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 June 30, 2022

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 June 30, 2022, 808,103,223 shares of the registrant's common stock, $0.01 par value per share, were outstanding.

THE BANK OF NEW YORK MELLON CORPORATION

Second Quarter 2022 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 second quarter 2022 and subsequent events	4
Highlights of second quarter 2022 results	5
Fee and other revenue	6
Net interest revenue	10
Noninterest expense	13
Income taxes	13
Review of business segments	14
Critical accounting estimates	23
Consolidated balance sheet review	24
Liquidity and dividends	33
Capital	37
Trading activities and risk management	41
Asset/liability management	43
Supplemental information – Explanation of GAAP and Non-GAAP financial measures	45
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—Acquisitions and dispositions	58
Note 3—Securities	58
Note 4—Loans and asset quality	64
Note 5—Goodwill and intangible assets	71
Note 6—Other assets	72
Note 7—Contract revenue	74
Note 8—Net interest revenue	76
Note 9—Employee benefit plans	77
Note 10—Income taxes	77
Note 11—Variable interest entities	77
Note 12—Preferred stock	79
Note 13—Other comprehensive income (loss)	80
Note 14—Fair value measurement	81
Note 15—Fair value option	86
Note 16—Derivative instruments	86
Note 17—Commitments and contingent liabilities	93
Note 18—Business segments	99
Note 19—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 and Use of Proceeds.	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	
	June 30, 2022	March 31, 2022	June 30, 2021	**June 30, 2022**	June 30, 2021
Results applicable to common shareholders of The Bank of New York Mellon Corporation:					
Net income	**$ 835**	$ 699	$ 991	**$ 1,534**	$ 1,849
Basic earnings per share	**$ 1.03**	$ 0.86	$ 1.14	**$ 1.89**	$ 2.11
Diluted earnings per share	**$ 1.03**	$ 0.86	$ 1.13	**$ 1.88**	$ 2.10
Fee and other revenue	**$ 3,430**	$ 3,228	$ 3,315	**$ 6,658**	$ 6,581
Net interest revenue	**824**	698	645	**1,522**	1,300
Total revenue	**$ 4,254**	$ 3,926	$ 3,960	**$ 8,180**	$ 7,881
Return on common equity *(annualized)*	**9.3 %**	7.6 %	9.8 %	**8.4 %**	9.2 %
Return on tangible common equity *(annualized)* – Non-GAAP *(a)*	**19.2 %**	15.4 %	18.6 %	**17.2 %**	17.3 %
Fee revenue as a percentage of total revenue	**78 %**	80 %	81 %	**79 %**	82 %
Non-U.S. revenue as a percentage of total revenue	**36 %**	35 %	38 %	**35 %**	38 %
Pre-tax operating margin	**26 %**	23 %	32 %	**25 %**	31 %
Net interest margin	**0.89 %**	0.75 %	0.67 %	**0.82 %**	0.67 %
Net interest margin on a fully taxable equivalent ("FTE") basis – Non-GAAP *(b)*	**0.89 %**	0.76 %	0.67 %	**0.83 %**	0.67 %
Assets under custody and/or administration ("AUC/A") at period end *(in trillions) (c)*	**$ 43.0**	$ 45.5	$ 45.0	**$ 43.0**	$ 45.0
Assets under management ("AUM") at period end *(in billions) (d)*	**$ 1,937**	$ 2,266	$ 2,320	**$ 1,937**	$ 2,320
Average common shares and equivalents outstanding *(in thousands)*:					
Basic	**810,903**	809,469	869,460	**810,233**	876,006
Diluted	**813,590**	813,986	873,475	**813,894**	879,409
Selected average balances:					
Interest-earning assets	**$ 370,782**	$ 373,186	$ 388,285	**$ 371,997**	$ 392,766
Total assets	**$ 437,623**	$ 440,202	$ 452,329	**$ 438,924**	$ 456,332
Interest-bearing deposits	**$ 219,124**	$ 223,243	$ 239,466	**$ 221,172**	$ 242,275
Noninterest-bearing deposits	**$ 91,893**	$ 90,179	$ 85,802	**$ 91,060**	$ 84,622
Long-term debt	**$ 26,195**	$ 25,588	$ 25,275	**$ 25,893**	$ 25,734
Preferred stock	**$ 4,838**	$ 4,838	$ 4,541	**$ 4,838**	$ 4,541
Total The Bank of New York Mellon Corporation common shareholders' equity	**$ 36,199**	$ 37,363	$ 40,393	**$ 36,778**	$ 40,556
Other information at period end:					
Cash dividends per common share	**$ 0.34**	$ 0.34	$ 0.31	**$ 0.68**	$ 0.62
Common dividend payout ratio	**33 %**	40 %	28 %	**36 %**	30 %
Common dividend yield *(annualized)*	**3.3 %**	2.8 %	2.4 %	**3.3 %**	2.4 %
Closing stock price per common share	**$ 41.71**	$ 49.63	$ 51.23	**$ 41.71**	$ 51.23
Market capitalization	**$ 33,706**	$ 40,091	$ 44,220	**$ 33,706**	$ 44,220
Book value per common share	**$ 44.73**	$ 45.76	$ 47.20	**$ 44.73**	$ 47.20
Tangible book value per common share – Non-GAAP *(a)*	**$ 22.02**	$ 22.76	$ 25.64	**$ 22.02**	$ 25.64
Full-time employees	**50,800**	49,600	48,800	**50,800**	48,800
Common shares outstanding *(in thousands)*	**808,103**	807,798	863,174	**808,103**	863,174

Consolidated Financial Highlights (unaudited) (continued)

Regulatory capital and other ratios	June 30, 2022	March 31, 2022	Dec. 31, 2021
Average liquidity coverage ratio ("LCR")	**111 %**	109 %	109 %
Regulatory capital ratios: *(e)*			
Advanced:			
Common Equity Tier 1 ("CET1") ratio	**10.0 %**	10.4 %	11.4 %
Tier 1 capital ratio	**12.8**	13.2	14.2
Total capital ratio	**13.6**	13.9	15.0
Standardized:			
CET1 ratio	**10.1 %**	10.1 %	11.2 %
Tier 1 capital ratio	**12.9**	12.9	14.0
Total capital ratio	**13.8**	13.7	14.9
Tier 1 leverage ratio	**5.2 %**	5.3 %	5.5 %
Supplementary leverage ratio ("SLR")	**6.2**	6.2	6.6
BNY Mellon shareholders' equity to total assets ratio	**9.1 %**	8.8 %	9.7 %
BNY Mellon common shareholders' equity to total assets ratio	**8.0**	7.8	8.6

(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 45 for the reconciliation of Non-GAAP measures.

(b) See "Net interest revenue" on page 10 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 June 30, 2022 and $1.7 trillion at March 31, 2022 and June 30, 2021.

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

(e) 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 37.

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, 2021 (the "2021 Annual Report").

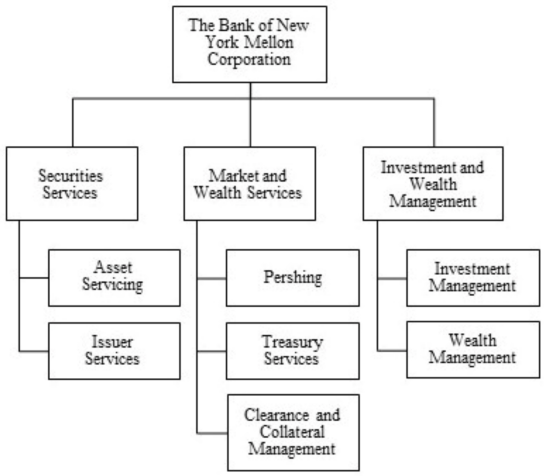
The following should be read in conjunction with the Consolidated Financial Statements included in this report. Investors should also read the section titled "Forward-looking Statements."

Overview

Established in 1784 by Alexander Hamilton, we were the first company listed on the New York Stock Exchange (NYSE: BK). With a history of more than 235 years, BNY Mellon is a global company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY Mellon delivers informed investment and wealth management and investment services in 35 countries.

