presents the contract value of repurchase agreements and securities lending transactions accounted for as secured borrowings by the type of collateral provided to counterparties.

Repurchase agreements and securities lending transactions accounted for as secured borrowings

	Sept. 30, 2023					Dec. 31, 2022				
	Remaining contractual maturity					Remaining contractual maturity				
(in millions)	Overnight and continuous	Up to 30 days	30-90 days	Over 90 days	Total	Overnight and continuous	Up to 30 days	30-90 days	Over 90 days	Total
Repurchase agreements:										
U.S. Treasury	**$ 115,930**	**$ 743**	**$ 1,044**	**$ 627**	**$ 118,344**	$ 62,401	$ 7	$ 827	$ 553	$ 63,788
Agency RMBS	**21,846**	**508**	**371**	**25**	**22,750**	1,460	493	—	—	1,953
Corporate bonds	**91**	**122**	**1,039**	**628**	**1,880**	99	88	782	306	1,275
Sovereign debt/sovereign guaranteed	**1,445**	**—**	**—**	**—**	**1,445**	1,008	—	—	—	1,008
State and political subdivisions	**48**	**37**	**431**	**272**	**788**	38	49	443	159	689
U.S. government agencies	**164**	**7**	**47**	**7**	**225**	161	—	—	—	161
Other debt securities	**2**	**129**	**90**	**14**	**235**	13	102	92	7	214
Equity securities	**—**	**5**	**1,353**	**2**	**1,360**	—	61	1,681	—	1,742
Total	**$ 139,526**	**$ 1,551**	**$ 4,375**	**$ 1,575**	**$ 147,027**	$ 65,180	$ 800	$ 3,825	$ 1,025	$ 70,830
Securities lending:										
Agency RMBS	**$ 98**	**$ —**	**$ —**	**$ —**	**$ 98**	$ 110	$ —	$ —	$ —	$ 110
Other debt securities	**40**	**—**	**—**	**—**	**40**	66	—	—	—	66
Equity securities	**2,297**	**—**	**—**	**—**	**2,297**	1,651	—	—	—	1,651
Total	**$ 2,435**	**$ —**	**$ —**	**$ —**	**$ 2,435**	$ 1,827	$ —	$ —	$ —	$ 1,827
Total secured borrowings	**$ 141,961**	**$ 1,551**	**$ 4,375**	**$ 1,575**	**$ 149,462**	$ 67,007	$ 800	$ 3,825	$ 1,025	$ 72,657

BNY Mellon's repurchase agreements and securities lending transactions primarily encounter risk associated with liquidity. We are required to pledge collateral based on predetermined terms within the agreements. If we were to experience a decline in the fair value of the collateral pledged for these transactions, we could be required to provide additional collateral to the counterparty, therefore decreasing the amount of assets available for other liquidity needs that may arise. BNY Mellon also offers tri-party collateral agency services in the tri-party repo market where we are exposed to credit risk. In order to mitigate this risk, we require dealers to fully secure intraday credit.

Note 18–Commitments and contingent liabilities

Off-balance sheet arrangements

In the normal course of business, various commitments and contingent liabilities are outstanding that are not reflected in the accompanying consolidated balance sheets.

Our significant trading and off-balance sheet risks are securities, foreign currency and interest rate risk management products, commercial lending commitments, letters of credit and securities lending indemnifications. We assume these risks to reduce interest rate and foreign currency risks, to provide customers with the ability to meet credit and liquidity needs and to hedge foreign currency and interest rate risks. These items involve, to varying degrees, credit, foreign currency and interest rate risks not recognized on the balance sheet. Our off-balance sheet risks are managed and monitored in manners similar to those used for on-balance sheet risks.

The following table presents a summary of our off-balance sheet credit risks.

Off-balance sheet credit risks *(in millions)*	**Sept. 30, 2023**	Dec. 31, 2022
Lending commitments	**$ 48,624**	$ 49,750
Standby letters of credit ("SBLC") *(a)*	**1,974**	1,918
Commercial letters of credit	**51**	19
Securities lending indemnifications *(b)(c)*	**452,620**	491,043

(a) Net of participations totaling $184 million at Sept. 30, 2023 and $175 million at Dec. 31, 2022.

(b) Excludes the indemnification for securities for which BNY Mellon acts as an agent on behalf of CIBC Mellon clients, which totaled $60 billion at Sept. 30, 2023 and $64 billion at Dec. 31, 2022.

(c) Includes cash collateral, invested in indemnified repurchase agreements, held by us as securities lending agent of $48 billion at Sept. 30, 2023 and $43 billion at Dec. 31, 2022.

The total potential loss on undrawn lending commitments, standby and commercial letters of credit and securities lending indemnifications is equal to the total notional amount if drawn upon, which does not consider the value of any collateral.

Since many of the lending commitments are expected to expire without being drawn upon, the total amount does not necessarily represent future cash requirements. A summary of lending commitment maturities is as follows: $28.8 billion in less than one year, $19.5 billion in one to five years and $337 million over five years.

SBLCs principally support obligations of corporate clients and were collateralized with cash and securities of $145 million at Sept. 30, 2023 and $144 million at Dec. 31, 2022. At Sept. 30, 2023, $1.3 billion of the SBLCs will expire within one year, $634 million in one to five years and $8 million over five years.

We must recognize, at the inception of an SBLC and foreign and other guarantees, a liability for the fair value of the obligation undertaken in issuing the guarantee. The fair value of the liability, which was recorded with a corresponding asset in other assets, was estimated as the present value of contractual customer fees. The estimated liability for losses related to SBLCs and foreign and other guarantees, if any, is included in the allowance for lending-related commitments.

Payment/performance risk of SBLCs is monitored using both historical performance and internal ratings criteria. BNY Mellon's historical experience is that SBLCs typically expire without being funded. SBLCs below investment grade are monitored closely for payment/performance risk. The table below shows SBLCs by investment grade:

Standby letters of credit	**Sept. 30, 2023**	Dec. 31, 2022
Investment grade	**74 %**	75 %
Non-investment grade	**26 %**	25 %

A commercial letter of credit is normally a short-term instrument used to finance a commercial contract for the shipment of goods from a seller to a buyer. Although the commercial letter of credit is contingent upon the satisfaction of specified conditions, it represents a credit exposure if the buyer defaults on the underlying transaction. As a result, the total contractual amounts do not necessarily represent future cash requirements. Commercial letters of credit totaled $51 million at Sept. 30, 2023 and $19 million at Dec. 31, 2022.