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 lifecycle, 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 second quarter 2022 and subsequent events

Leadership succession

In July 2022, we announced that Dermot McDonogh was appointed to the position of Chief Financial Officer ("CFO"), effective Feb. 1, 2023, succeeding Emily Portney, who has served in that role since July 19, 2020. Mr. McDonogh will join BNY Mellon on Nov. 1, 2022. Ms. Portney will continue serving as CFO through Jan. 31, 2023, at which time she will assume a new position leading the Company's Treasury Services, Credit Services and Clearance & Collateral Management businesses.

Mr. McDonogh most recently served as the chief operating officer of the Europe, Middle East and Africa region for Goldman Sachs International and as the chief executive officer of Goldman Sachs International Bank since 2015.

Increase in cash dividend on common stock

In July, our Board of Directors approved a 9% increase in the quarterly cash dividend on common stock, from $0.34 to $0.37 per share.

Highlights of second quarter 2022 results

Net income applicable to common shareholders was $835 million, or $1.03 per diluted common share, in the second quarter of 2022. Net income applicable to common shareholders was $991 million, or $1.13 per diluted common share, in the second quarter of 2021. The highlights below are based on the second quarter of 2022 compared with the second quarter of 2021, unless otherwise noted.

- Total revenue of $4.3 billion increased 7%, primarily reflecting:
  - Fee and other revenue increased 3%, primarily reflecting:
    - Fee revenue increased 4%, primarily reflecting lower money market fee waivers, higher client activity and higher foreign exchange revenue, partially offset by the unfavorable impact of a stronger U.S. dollar, lower market values and the impact of lost business in the prior year in both Pershing and Corporate Trust. (See "Fee and other revenue" beginning on page 6.)
    - Investment and other revenue was unchanged, primarily reflecting higher strategic equity investment gains, offset by lower seed capital results. (See "Fee and other revenue" beginning on page 6.)
  - Net interest revenue increased 28%, primarily reflecting higher interest rates on interest-earning assets and a change in asset mix, partially offset by higher funding expense and lower interest-earning assets. (See "Net interest revenue" on page 10.)
- Provision for credit losses was $47 million compared with a benefit of $86 million, primarily reflecting changes in the macroeconomic forecast. (See "Consolidated balance sheet review – Allowance for credit losses" beginning on page 31.)
- Noninterest expense increased 12%, including 4% increase due to higher litigation reserves. The remainder of the increase primarily reflects higher investments in growth, infrastructure and efficiency initiatives and higher revenue-related expenses, including the impact of inflation, partially offset by the favorable impact of a stronger U.S. dollar. (See "Noninterest expense" on page 13.)
- Effective tax rate of 21.1% includes ~1.5% impact due to increase in litigation reserves. (See "Income taxes" on page 13.)

Metrics

- AUC/A of $43.0 trillion decreased 4%, primarily reflecting lower market values and the unfavorable impact of a stronger U.S. dollar, partially offset by client inflows and net new business.
- AUM of $1.9 trillion decreased 17%, primarily reflecting lower market values and the unfavorable impact of a stronger U.S. dollar, partially offset by net inflows.

Capital and liquidity

- Our CET1 ratio calculated under the Advanced Approaches was 10.0% at June 30, 2022, and 10.1% at March 31, 2022 under the Standardized Approach. The decrease primarily reflects unrealized losses on securities available-for-sale, foreign currency translation and capital deployed through dividends, partially offset by capital generated through earnings and lower risk-weighted assets ("RWA"). (See "Capital" beginning on page 37.)
- Tier 1 leverage was 5.2% at June 30, 2022, compared with 5.3% at March 31, 2022. The decrease was driven by the decrease in capital, partially offset by lower average assets. (See "Capital" beginning on page 37.)
- Dividends to common shareholders were $279 million (including dividend-equivalents on share-based awards).

Highlights of our principal business segments

Securities Services

- Total revenue increased 12%.
- Income before income taxes decreased 24%; includes a 40% reduction due to higher litigation reserves and provision for credit losses.
- Pre-tax operating margin of 17%; or 21% excluding higher litigation reserves (Non-GAAP). (See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 45 for a reconciliation of this Non-GAAP measure.)

Market and Wealth Services

- Total revenue increased 10%.
- Income before income taxes increased 9%.
- Pre-tax operating margin of 46%.

Investment and Wealth Management

- Total revenue decreased 10%.
- Income before income taxes decreased 36%.
- Pre-tax operating margin of 23%; adjusted pre-tax operating margin – Non-GAAP of 26%. (See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 45 for a reconciliation of this Non-GAAP measure.)

See "Review of business segments" and Note 18 of the Notes to Consolidated Financial Statements for additional information on our business segments.

Fee and other revenue

Fee and other revenue									**YTD22**
					2Q22 vs.				**vs.**
(dollars in millions, unless otherwise noted)	**2Q22**	1Q22	2Q21	**1Q22**	**2Q21**	**YTD22**	YTD21	**YTD21**
Investment services fees	**$ 2,206**	$ 1,993	$ 2,076	**11 %**	**6 %**	**$ 4,199**	$ 4,132	**2 %**
Investment management and performance fees *(a)*	**833**	883	889	**(6)**	**(6)**	**1,716**	1,779	**(4)**
Foreign exchange revenue	**222**	207	184	**7**	**21**	**429**	415	**3**
Financing-related fees	**44**	45	48	**(2)**	**(8)**	**89**	99	**(10)**
Distribution and servicing fees	**34**	30	27	**13**	**26**	**64**	56	**14**
Total fee revenue	**3,339**	3,158	3,224	**6**	**4**	**6,497**	6,481	**—**
Investment and other revenue	**91**	70	91	**N/M**	**N/M**	**161**	100	**N/M**
Total fee and other revenue	**$ 3,430**	$ 3,228	$ 3,315	**6 %**	**3 %**	**$ 6,658**	$ 6,581	**1 %**
Fee revenue as a percentage of total revenue	**78 %**	80 %	81 %			**79 %**	82 %	
AUC/A at period end *(in trillions) (b)*	**$ 43.0**	$ 45.5	$ 45.0	**(5)%**	**(4)%**	**$ 43.0**	$ 45.0	**(4)%**
AUM at period end *(in billions) (c)*	**$ 1,937**	$ 2,266	$ 2,320	**(15)%**	**(17)%**	**$ 1,937**	$ 2,320	**(17)%**

(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 June 30, 2022 and $1.7 trillion at March 31, 2022 and June 30, 2021.
(c) Excludes assets managed outside of the Investment and Wealth Management business segment.
N/M – Not meaningful.

Fee revenue increased 4% compared with the second quarter of 2021 and 6% compared with the first quarter of 2022. The increases compared with the second quarter of 2021 and first quarter of 2022 primarily reflect higher investment services fees and foreign exchange revenue, partially offset by lower investment management and performance fees.

Investment and other revenue was unchanged compared with the second quarter of 2021 and increased $21 million compared with the first quarter of 2022. Compared with the second quarter of 2021, higher strategic equity investment gains were offset by lower seed capital results. The increase compared with the first quarter of 2022 primarily reflects higher fixed-income trading results and strategic equity investment gains, partially offset by lower seed capital results.

Money market fee waivers

In recent periods, low short-term interest rates resulted in money market mutual fund fees and other similar fees being waived to protect investors from negative returns. The fee waivers impacted fee revenues in most of our businesses, but also resulted in lower distribution and servicing expense. Money market fee waivers are highly sensitive to changes in short-term interest rates and are difficult to predict.

The following table presents the impact of money market fee waivers on our consolidated fee revenue, net of distribution and servicing expense. In the second quarter of 2022, the net impact of money market fee waivers was $66 million, down from $199 million in the first quarter of 2022, driven by higher interest rates.