We expect many of the lending commitments and letters of credit to expire without the need to advance any cash. The revenue associated with guarantees frequently depends on the credit rating of the obligor and the structure of the transaction, including collateral, if any. The allowance for lending-related commitments was $85 million at Sept. 30, 2023 and $78 million at Dec. 31, 2022.

A securities lending transaction is a fully collateralized transaction in which the owner of a security agrees to lend the security (typically through an agent, in our case, The Bank of New York Mellon) to a borrower, usually a broker-dealer or bank, on an open, overnight or term basis, under the terms of a prearranged contract.

We typically lend securities with indemnification against borrower default. We generally require the borrower to provide collateral with a minimum value of 102% of the fair value of the securities borrowed, which is monitored on a daily basis, thus reducing credit risk. Market risk can also arise in securities lending transactions. These risks are controlled through policies limiting the level of risk that can be undertaken. Securities lending transactions are generally entered into only with highly rated counterparties. Securities lending indemnifications

were secured by collateral of $476 billion at Sept. 30, 2023 and $515 billion at Dec. 31, 2022.

CIBC Mellon, a joint venture between BNY Mellon and the Canadian Imperial Bank of Commerce ("CIBC"), engages in securities lending activities. CIBC Mellon, BNY Mellon and CIBC jointly and severally indemnify securities lenders against specific types of borrower default. At Sept. 30, 2023 and Dec. 31, 2022, $60 billion and $64 billion, respectively, of borrowings at CIBC Mellon, for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, were secured by collateral of $63 billion and $68 billion, respectively. If, upon a default, a borrower's collateral was not sufficient to cover its related obligations, certain losses related to the indemnification could be covered by the indemnitors.

Unsettled repurchase and reverse repurchase agreements

In the normal course of business, we enter into repurchase agreements and reverse repurchase agreements that settle at a future date. In repurchase agreements, BNY Mellon receives cash from and provides securities as collateral to a counterparty at settlement. In reverse repurchase agreements, BNY Mellon advances cash to and receives securities as collateral from the counterparty at settlement. These transactions are recorded on the consolidated balance sheet on the settlement date. At Sept. 30, 2023, we had no unsettled repurchase agreements and $65.9 billion of unsettled reverse repurchase agreements. At Dec. 31, 2022, we had $4.0 billion of unsettled repurchase agreements and $11.3 billion of unsettled reverse repurchase agreements.

Industry concentrations

We have significant industry concentrations related to credit exposure at Sept. 30, 2023. The tables below present our credit exposure in the financial institutions and commercial portfolios.

Financial institutions portfolio exposure *(in billions)*	**Sept. 30, 2023**		
	Loans	Unfunded commitments	Total exposure
Securities industry	$ 1.7	$ 17.2	$ 18.9
Asset managers	1.5	8.0	9.5
Banks	6.8	1.5	8.3
Insurance	0.1	3.9	4.0
Government	—	0.2	0.2
Other	0.3	1.0	1.3
Total	**$ 10.4**	**$ 31.8**	**$ 42.2**

Commercial portfolio exposure *(in billions)*	**Sept. 30, 2023**		
	Loans	Unfunded commitments	Total exposure
Services and other	$ 1.1	$ 3.4	$ 4.5
Manufacturing	0.5	3.6	4.1
Energy and utilities	0.3	3.7	4.0
Media and telecom	—	0.7	0.7
Total	**$ 1.9**	**$ 11.4**	**$ 13.3**

Major concentrations in securities lending are primarily to broker-dealers and are generally collateralized with cash and/or securities.

Sponsored member repo program

BNY Mellon is a sponsoring member in the FICC sponsored member program, where we submit eligible repurchase and reverse repurchase transactions in U.S. Treasury and agency securities ("Sponsored Member Transactions") between BNY Mellon and our sponsored member clients for novation and clearing through FICC pursuant to the FICC Government Securities Division rulebook (the "FICC Rules"). We also guarantee to FICC the prompt and full payment and performance of our sponsored member clients' respective obligations under the FICC Rules in connection with such clients' Sponsored Member Transactions. We minimize our credit exposure under this guaranty by obtaining a security interest in our sponsored member clients' collateral and rights under Sponsored Member Transactions. See "Offsetting assets and liabilities" in Note 17 for additional information on our repurchase and reverse repurchase agreements.

Indemnification arrangements

We have provided standard representations for underwriting agreements, acquisition and divestiture agreements, sales of loans and commitments, and other similar types of arrangements and customary indemnification for claims and legal proceedings

related to providing financial services that are not otherwise included above. Insurance has been purchased to mitigate certain of these risks. Generally, there are no stated or notional amounts included in these indemnifications, and the contingencies triggering the obligation for indemnification are not expected to occur. Furthermore, often counterparties to these transactions provide us with comparable indemnifications. We are unable to develop an estimate of the maximum payout under these indemnifications for several reasons. In addition to the lack of a stated or notional amount in a majority of such indemnifications, we are unable to predict the nature of events that would trigger indemnification or the level of indemnification for a certain event. We believe, however, that the possibility that we will have to make any material payments for these indemnifications is remote. At Sept. 30, 2023 and Dec. 31, 2022, we have not recorded any material liabilities under these arrangements.

Clearing and settlement exchanges

We are a noncontrolling equity investor in, and/or member of, several industry clearing or settlement exchanges through which foreign exchange, securities, derivatives or other transactions settle. Certain of these industry clearing and settlement exchanges require their members to guarantee their obligations and liabilities and/or to provide liquidity support in the event other members do not honor their obligations. We believe the likelihood that a clearing or settlement exchange (of which we are a member) would become insolvent is remote. Additionally, certain settlement exchanges have implemented loss allocation policies that enable the exchange to allocate settlement losses to the members of the exchange. It is not possible to quantify such mark-to-market loss until the loss occurs. Any ancillary costs that occur as a result of any mark-to-market loss cannot be quantified. In addition, we also sponsor clients as members on clearing and settlement exchanges and guarantee their obligations. At Sept. 30, 2023 and Dec. 31, 2022, we did not record any material liabilities under these arrangements.