Money market fee waivers						
(in millions)	**2Q22**	1Q22	2Q21	**YTD22**	YTD21
Investment services fees	**$**	**(26)**	$ (126)	$ (148)	**$**	**(152)**	$ (257)
Investment management and performance fees		**(40)**	(85)	(115)		**(125)**	(204)
Distribution and servicing fees		**(2)**	(11)	(13)		**(13)**	(26)
Total fee revenue		**(68)**	(222)	(276)		**(290)**	(487)
Less: Distribution and servicing expense		**2**	23	24		**25**	47
Net impact of money market fee waivers	**$**	**(66)**	$ (199)	$ (252)	**$**	**(265)**	$ (440)
Impact to investment services fees by line of business: *(a)*							
Asset Servicing	**$**	**—**	$ (19)	$ (30)	**$**	**(19)**	$ (45)
Issuer Services		**(1)**	(11)	(16)		**(12)**	(27)
Pershing		**(25)**	(90)	(91)		**(115)**	(168)
Treasury Services		**—**	(6)	(11)		**(6)**	(17)
Total impact of investment services fees by line of business	**$**	**(26)**	$ (126)	$ (148)	**$**	**(152)**	$ (257)
Impact to fee revenue by line of business: *(a)*							
Asset Servicing	**$**	**(1)**	$ (28)	$ (50)	**$**	**(29)**	$ (79)
Issuer Services		**(1)**	(14)	(22)		**(15)**	(37)
Pershing		**(29)**	(107)	(99)		**(136)**	(193)
Treasury Services		**—**	(8)	(16)		**(8)**	(25)
Investment Management		**(37)**	(63)	(85)		**(100)**	(146)
Wealth Management		**—**	(2)	(4)		**(2)**	(7)
Total impact to fee revenue by line of business	**$**	**(68)**	$ (222)	$ (276)	**$**	**(290)**	$ (487)

(a) The line of business revenue for management reporting purposes reflects the impact of revenue transferred between the businesses.

Investment services fees

Investment services fees increased 6% compared with the second quarter of 2021 and 11% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects lower money market fee waivers and higher client activity, partially offset by the impact of lost business in the prior year in Pershing and Corporate Trust and the unfavorable impact of a stronger U.S. dollar. The increase compared with the first quarter of 2022 primarily reflects lower money market fee waivers, the accelerated amortization of deferred costs for depositary receipts services related to Russia recorded in the first quarter of 2022 and higher client activity, partially offset by lower market values.

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 6% compared with the second quarter of 2021 and first quarter of 2022. The decrease compared with the second quarter of 2021 primarily reflects lower market values, the unfavorable impact of a stronger U.S. dollar, an unfavorable change in the mix of AUM and lower equity income, partially offset by lower money market fee waivers. The decrease compared with the first quarter of 2022 primarily reflects lower market values, timing of performance fees and the unfavorable impact of a stronger U.S. dollar, partially offset by lower money market fee waivers. Performance fees were $5 million in the second quarter of 2022, $14 million in the second quarter of 2021 and $34 million in the first quarter of 2022. On a constant currency basis (Non-GAAP), investment management and performance fees decreased 3% compared with the second quarter of 2021. See “Supplemental information – Explanation of GAAP and Non-GAAP financial measures” beginning on page 45 for the reconciliation of Non-GAAP measures.

AUM was $1.9 trillion at June 30, 2022, a decrease of 17% compared with June 30, 2021, primarily reflecting lower market values and the unfavorable impact of a stronger U.S. dollar, partially offset by net inflows.

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 increased 21% compared with the second quarter of 2021 and 7% compared with the first quarter of 2022. Both increases primarily reflect higher volatility. Foreign exchange revenue is primarily reported in the Securities Services business segment and, to a lesser extent, the Market and Wealth Services and Investment and Wealth Management business segments and the Other segment.

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 equity securities, 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 or loss includes various miscellaneous revenues.

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

Investment and other revenue *(in millions)*	**2Q22**	1Q22	2Q21	**YTD22**	YTD21
(Loss) income from consolidated investment management funds	**$ (24)**	$ (20)	$ 13	**$ (44)**	$ 30
Seed capital (losses) gains *(a)*	**(24)**	(8)	18	**(32)**	21
Other trading revenue (loss)	**45**	5	(1)	**50**	(8)
Renewable energy investment (losses)	**(44)**	(44)	(41)	**(88)**	(122)
Corporate/bank-owned life insurance	**28**	33	29	**61**	62
Other investments gains *(b)*	**78**	61	23	**139**	34
Disposal gains	**—**	—	6	**—**	6
Expense reimbursements from joint venture	**26**	27	25	**53**	48
Other income	**6**	12	17	**18**	27
Net securities gains	**—**	4	2	**4**	2
Total investment and other revenue	**$ 91**	$ 70	$ 91	**$ 161**	$ 100

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

Investment and other revenue was $91 million in the second quarter of 2022 compared with $91 million in the second quarter of 2021 and $70 million in the first quarter of 2022. Compared with the second quarter of 2021, higher strategic equity investment gains were offset by lower seed capital results. The increase compared with the first quarter of 2022 primarily reflects higher fixed-income trading results and strategic equity investment gains, partially offset by lower seed capital results.

Year-to-date 2022 compared with year-to-date 2021

Fee revenue increased less than 1% compared with the first six months of 2021, primarily reflecting higher investment services fees and foreign exchange

revenue, partially offset by lower investment management and performance fees. The 2% increase in investment services fees primarily reflects lower money market fee waivers and higher market values and client activity, partially offset by the accelerated amortization of deferred costs for depositary receipts services related to Russia recorded in the first quarter of 2022, the impact of lost business in the prior year in Pershing and Corporate Trust and the unfavorable impact of a stronger U.S. dollar. The 3% increase in foreign exchange revenue primarily reflects higher volatility. The 4% decrease in investment management and performance fees primarily reflects the unfavorable impact of a stronger U.S. dollar, lower equity income and an unfavorable change in the mix of AUM, partially offset by lower money market fee waivers.

Investment and other revenue increased $61 million compared with the first six months of 2021, primarily reflecting higher strategic equity investment gains and a $39 million impairment for a renewable energy investment recorded in the first quarter of 2021, partially offset by lower seed capital results.

Net interest revenue

Net interest revenue									YTD22
				2Q22 vs.					vs.
(dollars in millions)	2Q22	1Q22	2Q21	1Q22	2Q21	YTD22	YTD21	YTD21
Net interest revenue – GAAP	**$ 824**	$ 698	$ 645	**18 %**	**28 %**	**$ 1,522**	$ 1,300	**17 %**
Add: Tax equivalent adjustment	**3**	3	3	**N/M**	**N/M**	**6**	6	**N/M**
Net interest revenue (FTE) – Non-GAAP *(a)*	**$ 827**	$ 701	$ 648	**18 %**	**28 %**	**$ 1,528**	$ 1,306	**17 %**
Average interest-earning assets	**$ 370,782**	$ 373,186	$ 388,285	**(1)%**	**(5)%**	**$ 371,997**	$ 392,766	**(5)%**
Net interest margin – GAAP	**0.89 %**	0.75 %	0.67 %	**14 bps**	**22 bps**	**0.82 %**	0.67 %	**15 bps**
Net interest margin (FTE) – Non-GAAP *(a)*	**0.89 %**	0.76 %	0.67 %	**13 bps**	**22 bps**	**0.83 %**	0.67 %	**16 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 28% compared with the second quarter of 2021 and 18% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects higher interest rates on interest-earning assets and a change in asset mix, partially offset by higher funding expense and lower interest-earning assets. The increase compared with the first quarter of 2022 primarily reflects higher interest rates on interest-earning assets, partially offset by higher funding expense.

Net interest margin increased 22 basis points compared with the second quarter of 2021 and 14 basis points compared with the first quarter of 2022. The changes compared with the second quarter of 2021 and the first quarter of 2022 primarily reflect the factors mentioned above.

Average interest-earning assets decreased 5% compared with the second quarter of 2021 and 1% compared with the first quarter of 2022. The decrease compared with the second quarter of 2021 primarily reflects lower interest-bearing deposits with the Federal Reserve and other central banks, securities balances and interest-bearing deposits with banks. The decrease was partially offset by larger loan balances. The decrease compared with the first quarter of 2022 primarily reflects lower securities balances, partially offset by larger loan balances.

Average non-U.S. dollar deposits comprised approximately 25% of our average total deposits in the second quarter of 2022. Approximately 40% of the average non-U.S. dollar deposits in the second quarter of 2022 were euro-denominated.

Year-to-date 2022 compared with year-to-date 2021

Net interest revenue increased 17% compared with the first six months of 2021, primarily driven by higher interest rates on interest-earning assets and a change in asset mix, partially offset by higher funding expense and lower interest-earning assets. The increase in the net interest margin primarily reflects the factors mentioned above.

Average interest-earning assets decreased 5% compared with the first six months of 2021. The decrease primarily reflects lower interest-bearing deposits with the Federal Reserve and other central banks, interest-bearing deposits with banks and securities balances. The decrease was partially offset by larger loan balances.

Average balances and interest rates	Quarter ended								
	June 30, 2022			March 31, 2022			June 30, 2021		
(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	**$ 102,844**	**$ 99**	**0.38 %**	$ 100,303	$ 2	0.01 %	$ 114,564	$ (25)	(0.09)%
Interest-bearing deposits with banks (primarily foreign banks)	**18,097**	**33**	**0.74**	17,181	14	0.33	22,465	11	0.20
Federal funds sold and securities purchased under resale agreements *(a)*	**24,212**	**116**	**1.91**	27,006	37	0.56	27,857	25	0.36
Loans	**69,036**	**370**	**2.15**	66,810	260	1.57	60,520	237	1.57
Securities:									
U.S. government obligations	**41,267**	**110**	**1.07**	40,868	74	0.74	33,212	59	0.71
U.S. government agency obligations	**64,939**	**258**	**1.59**	67,055	245	1.46	72,809	244	1.34
State and political subdivisions *(b)*	**2,065**	**11**	**2.13**	2,337	13	2.16	2,768	14	1.94
Other securities *(b)*	**43,635**	**142**	**1.31**	45,541	115	1.02	47,451	112	0.95
Total investment securities *(b)*	**151,906**	**521**	**1.37**	155,801	447	1.15	156,240	429	1.10
Trading securities *(b)*	**4,687**	**23**	**1.91**	6,085	21	1.43	6,639	11	0.72
Total securities *(b)*	**156,593**	**544**	**1.39**	161,886	468	1.16	162,879	440	1.08
Total interest-earning assets *(b)*	**$ 370,782**	**$ 1,162**	**1.25 %**	$ 373,186	$ 781	0.84 %	$ 388,285	$ 688	0.71 %
Noninterest-earning assets	**66,841**			67,016			64,044		
Total assets	**$ 437,623**			$ 440,202			$ 452,329		
Liabilities and equity									
Interest-bearing liabilities:									
Interest-bearing deposits	**$ 219,124**	**$ 90**	**0.16 %**	$ 223,243	$ (37)	(0.07)%	$ 239,466	$ (49)	(0.08)%
Federal funds purchased and securities sold under repurchase agreements *(a)*	**12,610**	**77**	**2.47**	12,864	12	0.36	13,773	(5)	(0.17)
Trading liabilities	**3,231**	**10**	**1.25**	3,372	4	0.53	2,282	2	0.38
Other borrowed funds	**437**	**2**	**2.14**	458	3	2.36	298	1	2.21
Commercial paper	**5**	**—**	**1.61**	4	—	0.09	—	—	—
Payables to customers and broker-dealers	**16,592**	**9**	**0.21**	16,661	—	0.01	16,811	—	(0.01)
Long-term debt	**26,195**	**147**	**2.22**	25,588	98	1.53	25,275	91	1.43
Total interest-bearing liabilities	**$ 278,194**	**$ 335**	**0.48 %**	$ 282,190	$ 80	0.11 %	$ 297,905	$ 40	0.05 %
Total noninterest-bearing deposits	**91,893**			90,179			85,802		
Other noninterest-bearing liabilities	**26,354**			25,419			23,317		
Total liabilities	**396,441**			397,788			407,024		
Total The Bank of New York Mellon Corporation shareholders' equity	**41,037**			42,201			44,934		
Noncontrolling interests	**145**			213			371		
Total liabilities and equity	**$ 437,623**			$ 440,202			$ 452,329		
Net interest revenue (FTE) – Non-GAAP *(b)(c)*		**$ 827**			$ 701			$ 648	
Net interest margin (FTE) – Non-GAAP *(b)(c)*			**0.89 %**			0.76 %			0.67 %
Less: Tax equivalent adjustment		**3**			3			3	
Net interest revenue – GAAP		**$ 824**			$ 698			$ 645	
Net interest margin – GAAP			**0.89 %**			0.75 %			0.67 %

(a) Includes the average impact of offsetting under enforceable netting agreements of approximately $33 billion for the second quarter of 2022, $53 billion for the first quarter of 2022 and $41 billion for the second quarter of 2021. 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 0.80% for the second quarter of 2022, 0.19% for the first quarter of 2022 and 0.15% for the second quarter of 2021. 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 0.68% for the second quarter of 2022, 0.07% for the first quarter of 2022 and (0.04)% for the second quarter of 2021. 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 10 for the reconciliation of this Non-GAAP measure.

Average balances and interest rates	Year-to-date					
	June 30, 2022			June 30, 2021		
(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	**$ 101,600**	**$ 101**	**0.20 %**	$ 120,216	$ (41)	(0.07)%
Interest-bearing deposits with banks (primarily foreign banks)	**17,641**	**47**	**0.54**	21,892	25	0.24
Federal funds sold and securities purchased under resale agreements *(a)*	**25,602**	**153**	**1.20**	28,518	57	0.40
Loans	**67,929**	**630**	**1.87**	58,665	467	1.60
Securities:						
U.S. government obligations	**41,069**	**184**	**0.90**	30,998	122	0.80
U.S. government agency obligations	**65,991**	**503**	**1.52**	75,202	515	1.37
State and political subdivisions *(b)*	**2,200**	**24**	**2.15**	2,648	26	1.93
Other securities *(b)*	**44,583**	**257**	**1.16**	47,242	228	0.97
Total investment securities *(b)*	**153,843**	**968**	**1.26**	156,090	891	1.14
Trading securities *(b)*	**5,382**	**44**	**1.64**	7,385	30	0.85
Total securities *(b)*	**159,225**	**1,012**	**1.27**	163,475	921	1.13
Total interest-earning assets *(b)*	**$ 371,997**	**$ 1,943**	**1.05 %**	$ 392,766	$ 1,429	0.73 %
Noninterest-earning assets	**66,927**			63,566		
Total assets	**$ 438,924**			$ 456,332		
Liabilities and equity						
Interest-bearing liabilities:						
Interest-bearing deposits	**$ 221,172**	**$ 53**	**0.05 %**	$ 242,275	$ (86)	(0.07)%
Federal funds purchased and securities sold under repurchase agreements *(a)*	**12,736**	**89**	**1.41**	14,526	(8)	(0.12)
Trading liabilities	**3,301**	**14**	**0.88**	2,255	5	0.45
Other borrowed funds	**448**	**5**	**2.25**	314	3	2.11
Commercial paper	**5**	**—**	**0.89**	—	—	—
Payables to customers and broker-dealers	**16,626**	**9**	**0.11**	17,249	(1)	(0.01)
Long-term debt	**25,893**	**245**	**1.88**	25,734	210	1.63
Total interest-bearing liabilities	**$ 280,181**	**$ 415**	**0.30 %**	$ 302,353	$ 123	0.08 %
Total noninterest-bearing deposits	**91,060**			84,622		
Other noninterest-bearing liabilities	**25,888**			23,933		
Total liabilities	**397,129**			410,908		
Total The Bank of New York Mellon Corporation shareholders' equity	**41,616**			45,097		
Noncontrolling interests	**179**			327		
Total liabilities and equity	**$ 438,924**			$ 456,332		
Net interest revenue (FTE) – Non-GAAP *(b)(c)*		**$ 1,528**			$ 1,306	
Net interest margin (FTE) – Non-GAAP *(b)(c)*			**0.83 %**			0.67 %
Less: Tax equivalent adjustment		**6**			6	
Net interest revenue – GAAP		**$ 1,522**			$ 1,300	
Net interest margin – GAAP			**0.82 %**			0.67 %

(a) Includes the average impact of offsetting under enforceable netting agreements of approximately $43 billion for the first six months of 2022 and $39 billion for the first six months of 2021. 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 0.45% for the first six months of 2022 and 0.17% for the first six months of 2021. 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 0.32% for the first six months of 2022 and (0.03)% for the first six months of 2021. 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 10 for the reconciliation of this Non-GAAP measure.