Legal proceedings

In the ordinary course of business, The Bank of New York Mellon Corporation and its subsidiaries are routinely named as defendants in or made parties to pending and potential legal actions. We also are subject to governmental and regulatory examinations, information-gathering requests, investigations and proceedings (both formal and informal). Claims for significant monetary damages are often asserted in many of these legal actions, while claims for disgorgement, restitution, penalties and/or other remedial actions or sanctions may be sought in governmental and regulatory matters. It is inherently difficult to predict the eventual outcomes of such matters given their complexity and the particular facts and circumstances at issue in each of these matters. However, on the basis of our current knowledge and understanding, we do not believe that judgments, settlements or orders, if any, arising from these matters (either individually or in the aggregate, after giving effect to applicable reserves and insurance coverage) will have a material adverse effect on the consolidated financial position or liquidity of BNY Mellon, although they could have a material effect on our results of operations in a given period.

In view of the inherent unpredictability of outcomes in litigation and regulatory matters, particularly where (i) the damages sought are substantial or indeterminate, (ii) the proceedings are in the early stages, or (iii) the matters involve novel legal theories or a large number of parties, as a matter of course there is considerable uncertainty surrounding the timing or ultimate resolution of litigation and regulatory matters, including a possible eventual loss, fine, penalty or business impact, if any, associated with each such matter. In accordance with applicable accounting guidance, we establish accruals for litigation and regulatory matters when those matters proceed to a stage where they present loss contingencies that are both probable and reasonably estimable. In such cases, there may be a possible exposure to loss in excess of any amounts accrued. We regularly monitor such matters for developments that could affect the amount of the accrual, and will adjust the accrual amount as appropriate. If the loss contingency in question is not both probable and reasonably estimable, we do not establish an accrual and the matter continues to be monitored for any developments that would make the loss contingency both probable and reasonably estimable. We believe that our accruals for legal proceedings are appropriate and, in the aggregate, are not material to the consolidated financial position of BNY Mellon, although future accruals could have a material effect on the results of operations in a given period. In addition, if we have the potential to recover a portion of an estimated loss from a third party, we record a

receivable up to the amount of the accrual that is probable of recovery.

For certain of those matters described here for which a loss contingency may, in the future, be reasonably possible (whether in excess of a related accrued liability or where there is no accrued liability), BNY Mellon is currently unable to estimate a range of reasonably possible loss. For those matters described here where BNY Mellon is able to estimate a reasonably possible loss, the aggregate range of such reasonably possible loss is up to $590 million in excess of the accrued liability (if any) related to those matters. For matters where a reasonably possible loss is denominated in a foreign currency, our estimate is adjusted quarterly based on prevailing exchange rates. We do not consider potential recoveries when estimating reasonably possible losses.

The following describes certain judicial, regulatory and arbitration proceedings involving BNY Mellon:

Mortgage-Securitization Trusts Proceedings

BNY Mellon has been named as a defendant in a number of legal actions brought by MBS investors alleging that the trustee has expansive duties under the governing agreements, including the duty to investigate and pursue breach of representation and warranty claims against other parties to the MBS transactions. Two actions commenced in December 2015 and February 2017 are pending in New York federal court. An action commenced in December 2014 in New York federal court was dismissed and the dismissal was affirmed on appeal in April 2023. In New York state court, six actions are pending: one case commenced in May 2016; two related cases commenced in September 2021 and October 2022; and three related cases commenced in October 2021, December 2021 and February 2022.

Matters Related to R. Allen Stanford

In late December 2005, Pershing LLC ("Pershing") became a clearing firm for Stanford Group Co. ("SGC"), a registered broker-dealer that was part of a group of entities ultimately controlled by R. Allen Stanford ("Stanford"). Stanford International Bank, also controlled by Stanford, issued certificates of deposit ("CDs"). Some investors allegedly wired funds from their SGC accounts to purchase CDs. In 2009, the Securities and Exchange Commission charged Stanford with operating a Ponzi scheme in connection with the sale of CDs, and SGC was placed into receivership. Alleged purchasers of CDs have filed two putative class action proceedings against Pershing: one in November 2009 in Texas federal court, and one in May 2016 in New Jersey federal court. On Nov. 5, 2021, the court dismissed the class action filed in New Jersey and that matter has concluded. Three lawsuits remain against Pershing in Louisiana and New Jersey federal courts, which were filed in January 2010, October 2015 and May 2016. The purchasers allege that Pershing, as SGC's clearing firm, assisted Stanford in a fraudulent scheme and assert contractual, statutory and common law claims. In March 2019, a group of investors filed a putative class action against The Bank of New York Mellon in New Jersey federal court, making the same allegations as in the prior actions brought against Pershing. On Nov. 12, 2021, the court dismissed the class action against The Bank of New York Mellon; on Dec. 15, 2022, an appeals court reversed the dismissal and returned the case to the trial court for further proceedings. All the cases that have been brought in federal court against Pershing have been consolidated in Texas federal court for discovery purposes. Various alleged Stanford CD purchasers asserted similar claims in Financial Industry Regulatory Authority, Inc. ("FINRA") arbitration proceedings.