Noninterest expense

Noninterest expense								YTD22
				2Q22 vs.				vs.
(dollars in millions)	**2Q22**	1Q22	2Q21	**1Q22**	**2Q21**	**YTD22**	YTD21	**YTD21**
Staff	**$ 1,623**	$ 1,702	$ 1,518	**(5)%**	**7 %**	**$ 3,325**	$ 3,120	**7 %**
Software and equipment	**405**	399	365	**2**	**11**	**804**	727	**11**
Professional, legal and other purchased services	**379**	370	363	**2**	**4**	**749**	706	**6**
Sub-custodian and clearing	**131**	118	132	**11**	**(1)**	**249**	256	**(3)**
Net occupancy	**125**	122	122	**2**	**2**	**247**	245	**1**
Distribution and servicing	**90**	79	73	**14**	**23**	**169**	147	**15**
Business development	**43**	30	22	**43**	**95**	**73**	41	**78**
Bank assessment charges	**37**	35	35	**6**	**6**	**72**	69	**4**
Amortization of intangible assets	**17**	17	20	**—**	**(15)**	**34**	44	**(23)**
Other	**262**	134	128	**96**	**105**	**396**	274	**45**
Total noninterest expense	**$ 3,112**	$ 3,006	$ 2,778	**4 %**	**12 %**	**$ 6,118**	$ 5,629	**9 %**
Full-time employees at period end	**50,800**	49,600	48,800	**2 %**	**4 %**	**50,800**	48,800	**4 %**

Total noninterest expense increased 12% compared with the second quarter of 2021 and 4% compared with the first quarter of 2022. The increases compared with the second quarter of 2021 and the first quarter of 2022 primarily reflect higher investments in growth, infrastructure and efficiency initiatives and higher litigation reserves and revenue-related expenses, including the impact of inflation, partially offset by the favorable impact of a stronger U.S. dollar. The investments in growth, infrastructure and efficiency initiatives are primarily included in staff, software and equipment, and professional, legal and other purchased services expenses. The increase compared with the first quarter of 2022 was also partially offset by lower staff expense primarily driven by the annual vesting of stock-based awards to retirement eligible employees recorded in the first quarter of 2022.

Year-to-date 2022 compared with year-to-date 2021

Noninterest expense increased 9% compared with the first six months of 2021, primarily reflecting higher investments in growth, infrastructure and efficiency initiatives and higher litigation reserves and revenue-related expenses, including the impact of inflation, partially offset by the favorable impact of a stronger U.S. dollar.

Income taxes

BNY Mellon recorded an income tax provision of $231 million (21.1% effective tax rate) in the second quarter of 2022, $241 million (19.0% effective tax rate) in the second quarter of 2021 and $153 million (16.7% effective tax rate) in the first quarter of 2022. For additional information, see Note 10 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 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 businesses, see Note 18 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 2021 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 second quarter of 2022.

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. Prior to 2022, in the third quarter, staff expense typically increased reflecting the annual employee merit increase. In 2022, this increase was reflected in the second quarter.

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 the global market fluctuations. At June 30, 2022, 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 18 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)	2Q22	1Q22	4Q21	3Q21	2Q21	2Q22 vs. 1Q22	2Q22 vs. 2Q21	YTD22	YTD21	YTD22 vs. YTD21
Revenue:										
Investment services fees:										
Asset Servicing	**$ 995**	$ 999	$ 984	$ 979	$ 960	**— %**	**4 %**	**$ 1,994**	$ 1,913	**4 %**
Issuer Services	**309**	141	253	281	281	**119**	**10**	**450**	527	**(15)**
Total investment services fees	**1,304**	1,140	1,237	1,260	1,241	**14**	**5**	**2,444**	2,440	**—**
Foreign exchange revenue	**155**	148	148	125	129	**5**	**20**	**303**	301	**1**
Other fees *(a)*	**54**	41	28	30	25	**32**	**116**	**95**	55	**73**
Total fee revenue	**1,513**	1,329	1,413	1,415	1,395	**14**	**8**	**2,842**	2,796	**2**
Investment and other revenue	**36**	74	53	73	38	**N/M**	**N/M**	**110**	68	**N/M**
Total fee and other revenue	**1,549**	1,403	1,466	1,488	1,433	**10**	**8**	**2,952**	2,864	**3**
Net interest revenue	**457**	377	367	349	354	**21**	**29**	**834**	710	**17**
Total revenue	**2,006**	1,780	1,833	1,837	1,787	**13**	**12**	**3,786**	3,574	**6**
Provision for credit losses	**13**	(10)	(7)	(19)	(58)	**N/M**	**N/M**	**3**	(108)	**N/M**
Noninterest expense (excluding amortization of intangible assets)	**1,647**	1,502	1,481	1,535	1,393	**10**	**18**	**3,149**	2,804	**12**
Amortization of intangible assets	**9**	8	9	8	7	**13**	**29**	**17**	15	**13**
Total noninterest expense	**1,656**	1,510	1,490	1,543	1,400	**10**	**18**	**3,166**	2,819	**12**
Income before income taxes	**$ 337**	$ 280	$ 350	$ 313	$ 445	**20 %**	**(24)%**	**$ 617**	$ 863	**(29)%**
Pre-tax operating margin	**17 %**	16 %	19 %	17 %	25 %			**16 %**	24 %	
Securities lending revenue *(b)*	**$ 45**	$ 39	$ 45	$ 45	$ 42	**15 %**	**7 %**	**$ 84**	$ 83	**1 %**
Total revenue by line of business:										
Asset Servicing	**$ 1,534**	$ 1,512	$ 1,456	$ 1,437	$ 1,382	**1 %**	**11 %**	**$ 3,046**	$ 2,806	**9 %**
Issuer Services	**472**	268	377	400	405	**76**	**17**	**740**	768	**(4)**
Total revenue by line of business	**$ 2,006**	$ 1,780	$ 1,833	$ 1,837	$ 1,787	**13 %**	**12 %**	**$ 3,786**	$ 3,574	**6 %**
Selected average balances:										
Average loans	**$ 11,386**	$ 10,150	$ 9,764	$ 8,389	$ 8,485	**12 %**	**34 %**	**$ 10,772**	$ 8,430	**28 %**
Average deposits	**$ 191,191**	$ 192,156	$ 200,272	$ 198,680	$ 203,147	**(1)%**	**(6)%**	**$ 191,671**	$ 201,505	**(5)%**
Selected metrics:										
AUC/A at period end *(in trillions) (c)*	**$ 31.0**	$ 33.7	$ 34.6	$ 33.8	$ 33.7	**(8)%**	**(8)%**	**$ 31.0**	$ 33.7	**(8)%**
Market value of securities on loan at period end *(in billions) (d)*	**$ 441**	$ 449	$ 447	$ 443	$ 456	**(2)%**	**(3)%**	**$ 441**	$ 456	**(3)%**

(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 June 30, 2022 and $1.7 trillion at March 31, 2022, Dec. 31, 2021, Sept. 30, 2021 and June 30, 2021.

(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 $70 billion at June 30, 2022, $78 billion at March 31, 2022, $71 billion at Dec. 31, 2021, $68 billion at Sept. 30, 2021 and $63 billion at June 30, 2021.

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 lifecycle to our global asset owner and asset manager clients. We are one of the leading global investment services providers with $31.0 trillion of AUC/A at June 30, 2022. For information on the drivers of the Securities Services fee revenue, see Note 10 of the Notes to Consolidated Financial Statements in our 2021 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 $4.3 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 $31.0 trillion decreased 8% compared with June 30, 2021, primarily reflecting lower market values and the unfavorable impact of a stronger U.S. dollar, partially offset by net new business and client inflows.

Total revenue of $2.0 billion increased 12% compared with the second quarter of 2021 and 13% compared with the first quarter of 2022. The drivers of total revenue by line of business are indicated below.

Asset Servicing revenue of $1.5 billion increased 11% compared with the second quarter of 2021 and 1% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects higher net interest revenue, lower money market fee waivers and higher foreign exchange revenue and client activity, partially offset by the unfavorable impact of a stronger U.S. dollar and lower market values. The increase compared with the first quarter of 2022 was impacted by the same factors and was partially offset by a gain on a strategic equity investment recorded in the first quarter of 2022.