Brazilian Postalis Litigation

BNY Mellon Servicos Financeiros DTVM S.A. ("DTVM"), a subsidiary that provides asset services in Brazil, acts as administrator for certain investment funds in which a public pension fund for postal workers called Postalis-Instituto de Seguridade Social dos Correios e Telégrafos ("Postalis") invested. On Aug. 22, 2014, Postalis sued DTVM in Rio de Janeiro, Brazil for losses related to a Postalis fund for which DTVM is administrator. Postalis alleges that DTVM failed to properly perform duties, including to conduct due diligence of and exert control over the manager. On March 12, 2015, Postalis filed a lawsuit in Rio de Janeiro against DTVM and BNY Mellon Administração de Ativos Ltda. ("Ativos") alleging failure to properly perform duties relating to another fund of which DTVM is administrator and Ativos is manager. On Dec. 14, 2015, Associacão dos Profissionais dos Correios ("ADCAP"), a Brazilian postal workers association, filed a lawsuit in São Paulo against DTVM and other defendants alleging that DTVM improperly contributed to Postalis investment losses. On March 20, 2017, the lawsuit was dismissed without prejudice, and ADCAP appealed. On Aug. 4, 2021, the appellate court overturned the dismissal and sent the lawsuit to a

state lower court. On March 2, 2023, DTVM appealed the August 4 decision to Brazil's Superior Court of Justice. On Dec. 17, 2015, Postalis filed three lawsuits in Rio de Janeiro against DTVM and Ativos alleging failure to properly perform duties with respect to investments in several other funds. On May 20, 2021, the court in one of those lawsuits entered a judgment of approximately $3 million against DTVM and Ativos. On Aug. 23, 2021, DTVM and Ativos filed an appeal of the May 20 decision. On June 7, 2022, the appellate court partially granted and partially denied the appeal, reducing the judgment to approximately $2 million. On July 13, 2023, DTVM and Ativos filed a further appeal to Brazil's Superior Court of Justice. On Aug. 24, 2022, the court dismissed one of the other lawsuits. On Nov. 24, 2022, Postalis appealed that decision. On Feb. 4, 2016, Postalis filed a lawsuit in Brasilia against DTVM, Ativos and BNY Mellon Alocação de Patrimônio Ltda. ("Alocação de Patrimônio"), an investment management subsidiary, alleging failure to properly perform duties and liability for losses with respect to investments in various funds of which the defendants were administrator and/or manager. On Jan. 16, 2018, the Brazilian Federal Prosecution Service ("MPF") filed a civil lawsuit in São Paulo against DTVM alleging liability for Postalis losses based on alleged failures to properly perform certain duties as administrator to certain funds in which Postalis invested or as controller of Postalis's own investment portfolio. On April 18, 2018, the court dismissed the lawsuit without prejudice. On Aug. 4, 2021, the appellate court overturned the dismissal and returned the lawsuit to the lower court. On April 11, 2022, DTVM appealed the Aug. 4 decision to Brazil's Superior Court of Justice. On Aug. 21, 2023, DTVM's appeal was denied. In addition, the Tribunal de Contas da União ("TCU"), an administrative tribunal, has initiated proceedings with the purpose of determining liability for losses to three investment funds administered by DTVM in which Postalis was an investor. On Sept. 9, 2020, TCU rendered a decision in one of the proceedings, finding DTVM and two former Postalis directors jointly and severally liable for approximately $50 million. TCU also imposed on DTVM a fine of approximately $2 million. DTVM's administrative appeal of the decision was denied. On Feb. 25, 2022, DTVM filed a lawsuit in Brazil federal court in Brasilia seeking annulment of TCU's decision and an injunction preventing TCU from enforcing the judgment. On Aug. 24, 2022, the Brazilian Federal Attorneys filed an action in Rio de Janeiro court seeking to enforce the fine portion of the judgment. On Nov. 8, 2022, the Brasilia federal court in the annulment action granted DTVM's request for an injunction, suspending the Sept. 9, 2020 TCU decision until the annulment action is decided. On Oct. 4, 2019, Postalis and another pension fund filed a request for arbitration in São Paulo against DTVM and Ativos alleging liability for losses to an investment fund for which DTVM was administrator and Ativos was manager. On March 26, 2021, DTVM and Ativos filed a lawsuit in São Paulo challenging the decision rendered by the Arbitration Court with respect to its jurisdiction over the case. On Feb. 24, 2023, the São Paulo court annulled the Arbitration Court's decision that it had jurisdiction, and Postalis and the other pension fund have appealed. On Sept. 21, 2023, the São Paulo court issued an order suspending the arbitration; the Arbitration Court implemented the suspension on Oct. 6, 2023. On Oct. 25, 2019, Postalis filed a lawsuit in Rio de Janeiro against DTVM and Alocação de Patrimônio, alleging liability for losses in another fund for which DTVM was administrator and Alocação de Patrimônio and Ativos were managers. On May 9, 2022, the court found DTVM and Alocação de Patrimônio jointly and severally liable for approximately $20 million. On Aug. 12, 2022, DTVM and Alocação de Patrimônio appealed the decision. On June 19, 2020, a lawsuit was filed in federal court in Rio de Janeiro against DTVM, Postalis, and various other defendants alleging liability against DTVM for certain Postalis losses in an investment fund of which DTVM was administrator. On Feb. 10, 2021, Postalis and another pension fund served DTVM in a lawsuit filed in Rio de Janeiro, alleging liability for losses in another investment fund for which DTVM was administrator and the other defendant was manager.

Brazilian Silverado Litigation

DTVM acts as administrator for the Fundo de Investimento em Direitos Creditórios Multisetorial Silverado Maximum ("Silverado Maximum Fund"), which invests in commercial credit receivables. On June 2, 2016, the Silverado Maximum Fund sued DTVM in its capacity as administrator, along with Deutsche Bank S.A. - Banco Alemão in its capacity as custodian and Silverado Gestão e Investimentos Ltda. in its capacity as investment manager. The Fund alleges that each of the defendants failed to fulfill its respective duty, and caused losses to the Fund for which the defendants are jointly and severally liable.

German Tax Matters

German authorities are investigating past "cum/ex" trading, which involved the purchase of equity securities on or shortly before the dividend date, but settled after that date, potentially resulting in an unwarranted refund of withholding tax. German authorities have taken the view that past cum/ex trading may have resulted in tax avoidance or evasion. European subsidiaries of BNY Mellon have been informed by German authorities about investigations into potential cum/ex trading by certain third-party investment funds, where one of the subsidiaries had acquired entities that served as depositary and/or fund manager for those third-party investment funds. We have received information requests from the authorities relating to pre-acquisition activity and are cooperating fully with those requests. In August 2019, the District Court of Bonn ordered that one of these subsidiaries be joined as a secondary party in connection with the prosecution of unrelated individual defendants. Trial commenced in September 2019. In March 2020, the court stated that it would refrain from taking action against the subsidiary in order to expedite the conclusion of the trial. The court convicted the unrelated individual defendants, and determined that the cum/ex trading activities of the relevant third-party investment funds were unlawful. In November and December 2020 and February 2023, we received secondary liability notices from the German tax authorities totaling approximately $150 million (at then-prevailing exchange rates) related to pre-acquisition activity in various funds for which the entities we acquired were depositary and/or fund manager. We have appealed the notices. In connection with the acquisition of the subject entities, we obtained an indemnity for liabilities from the sellers that we intend to pursue as necessary.

Off-Channel Business-Related Communications

The Company has been responding to a request for information from the SEC concerning compliance with recordkeeping obligations relating to business communications transmitted on unapproved electronic communication platforms. SEC Staff has stated that it is conducting similar inquiries into recordkeeping practices at other financial institutions. The Company is cooperating with the inquiry. In April 2023, the Company received a similar request from the Commodity Futures Trading Commission and is cooperating with that inquiry as well.

Note 19–Business segments

We have an internal information system that produces performance data along product and service lines for our three principal business segments and the Other segment. The primary products and services and types of revenue for our principal businesses and a description of the Other segment are presented in Note 24 of the Notes to Consolidated Financial Statements in our 2022 Annual Report.

Business accounting principles

Our business data has been determined on an internal management basis of accounting, rather than GAAP which is used for consolidated financial reporting. These measurement principles are designed so that reported results of the businesses will track their economic performance.

Business segment results are subject to reclassification when organizational changes are made, or for refinements in revenue and expense allocation methodologies. Refinements are typically reflected on a prospective basis. There were no reclassifications or organization changes in the third quarter of 2023.

The accounting policies of the businesses are the same as those described in Note 1 of the Notes to Consolidated Financial Statements in our 2022 Annual Report.

The results of our business segments are presented and analyzed on an internal management reporting basis.

- Revenue amounts reflect fee and other revenue generated by each business and include revenue for services provided between the segments that are also provided to third parties. Fee and other revenue transferred between businesses under revenue transfer agreements is included within other fees in each segment.
- Revenues and expenses associated with specific client bases are included in those businesses. For example, foreign exchange activity associated with clients using custody products is included in the Securities Services segment.
- Net interest revenue is allocated to businesses based on the yields on the assets and liabilities generated by each business. We employ a funds

transfer pricing system that matches funds with the specific assets and liabilities of each business based on their interest sensitivity and maturity characteristics.

The provision for credit losses associated with the respective credit portfolios is reflected in each segment.

Incentives expense related to restricted stock and RSUs is allocated to the segments.

Support and other indirect expenses, including services provided between segments that are not provided to third parties or not subject to a revenue transfer agreement, are allocated to the businesses based on internally developed methodologies and reflected in noninterest expense.

Recurring FDIC expense is allocated to the businesses based on average deposits generated within each business.

Severance expense is recorded in the segments based on the business or function the impacted employees reside, with severance related to corporate staff, technology and operations reflected in the Other segment.

- Litigation expense is generally recorded in the business in which the charge occurs.
- Management of the securities portfolio is a shared service contained in the Other segment. As a result, gains and losses associated with the valuation of the securities portfolio are generally included in the Other segment.
- Client deposits serve as the primary funding source for our securities portfolio. We typically allocate all interest revenue to the businesses generating the deposits. Accordingly, accretion related to the portion of the securities portfolio restructured in 2009 has been included in the results of the businesses.
- Balance sheet assets and liabilities and their related income or expense are specifically assigned to each business. Segments with a net liability position have been allocated assets.
- Goodwill and intangible assets are reflected within individual businesses.

The following consolidating schedules present the contribution of our segments to our overall profitability.

For the quarter ended Sept. 30, 2023 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	**$ 1,489**	**$ 1,043**	**$ 789**	*(a)*	**$ 34**	**$ 3,355**	*(a)*
Net interest revenue (expense)	**600**	**402**	**38**		**(24)**	**1,016**	
Total revenue	**2,089**	**1,445**	**827**	*(a)*	**10**	**4,371**	*(a)*
Provision for credit losses	**19**	**6**	**(9)**		**(13)**	**3**	
Noninterest expense	**1,585**	**808**	**672**		**24**	**3,089**	
Income (loss) before income taxes	**$ 485**	**$ 631**	**$ 164**	*(a)*	**$ (1)**	**$ 1,279**	*(a)*
Pre-tax operating margin *(b)*	**23 %**	**44 %**	**20 %**		**N/M**	**29 %**	
Average assets	**$ 190,964**	**$ 129,804**	**$ 26,531**		**$ 50,193**	**$ 397,492**	

(a) Total fee and other revenue, total revenue and income before income taxes are net of income attributable to noncontrolling interests related to consolidated investment management funds of $3 million.

(b) Income before income taxes divided by total revenue.

N/M – Not meaningful.

For the quarter ended June 30, 2023 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	$ 1,572	$ 1,025	$ 774	*(a)*	$ (18)	$ 3,353	*(a)*
Net interest revenue (expense)	668	420	39		(27)	1,100	
Total revenue (loss)	2,240	1,445	813	*(a)*	(45)	4,453	*(a)*
Provision for credit losses	16	7	7		(25)	5	
Noninterest expense	1,582	781	677		71	3,111	
Income (loss) before income taxes	$ 642	$ 657	$ 129	*(a)*	$ (91)	$ 1,337	*(a)*
Pre-tax operating margin *(b)*	29 %	46 %	16 %		N/M	30 %	
Average assets	$ 202,207	$ 131,657	$ 27,260		$ 60,050	$ 421,174	

(a) Total fee and other revenue, total revenue and income before income taxes are net of income attributable to noncontrolling interests related to consolidated investment management funds of $1 million.
(b) Income before income taxes divided by total revenue.
N/M – Not meaningful.