Issuer Services revenue of $472 million increased 17% compared with the second quarter of 2021 and 76% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects higher net interest revenue in Corporate Trust, higher Depositary Receipts revenue and lower money market fee waivers, partially offset by the impact of lost business in the prior year in Corporate Trust. The increase compared with the first quarter of 2022 primarily reflects the accelerated amortization of deferred costs for depositary receipts services related to Russia recorded in the first quarter of 2022, higher Depositary Receipts revenue, higher net interest revenue in Corporate Trust and lower money market fee waivers.

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 $1.7 billion increased 18% compared with the second quarter of 2021 and 10% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects higher investments in growth, infrastructure and efficiency initiatives, litigation reserves and revenue-related expenses, including the impact of inflation, partially offset by the favorable impact of a stronger U.S. dollar. The increase compared with the first quarter of 2022 primarily reflects higher litigation reserves.

Year-to-date 2022 compared with year-to-date 2021

Total revenue of $3.8 billion increased 6% compared with the first six months of 2021. Asset Servicing revenue of $3.0 billion increased 9%, primarily reflecting higher net interest revenue, lower money market fee waivers and higher client activity, partially offset by the unfavorable impact of a stronger U.S. dollar. Issuer Services revenue of $740 million

decreased 4%, primarily reflecting accelerated amortization of deferred costs for depositary receipts services related to Russia recorded in the first quarter of 2022 and the impact of lost business in the prior year in Corporate Trust, partially offset by higher net interest revenue and lower money market fee waivers in Corporate Trust.

Noninterest expense of $3.2 billion increased 12% compared with the first six months of 2021, primarily reflecting investments in growth, infrastructure and efficiency initiatives, higher litigation reserves and revenue-related expenses, including the impact of inflation, partially offset by the favorable impact of a stronger U.S. dollar.

Market and Wealth Services business segment

(dollars in millions, unless otherwise noted)	2Q22	1Q22	4Q21	3Q21	2Q21	2Q22 vs. 1Q22	2Q22 vs. 2Q21	YTD22	YTD21	YTD22 vs. YTD21
Revenue:										
Investment services fees:										
Pershing	**$ 479**	$ 433	$ 412	$ 427	$ 439	**11 %**	**9 %**	**$ 912**	$ 898	**2 %**
Treasury Services	**176**	170	170	168	160	**4**	**10**	**346**	324	**7**
Clearance and Collateral Management	**240**	243	236	228	228	**(1)**	**5**	**483**	454	**6**
Total investment services fees	**895**	846	818	823	827	**6**	**8**	**1,741**	1,676	**4**
Foreign exchange revenue	**22**	26	21	23	23	**(15)**	**(4)**	**48**	44	**9**
Other fees *(a)*	**46**	34	31	31	32	**35**	**44**	**80**	69	**16**
Total fee revenue	**963**	906	870	877	882	**6**	**9**	**1,869**	1,789	**4**
Investment and other revenue	**11**	—	6	13	21	**N/M**	**N/M**	**11**	28	**N/M**
Total fee and other revenue	**974**	906	876	890	903	**8**	**8**	**1,880**	1,817	**3**
Net interest revenue	**340**	296	297	283	289	**15**	**18**	**636**	578	**10**
Total revenue	**1,314**	1,202	1,173	1,173	1,192	**9**	**10**	**2,516**	2,395	**5**
Provision for credit losses	**4**	(2)	(3)	(16)	(19)	**N/M**	**N/M**	**2**	(48)	**N/M**
Noninterest expense (excluding amortization of intangible assets)	**700**	706	670	665	647	**(1)**	**8**	**1,406**	1,320	**7**
Amortization of intangible assets	**2**	2	4	3	5	**—**	**(60)**	**4**	14	**(71)**
Total noninterest expense	**702**	708	674	668	652	**(1)**	**8**	**1,410**	1,334	**6**
Income before income taxes	**$ 608**	$ 496	$ 502	$ 521	$ 559	**23 %**	**9 %**	**$ 1,104**	$ 1,109	**— %**
Pre-tax operating margin	**46 %**	41 %	43 %	44 %	47 %			**44 %**	46 %	
Total revenue by line of business:										
Pershing	**$ 636**	$ 570	$ 553	$ 566	$ 590	**12 %**	**8 %**	**$ 1,206**	$ 1,195	**1 %**
Treasury Services	**373**	338	331	326	319	**10**	**17**	**711**	636	**12**
Clearance and Collateral Management	**305**	294	289	281	283	**4**	**8**	**599**	564	**6**
Total revenue by line of business	**$ 1,314**	$ 1,202	$ 1,173	$ 1,173	$ 1,192	**9 %**	**10 %**	**$ 2,516**	$ 2,395	**5 %**
Selected average balances:										
Average loans	**$ 42,391**	$ 42,113	$ 40,812	$ 39,041	$ 38,360	**1 %**	**11 %**	**$ 42,253**	$ 36,736	**15 %**
Average deposits	**$ 94,716**	$ 95,704	$ 100,653	$ 101,253	$ 102,896	**(1)%**	**(8)%**	**$ 95,207**	$ 104,976	**(9)%**
Selected metrics:										
AUC/A at period end *(in trillions) (b)*	**$ 11.8**	$ 11.6	$ 11.8	$ 11.2	$ 11.1	**2 %**	**6 %**			
Pershing:										
AUC/A at period end *(in trillions)*	**$ 2.2**	$ 2.5	$ 2.6	$ 2.6	$ 2.8	**(12)%**	**(21)%**			
Net new assets (U.S. platform) *(in billions) (c)*	**$ 16**	$ 18	$ 69	$ 13	$ 47	**N/M**	**N/M**			
Average active clearing accounts *(in thousands)*	**7,432**	7,432	7,334	7,259	7,290	**— %**	**2 %**			
Treasury Services:										
Average daily U.S. dollar payment volumes	**237,763**	240,403	245,634	232,144	230,346	**(1)%**	**3 %**			
Clearance and Collateral Management:										
Average tri-party collateral management balances *(in billions)*	**$ 5,207**	$ 5,026	$ 4,972	$ 4,516	$ 3,898	**4 %**	**34 %**			

(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 represent 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 2021 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 $5.2 trillion serviced globally, including approximately $4.1 trillion of the U.S. tri-party repo market at June 30, 2022.

Review of financial results

AUC/A of $11.8 trillion increased 6% compared with June 30, 2021, primarily reflecting client inflows, partially offset by lower market values and the unfavorable impact of a stronger U.S. dollar.

Total revenue of $1.3 billion increased 10% compared with the second quarter of 2021 and 9% compared with the first quarter of 2022. The drivers of total revenue by line of business are indicated below.

Pershing revenue of $636 million increased 8% compared with the second quarter of 2021 and 12% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects lower money market fee waivers and higher transaction activity, partially offset by the impact of prior year lost business. The increase compared with the first quarter of 2022 primarily reflects lower money market fee waivers, partially offset by lower equity markets and lower transaction activity.

Treasury Services revenue of $373 million increased 17% compared with the second quarter of 2021 and 10% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects higher net interest revenue, lower money market fee waivers and higher payment volumes. The increase compared with the first quarter of 2022 primarily reflects higher net interest revenue and lower money market fee waivers.

Clearance and Collateral Management revenue of $305 million increased 8% compared with the second quarter of 2021 and 4% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects higher net interest revenue and clearance volumes. The increase compared with the first quarter of 2022 primarily reflects higher net interest revenue.

Noninterest expense of $702 million increased 8% compared with the second quarter of 2021 and decreased 1% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects higher investments in growth, infrastructure and efficiency initiatives, including the impact of inflation. The decrease compared with the first quarter of 2022 primarily reflects lower staff expense.

Year-to-date 2022 compared with year-to-date 2021

Total revenue of $2.5 billion increased 5% compared with the first six months of 2021. Pershing revenue of $1.2 billion increased 1%, primarily reflecting lower money market fee waivers and growth from existing clients, partially offset by the impact of prior year lost business. Treasury Services revenue of $711 million increased 12%, primarily reflecting higher net interest revenue, lower money market fee

waivers and higher payment volumes. Clearance and Collateral Management revenue of $599 million increased 6%, primarily reflecting higher net interest revenue and clearance volumes.