For the quarter ended Sept. 30, 2022 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	$ 1,536	$ 989	$ 805	*(a)*	$ 23	$ 3,353	*(a)*
Net interest revenue (expense)	538	378	57		(47)	926	
Total revenue (loss)	2,074	1,367	862	*(a)*	(24)	4,279	*(a)*
Provision for credit losses	(6)	(1)	3		(26)	(30)	
Noninterest expense	1,557	737	1,356		29	3,679	
Income (loss) before income taxes	$ 523	$ 631	$ (497)	*(a)*	$ (27)	$ 630	*(a)*
Pre-tax operating margin *(b)*	25 %	46 %	(57)%		N/M	15 %	
Average assets	$ 203,063	$ 138,204	$ 29,996		$ 44,407	$ 415,670	

(a) Total fee and other revenue, total revenue and income before income taxes are net of loss attributable to noncontrolling interests related to consolidated investment management funds of $— million.
(b) Income before income taxes divided by total revenue.
N/M – Not meaningful.

For the nine months ended Sept. 30, 2023 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	**$ 4,511**	**$ 3,082**	**$ 2,345**	*(a)*	**$ 5**	**$ 9,943**	*(a)*
Net interest revenue (expense)	**1,934**	**1,275**	**122**		**(87)**	**3,244**	
Total revenue (loss)	**6,445**	**4,357**	**2,467**	*(a)*	**(82)**	**13,187**	*(a)*
Provision for credit losses	**35**	**13**	**(2)**		**(11)**	**35**	
Noninterest expense	**4,723**	**2,358**	**2,083**		**136**	**9,300**	
Income (loss) before income taxes	**$ 1,687**	**$ 1,986**	**$ 386**	*(a)*	**$ (207)**	**$ 3,852**	*(a)*
Pre-tax operating margin *(b)*	**26 %**	**46 %**	**16 %**		**N/M**	**29 %**	
Average assets	**$ 196,556**	**$ 131,193**	**$ 26,968**		**$ 53,968**	**$ 408,685**	

(a) Total fee and other revenue, total revenue and income before income taxes are net of income attributable to noncontrolling interests related to consolidated investment management funds of $4 million.
(b) Income before income taxes divided by total revenue.
N/M – Not meaningful.

For the nine months ended Sept. 30, 2022 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Consolidated
Total fee and other revenue	$ 4,488	$ 2,869	$ 2,549 *(a)*	$ 118	$ 10,024 *(a)*
Net interest revenue (expense)	1,372	1,014	176	(114)	2,448
Total revenue	5,860	3,883	2,725 *(a)*	4	12,472 *(a)*
Provision for credit losses	(3)	1	—	21	19
Noninterest expense	4,723	2,147	2,802	125	9,797
Income (loss) before income taxes	$ 1,140	$ 1,735	$ (77) *(a)*	$ (142)	$ 2,656 *(a)*
Pre-tax operating margin *(b)*	19 %	45 %	(3)%	N/M	21 %
Average assets	$ 214,518	$ 140,435	$ 33,077	$ 43,044	$ 431,074

(a) Total fee and other revenue, total revenue and income before income taxes are net of loss attributable to noncontrolling interests related to consolidated investment management funds of $13 million.

(b) Income before income taxes divided by total revenue.

N/M – Not meaningful.

Note 20–Supplemental information to the Consolidated Statement of Cash Flows

Non-cash investing and financing transactions that, appropriately, are not reflected in the consolidated statement of cash flows are listed below.

Non-cash investing and financing transactions *(in millions)*	Nine months ended Sept. 30, **2023**	2022
Transfers from loans to other assets for other real estate owned	**$ 1**	$ 1
Change in assets of consolidated investment management funds	**332**	248
Change in liabilities of consolidated investment management funds	**6**	2
Change in nonredeemable noncontrolling interests of consolidated investment management funds	**49**	189
Securities purchased not settled	**234**	126
Securities matured not settled	**455**	—
Available-for-sale securities transferred to held-to-maturity securities	**—**	6,067
Premises and equipment/operating lease obligations	**203**	177
Excise tax on share repurchases	**18**	—

Item 4. Controls and Procedures

Disclosure controls and procedures

Our management, including the Chief Executive Officer and Chief Financial Officer, with participation by the members of the Disclosure Committee, has responsibility for ensuring that there is an adequate and effective process for establishing, maintaining, and evaluating disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in our SEC reports is timely recorded, processed, summarized and reported and that information required to be disclosed by BNY Mellon is accumulated and communicated to BNY Mellon's management to allow timely decisions regarding the required disclosure. In addition, our ethics hotline can also be used by employees and others for the anonymous communication of concerns about financial controls or reporting matters. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

As of the end of the period covered by this report, an evaluation was carried out under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective.

Changes in internal control over financial reporting

In the ordinary course of business, we may routinely modify, upgrade or enhance our internal controls and procedures for financial reporting. There have not been any changes in our internal control over financial reporting as defined in Rule 13a-15(f) of the Exchange Act during the third quarter of 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Some statements in this Quarterly Report may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These include statements about the usefulness of Non-GAAP measures, the future results of BNY Mellon, our businesses, financial, liquidity and capital condition, results of operations, liquidity, risk and capital management and processes, goals, strategies, outlook, objectives, expectations (including those regarding our performance results, efficiency, expenses, nonperforming assets, products, impacts of currency fluctuations, deposits, securities portfolio, divestments, impacts of trends on our businesses, regulatory, technology, market, economic or accounting developments and the impacts of such developments on our businesses, legal proceedings and other contingencies), human capital management (including related ambitions, objectives, aims and goals), effective tax rate, net interest revenue, estimates (including those regarding expenses, losses inherent in our credit portfolios and capital ratios), intentions (including those regarding our capital returns and expenses, including our investments in technology and pension expense), targets, opportunities, potential actions, growth, focus and initiatives.

In this report, any other report, any press release or any written or oral statement that BNY Mellon or its executives may make, words, such as "estimate," "forecast," "project," "anticipate," "likely," "target," "expect," "intend," "continue," "seek," "believe," "plan," "goal," "could," "should," "would," "may," "might," "will," "strategy," "synergies," "opportunities," "trends," "ambition," "objective," "aim," "future," "potentially," "outlook" and words of similar meaning, may signify forward-looking statements.