Noninterest expense of $1.4 billion increased 6% compared with the first six months of 2021 primarily reflecting higher investments in growth, infrastructure and efficiency initiatives, including the impact of inflation, partially offset by the favorable impact of a stronger U.S. dollar.

Investment and Wealth Management business segment

(dollars in millions)	2Q22	1Q22	4Q21	3Q21	2Q21	2Q22 vs. 1Q22	2Q22 vs. 2Q21	YTD22	YTD21	YTD22 vs. YTD21
Revenue:										
Investment management fees	**$ 825**	$ 848	$ 864	$ 893	$ 876	**(3)%**	**(6)%**	**$ 1,673**	$ 1,726	**(3)%**
Performance fees	**5**	34	32	21	14	**N/M**	**(64)**	**39**	54	**(28)**
Investment management and performance fees *(a)*	**830**	882	896	914	890	**(6)**	**(7)**	**1,712**	1,780	**(4)**
Distribution and servicing fees	**51**	32	28	28	28	**59**	**82**	**83**	56	**48**
Other fees *(b)*	**(31)**	1	22	20	16	**N/M**	**N/M**	**(30)**	38	**N/M**
Total fee revenue	**850**	915	946	962	934	**(7)**	**(9)**	**1,765**	1,874	**(6)**
Investment and other revenue *(c)*	**(13)**	(8)	23	23	18	**N/M**	**N/M**	**(21)**	21	**N/M**
Total fee and other revenue *(c)*	**837**	907	969	985	952	**(8)**	**(12)**	**1,744**	1,895	**(8)**
Net interest revenue	**62**	57	51	47	47	**9**	**32**	**119**	95	**25**
Total revenue	**899**	964	1,020	1,032	999	**(7)**	**(10)**	**1,863**	1,990	**(6)**
Provision for credit losses	**—**	(3)	(6)	(7)	(4)	**N/M**	**N/M**	**(3)**	—	**N/M**
Noninterest expense (excluding amortization of intangible assets)	**685**	748	741	684	669	**(8)**	**2**	**1,433**	1,371	**5**
Amortization of intangible assets	**6**	7	7	7	8	**(14)**	**(25)**	**13**	15	**(13)**
Total noninterest expense	**691**	755	748	691	677	**(8)**	**2**	**1,446**	1,386	**4**
Income before income taxes	**$ 208**	$ 212	$ 278	$ 348	$ 326	**(2)%**	**(36)%**	**$ 420**	$ 604	**(30)%**
Pre-tax operating margin	**23 %**	22 %	27 %	34 %	33 %			**23 %**	30 %	
Adjusted pre-tax operating margin – Non-GAAP *(d)*	**26 %**	24 %	29 %	36 %	35 %			**25 %**	33 %	
Total revenue by line of business:										
Investment Management	**$ 603**	$ 658	$ 709	$ 727	$ 700	**(8)%**	**(14)%**	**$ 1,261**	$ 1,398	**(10)%**
Wealth Management	**296**	306	311	305	299	**(3)**	**(1)**	**602**	592	**2**
Total revenue by line of business	**$ 899**	$ 964	$ 1,020	$ 1,032	$ 999	**(7)%**	**(10)%**	**$ 1,863**	$ 1,990	**(6)%**
Average balances:										
Average loans	**$ 14,087**	$ 13,228	$ 12,737	$ 12,248	$ 11,871	**6 %**	**19 %**	**$ 13,660**	$ 11,742	**16 %**
Average deposits	**$ 20,802**	$ 22,501	$ 18,374	$ 17,270	$ 17,466	**(8)%**	**19 %**	**$ 21,647**	$ 18,317	**18 %**

(a) On a constant currency basis, investment management and performance fees decreased 3% (Non-GAAP) compared with the second quarter of 2021. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 45 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 45 for the reconciliation of this Non-GAAP measure.

N/M – Not meaningful.

AUM trends							2Q22 vs.	
(dollars in billions)	2Q22	1Q22	4Q21	3Q21	2Q21		1Q22	2Q21
AUM by product type: *(a)*								
Equity	**$ 139**	$ 168	$ 187	$ 180	$ 187		**(17)%**	**(26)%**
Fixed income	**226**	248	267	269	272		**(9)**	**(17)**
Index	**387**	440	467	436	440		**(12)**	**(12)**
Liability-driven investments	**641**	812	890	843	841		**(21)**	**(24)**
Multi-asset and alternative investments	**188**	215	228	218	222		**(13)**	**(15)**
Cash	**356**	383	395	364	358		**(7)**	**(1)**
Total AUM	**$ 1,937**	$ 2,266	$ 2,434	$ 2,310	$ 2,320		**(15)%**	**(17)%**
Changes in AUM: *(a)*								
Beginning balance of AUM	**$ 2,266**	$ 2,434	$ 2,310	$ 2,320	$ 2,214			
Net inflows (outflows):								
Long-term strategies:								
Equity	**(4)**	(4)	(4)	(5)	(3)			
Fixed income	**(1)**	(5)	—	1	8			
Liability-driven investments	**12**	17	1	16	11			
Multi-asset and alternative investments	**(5)**	(4)	1	(2)	1			
Total long-term active strategies inflows (outflows)	**2**	4	(2)	10	17			
Index	**12**	(5)	(2)	(3)	(5)			
Total long-term strategies inflows (outflows)	**14**	(1)	(4)	7	12			
Short-term strategies:								
Cash	**(26)**	(11)	31	7	13			
Total net (outflows) inflows	**(12)**	(12)	27	14	25			
Net market impact	**(241)**	(130)	96	4	79			
Net currency impact	**(76)**	(26)	1	(28)	2			
Ending balance of AUM	**$ 1,937**	$ 2,266	$ 2,434	$ 2,310	$ 2,320		**(15)%**	**(17)%**
Wealth Management client assets *(b)*	**$ 264**	$ 305	$ 321	$ 307	$ 305		**(13)%**	**(13)%**

(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 20 and 21 of our 2021 Annual Report for additional information on our Investment and Wealth Management business segment.

In May 2022, we entered into a definitive agreement to sell BNY Alcentra Group Holdings, Inc. (together with its subsidiaries, "Alcentra"). At April 30, 2022, Alcentra had $38 billion in AUM concentrated in senior secured loans, high yield bonds, private credit, structured credit, special situations and multi-strategy credit strategies. The transaction is expected to be completed early in the first calendar quarter of 2023, subject to customary closing conditions, including certain regulatory approvals.

Review of financial results

AUM decreased 17% compared with June 30, 2021, primarily reflecting lower market values and the unfavorable impact of a stronger U.S. dollar, partially offset by net inflows.

Net long-term strategy inflows were $14 billion in the second quarter of 2022, driven by inflows of index and liability-driven investments, partially offset by outflows of multi-asset and alternative investments and equity funds. Short-term strategy outflows were $26 billion in the second quarter of 2022. Market and regulatory trends have resulted in increased demand for lower fee asset management products and for performance-based fees.

Total revenue of $899 million decreased 10% compared with the second quarter of 2021 and 7% compared with the first quarter of 2022. Investment Management revenue of $603 million decreased 14% compared with the second quarter of 2021 and 8% compared with the first quarter of 2022. The decrease compared with the second quarter of 2021 primarily reflects the unfavorable impact of a stronger U.S. dollar, lower seed capital results and market values, an unfavorable change in the mix of AUM and lower equity income, partially offset by lower money market fee waivers. The decrease compared with the first quarter of 2022 primarily reflects lower market values, timing of performance fees and the unfavorable impact of a stronger U.S. dollar, partially offset by lower money market fee waivers.

Wealth Management revenue of $296 million decreased 1% compared with the second quarter of 2021 and 3% compared with the first quarter of 2022. Both decreases primarily reflect lower market values, partially offset by higher net interest revenue.

Revenue generated in the Investment and Wealth Management business segment included 35% from non-U.S. sources in the second quarter of 2022, compared with 38% in the second quarter of 2021 and 39% in the first quarter of 2022.

Noninterest expense of $691 million increased 2% compared with the second quarter of 2021 and decreased 8% compared with the first quarter of 2022. The increase compared with the second quarter of 2021 primarily reflects higher investments in growth initiatives and distribution and servicing expenses, partially offset by favorable impact of a stronger U.S. dollar. The decrease compared with the first quarter of 2022 primarily reflects lower staff expense.