Actual results may differ materially from those expressed or implied as a result of a number of factors, including those discussed in "Risk Factors" in our 2022 Annual Report, such as:

- errors or delays in our operational and transaction processing, or those of third parties, may materially adversely affect our business, financial condition, results of operations and reputation;

  our risk management framework, models and processes may not be effective in identifying or mitigating risk and reducing the potential for losses;
- our business may be adversely affected if we are unable to attract, retain, develop and motivate employees;
- a communications or technology disruption or failure within our infrastructure or the infrastructure of third parties that results in a loss of information, delays our ability to access information or impacts our ability to provide services to our clients may materially adversely affect our business, financial condition and results of operations;
- a cybersecurity incident, or a failure in our computer systems, networks and information, or those of third parties, could result in the theft, loss, unauthorized access to, disclosure, use or alteration of information, system or network failures, or loss of access to information. Any such incident or failure could adversely impact our ability to conduct our businesses, damage our reputation and cause losses;
- we are subject to extensive government rulemaking, policies, regulation and supervision that impact our operations. Changes to and introduction of new rules and regulations have compelled, and in the future may compel, us to change how we manage our businesses, which could have a material adverse effect on our business, financial condition and results of operations;
- regulatory or enforcement actions or litigation could materially adversely affect our results of operations or harm our businesses or reputation;
- a failure or circumvention of our controls and procedures could have a material adverse effect on our business, financial condition, results of operations and reputation;
- we are dependent on fee-based business for a substantial majority of our revenue and our fee-based revenues could be adversely affected by slowing in market activity, weak financial markets, underperformance and/or negative trends in savings rates or in investment preferences;
- weakness and volatility in financial markets and the economy generally may materially adversely affect our business, financial condition and results of operations;
- levels of and changes in interest rates have impacted, and will in the future continue to impact, our profitability and capital levels, at times adversely;
- we have experienced, and may continue to experience, unrealized or realized losses on

securities related to volatile and illiquid market conditions, reducing our capital levels and/or earnings;

transitions away from and the replacement of LIBOR and other IBORs could adversely impact our business, financial condition and results of operations;

the failure or perceived weakness of any of our significant clients or counterparties, many of whom are major financial institutions or sovereign entities, and our assumption of credit, counterparty and concentration risk, could expose us to loss and adversely affect our business;

we could incur losses if our allowance for credit losses, including loan and lending-related commitment reserves, is inadequate or if our expectations of future economic conditions deteriorate;

our business, financial condition and results of operations could be adversely affected if we do not effectively manage our liquidity;

failure to satisfy regulatory standards, including "well capitalized" and "well managed" status or capital adequacy and liquidity rules more generally, could result in limitations on our activities and adversely affect our business and financial condition;

the Parent is a non-operating holding company and, as a result, is dependent on dividends from its subsidiaries and extensions of credit from its IHC to meet its obligations, including with respect to its securities, and to provide funds for share repurchases and payment of dividends to its stockholders;

our ability to return capital to shareholders is subject to the discretion of our Board of Directors and may be limited by U.S. banking laws and regulations, including those governing capital and capital planning, applicable provisions of Delaware law and our failure to pay full and timely dividends on our preferred stock;

any material reduction in our credit ratings or the credit ratings of our principal bank subsidiaries, The Bank of New York Mellon or BNY Mellon, N.A., could increase the cost of funding and borrowing to us and our rated subsidiaries and have a material adverse effect on our business, financial condition and results of operations and on the value of the securities we issue;

the application of our Title I preferred resolution strategy or resolution under the Title II orderly liquidation authority could adversely affect the Parent's liquidity and financial condition and the Parent's security holders;

- new lines of business, new products and services or transformational or strategic project initiatives subject us to new or additional risks, and the failure to implement these initiatives could affect our results of operations;
- we are subject to competition in all aspects of our business, which could negatively affect our ability to maintain or increase our profitability;
- our strategic transactions present risks and uncertainties and could have an adverse effect on our business, financial condition and results of operations;
- our businesses may be negatively affected by adverse events, publicity, government scrutiny or other reputational harm;
- climate change concerns could adversely affect our business, affect client activity levels and damage our reputation;
- impacts from natural disasters, climate change, acts of terrorism, pandemics, global conflicts and other geopolitical events may have a negative impact on our business and operations;
- tax law changes or challenges to our tax positions with respect to historical transactions may adversely affect our net income, effective tax rate and our overall results of operations and financial condition;
- changes in accounting standards governing the preparation of our financial statements and future events could have a material impact on our reported financial condition, results of operations, cash flows and other financial data; and
- risks relating to FDIC special deposits insurance assessments.

Investors should not place undue reliance on any forward-looking statement and consider all risk factors discussed in our 2022 Annual Report and any subsequent reports filed with the SEC by BNY Mellon pursuant to the Exchange Act. All forward-looking statements speak only as of the date on which such statements are made, and BNY Mellon undertakes no obligation to update any statement to reflect events or circumstances after the date on which such forward-looking statement is made or to reflect the occurrence of unanticipated events. The contents of BNY Mellon's website or any other website referenced herein are not part of this report.

Item 1. Legal Proceedings.

The information required by this Item is set forth in the "Legal proceedings" section in Note 18 of the Notes to Consolidated Financial Statements, which portion is incorporated herein by reference in response to this item.

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

(c) The following table discloses repurchases of our common stock made in the third quarter of 2023. All of the Company's preferred stock outstanding has preference over the Company's common stock with respect to the payment of dividends.

Issuer purchases of equity securities

Share repurchases – third quarter of 2023

(dollars in millions, except per share amounts; common shares in thousands)	Total shares repurchased	Average price per share	Total shares repurchased as part of a publicly announced plan or program	Maximum approximate dollar value of shares that may yet be purchased under the publicly announced plans or programs at Sept. 30, 2023
July 2023	1,909	$ 45.52	1,909	$ 3,209
August 2023	4,238	44.73	4,238	3,019
September 2023	3,832	45.13	3,832	2,846
Third quarter of 2023 *(a)*	**9,979**	**$ 45.03**	**9,979**	**$ 2,846** *(b)*

(a) Includes 62 thousand shares repurchased at a purchase price of $3 million from employees, primarily in connection with the employees' payment of taxes upon the vesting of restricted stock. The average price per share of open market repurchases was $45.03.

(b) Represents the maximum value of the shares to be repurchased under the share repurchase plan announced in January 2023 and includes shares repurchased in connection with employee benefit plans.

In January 2023, we announced a share repurchase program approved by our Board of Directors providing for the repurchase of up to $5.0 billion of common shares beginning Jan. 1, 2023. This new share repurchase plan replaced all previously authorized share repurchase plans.

Share repurchases may be executed through open market repurchases, in privately negotiated transactions or by other means, including through repurchase plans designed to comply with Rule 10b5-1 and other derivative, accelerated share repurchase and other structured transactions. The timing and exact amount of any common stock repurchases will depend on various factors, including market conditions and the common stock trading price; the Company's capital position, liquidity and financial performance; alternative uses of capital; and legal and regulatory limitations and considerations.

Item 5. Other Information.

(a) An amendment to the offer terms for Dermot McDonogh, Chief Financial Officer of the Company, was approved by the Human Resources and Compensation Committee of the Company on Oct. 30, 2023. The amended terms provide that Mr. McDonogh will receive a cash payment of $2,230,000 in 2023 to reflect additional tax obligations on previously disclosed equity buyout awards resulting from the Company's request that he relocate from the United Kingdom to the United States in connection with his employment. Such payment will be subject to the Company's standard terms and conditions, including clawback and recoupment.

(c) Certain of our officers or directors have made elections to participate in, and are participating in, our dividend reinvestment plan, employee stock purchase plan and 401(k) plan, and have made, and may from time to time make, elections to have shares withheld to cover withholding taxes or pay the exercise price of stock awards, which may be designed to satisfy the affirmative defense conditions of Rule 10b5-1 under the Exchange Act or may constitute non-Rule 10b5-1 trading arrangements (as defined in Item 408(c) of Regulation S-K).

Item 6. Exhibits.

The list of exhibits required to be filed as exhibits to this report appears below.

Index to Exhibits

Exhibit No.	Description	Method of Filing
3.1	Restated Certificate of Incorporation of The Bank of New York Mellon Corporation.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 000-52710) as filed with the Securities and Exchange Commission (the "Commission") on July 2, 2007, and incorporated herein by reference.
3.2	Certificate of Amendment to The Bank of New York Mellon Corporation's Restated Certificate of Incorporation, as filed with the Secretary of State of the State of Delaware on April 9, 2019.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on April 10, 2019, and incorporated herein by reference.
3.3	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series A Noncumulative Preferred Stock, dated June 15, 2007.	Previously filed as Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 000-52710) as filed with the Commission on July 5, 2007, and incorporated herein by reference.
3.4	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series D Noncumulative Perpetual Preferred Stock, dated May 16, 2013.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on May 16, 2013, and incorporated herein by reference.
3.5	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series F Noncumulative Perpetual Preferred Stock, dated July 29, 2016.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on Aug. 1, 2016, and incorporated herein by reference.
3.6	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series G Noncumulative Perpetual Preferred Stock, dated May 15, 2020.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on May 19, 2020, and incorporated herein by reference.
3.7	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series H Noncumulative Perpetual Preferred Stock, dated Nov. 2, 2020.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on Nov. 3, 2020, and incorporated herein by reference.
3.8	Certificate of Designations of The Bank of New York Mellon Corporation with respect to the Series I Noncumulative Perpetual Preferred Stock, dated Nov. 16, 2021.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on Nov. 18, 2021, and incorporated herein by reference.
3.9	Amended and Restated By-Laws of The Bank of New York Mellon Corporation, as amended and restated on Aug. 8, 2023.	Previously filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-35651) as filed with the Commission on Aug. 11, 2023, and incorporated herein by reference.

Exhibit No.	Description	Method of Filing
4.1	None of the instruments defining the rights of holders of long-term debt of the Parent or any of its subsidiaries represented long-term debt in excess of 10% of the total assets of the Company as of Sept. 30, 2023. The Company hereby agrees to furnish to the Commission, upon request, a copy of any such instrument.	N/A
22.1	Subsidiary Issuer of Guaranteed Securities.	Previously filed as Exhibit 22.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-35651) for the quarter ended March 31, 2021, and incorporated herein by reference.
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith.
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith.
32.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Furnished herewith.
32.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Furnished herewith.
101.INS	Inline XBRL Instance Document.	The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.	Filed herewith.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	Filed herewith.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.	Filed herewith.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.	Filed herewith.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.	Filed herewith.
104	The cover page of The Bank of New York Mellon Corporation's Quarterly Report on Form 10-Q for the quarter ended Sept. 30, 2023, formatted in inline XBRL.	The cover page interactive data file is embedded within the inline XBRL document and included in Exhibit 101.

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.

THE BANK OF NEW YORK MELLON CORPORATION
(Registrant)

Date: November 3, 2023

By: /s/ Kurtis R. Kurimsky
Kurtis R. Kurimsky
Corporate Controller
(Duly Authorized Officer and
Principal Accounting Officer of
the Registrant)

Exhibit 31.1

CERTIFICATION

I, Robin Vince, certify that:

1. I have reviewed this quarterly report on Form 10-Q of The Bank of New York Mellon Corporation (the "registrant");

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

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

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

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

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

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

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

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

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

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

Date: November 3, 2023

/s/ Robin Vince

Name: Robin Vince
Title: Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Dermot McDonogh, certify that:

1. I have reviewed this quarterly report on Form 10-Q of The Bank of New York Mellon Corporation (the "registrant");

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

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

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

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

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

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

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

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

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

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

Date: November 3, 2023

/s/ Dermot McDonogh

Name: Dermot McDonogh
Title: Chief Financial Officer

Exhibit 32.1

CERTIFICATION

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of The Bank of New York Mellon Corporation ("BNY Mellon"), hereby certifies, to his knowledge, that BNY Mellon's Quarterly Report on Form 10-Q for the quarter ended September 30, 2023 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of BNY Mellon.

Dated: November 3, 2023

/s/ Robin Vince

Name: Robin Vince

Title: Chief Executive Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

Exhibit 32.2

CERTIFICATION

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of The Bank of New York Mellon Corporation ("BNY Mellon"), hereby certifies, to his knowledge, that BNY Mellon's Quarterly Report on Form 10-Q for the quarter ended September 30, 2023 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of BNY Mellon.

Dated: November 3, 2023

/s/ Dermot McDonogh

Name: Dermot McDonogh

Title: Chief Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.