Year-to-date 2022 compared with year-to-date 2021

Total revenue of $1.9 billion decreased 6% compared with the first six months of 2021. Investment Management revenue of $1.3 billion decreased 10%, primarily reflecting the unfavorable impact of a stronger U.S. dollar, lower seed capital results and equity income, partially offset by lower money market fee waivers. Wealth Management revenue of $602 million increased 2%, primarily reflecting higher net interest revenue, partially offset by lower market values.

Noninterest expense of $1.4 billion increased 4% compared with the first six months of 2021, primarily reflecting higher investments in growth initiatives and distribution and servicing expenses, partially offset by the favorable impact of a stronger U.S. dollar.

Other segment

(in millions)		**2Q22**	1Q22	4Q21	3Q21	2Q21	**YTD22**	YTD21
Fee revenue	**$**	**13**	$ 8	$ 2	$ 12	$ 13	**$ 21**	$ 22
Investment and other revenue		**62**	12	19	23	9	**74**	(27)
Total fee and other revenue		**75**	20	21	35	22	**95**	(5)
Net interest expense		**(35)**	(32)	(38)	(38)	(45)	**(67)**	(83)
Total revenue		**40**	(12)	(17)	(3)	(23)	**28**	(88)
Provision for credit losses		**30**	17	(1)	(3)	(5)	**47**	(13)
Noninterest expense		**63**	33	55	16	49	**96**	90
(Loss) before income taxes	**$**	**(53)**	$ (62)	$ (71)	$ (16)	$ (67)	**$ (115)**	$ (165)
Average loans and leases	**$**	**1,172**	$ 1,319	$ 1,337	$ 1,528	$ 1,804	**$ 1,244**	$ 1,757

See page 22 of our 2021 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 $63 million compared with the second quarter of 2021 and $52 million compared with the first quarter of 2022. Both increases primarily reflect a strategic equity investment gain.

The provision for credit losses was $30 million in the second quarter of 2022 and was primarily related to changes in the macroeconomic forecast and an increase in cash balances with exposure to Russia.

Noninterest expense increased $14 million compared with the second quarter of 2021 and $30 million compared with the first quarter of 2022. Both increases primarily reflect higher staff expense.

Year-to-date 2022 compared with year-to-date 2021

Loss before income taxes decreased $50 million compared with the first six months of 2021. Total fee and other revenue increased $100 million, primarily reflecting higher strategic equity investment gains and a $39 million impairment for a renewable energy investment recorded in the first quarter of 2021.

The provision for credit losses was $47 million in the first six months of 2022 and was primarily related to changes in the macroeconomic forecast and an increase in cash balances with exposure to Russia.

Noninterest expense increased $6 million compared with the first six months of 2021, 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 2021 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	2021 Annual Report, pages 25-26, and "Allowance for credit losses."
Goodwill and other intangibles	2021 Annual Report, pages 26-27. Also see below.
Litigation and regulatory contingencies	"Legal proceedings" in Note 17 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.

In the second quarter of 2022, we performed our annual goodwill impairment test on all six reporting units using an income approach to estimate fair values of each reporting unit. Estimated cash flows used in the income approach were based on management's projections as of April 1, 2022. The discount rate applied to these cash flows was 10% and incorporated a 6.125% market equity risk premium. Estimated cash flows extend far into the future, and, by their nature, are difficult to estimate over such an extended time frame.

As a result of the annual goodwill impairment test of the six reporting units, no goodwill impairment was recognized. The fair values of four of the Company's reporting units were substantially in excess of the respective reporting units' carrying value. The Issuer Services reporting unit, with $2.4 billion of allocated goodwill, which is one of the two reporting units in the Securities Services business segment, exceeded its carrying value by approximately 10%. The Investment Management reporting unit, with $7.2 billion of allocated goodwill, which is one of the two reporting units in the Investment and Wealth Management business segment, exceeded its carrying value by approximately 6%. In the future, small changes in the assumptions for either reporting unit, such as changes in estimated cash flows, long-term growth rates or discount rates, could produce a non-cash goodwill impairment. See "Critical accounting estimates" in our 2021 Annual Report for additional information on the annual goodwill impairment test.

As of June 30, 2022, 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.

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 June 30, 2022, total assets were $453 billion, compared with $444 billion at Dec. 31, 2021. The increase in total assets was primarily driven by higher interest-bearing deposits with the Federal Reserve and other central banks, partially offset by lower securities and federal funds sold and securities purchased under resale agreements. Deposits totaled $326 billion at June 30, 2022, compared with $320 billion at Dec. 31, 2021. The increase reflects higher noninterest-bearing deposits (principally U.S. offices), partially offset by lower interest-bearing deposits in U.S. and non-U.S. offices. Total interest-bearing deposits as a percentage of total interest-earning assets were 57% at June 30, 2022 and 60% at Dec. 31, 2021.

At June 30, 2022, available funds totaled $170 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 $155 billion at Dec. 31, 2021. Total available funds as a percentage of total assets were 38% at June 30, 2022 and 35% at Dec. 31, 2021. For additional information on our available funds, see “Liquidity and dividends.”

Securities were $151 billion, or 33% of total assets, at June 30, 2022, compared with $159 billion, or 36% of total assets, at Dec. 31, 2021. The decrease primarily reflects unrealized pre-tax losses and lower agency residential mortgage-backed securities (“RMBS”), partially offset by higher U.S. Treasury securities. For additional information on our securities portfolio, see “Securities” and Note 3 of the Notes to Consolidated Financial Statements.

Loans were $69 billion, or 15% of total assets, at June 30, 2022, compared with $68 billion, or 15% of total assets, at Dec. 31, 2021. The increase was driven by higher loans in nearly all portfolios, partially offset by lower margin loans. For additional information on our loan portfolio, see “Loans” and Note 4 of the Notes to Consolidated Financial Statements.

Long-term debt totaled $28 billion at June 30, 2022 and $26 billion at Dec. 31, 2021. Issuances were partially offset by redemptions and a decrease in the fair value of hedged long-term debt. For additional information on long-term debt, see “Liquidity and dividends.”

The Bank of New York Mellon Corporation total shareholders’ equity decreased to $41 billion at June 30, 2022 from $43 billion at Dec. 31, 2021. 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 June 30, 2022, 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 June 30, 2022	Interest-bearing deposits						
(in billions)	Central banks	Banks	Lending *(a)*	Securities *(b)*	Other *(c)*	Total exposure	
Top 10 country exposure:							
Germany	$ 22.9	$ 0.7	$ 0.8	$ 4.3	$ 0.7	$ 29.4	
United Kingdom ("UK")	11.7	0.1	1.3	4.0	5.3	22.4	
Japan	7.8	1.1	—	0.5	0.2	9.6	
Canada	—	2.4	0.1	3.8	1.5	7.8	
Belgium	5.4	0.7	0.1	0.1	—	6.3	
Netherlands	3.7	—	0.2	1.4	0.2	5.5	
Luxembourg	1.2	0.2	1.1	—	2.1	4.6	
Ireland	0.8	0.3	0.4	—	1.8	3.3	
Singapore	—	1.1	—	1.5	0.5	3.1	
South Korea	0.1	0.2	2.3	0.2	0.2	3.0	
Total Top 10 country exposure	**$ 53.6**	**$ 6.8**	**$ 6.3**	**$ 15.8**	**$ 12.5**	**$ 95.0**	*(d)*
Select country exposure:							
Brazil	$ —	$ 0.1	$ 0.8	$ 0.1	$ 0.2	$ 1.2	
Russia	—	0.1	*(e)* —	—	—	0.1	
Total select country exposure	**$ —**	**$ 0.2**	**$ 0.8**	**$ 0.1**	**$ 0.2**	**$ 1.3**	

(a) Lending includes loans, acceptances, issued letters of credit, net of participations, and lending-related commitments.
(b) Securities includes 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 75% 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 June 30, 2022, 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 record keeping services to manage their exposures.

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 (dollars in millions)	March 31, 2022 Fair value	2Q22 change in unrealized gain (loss)	June 30, 2022 Amortized cost *(a)*	June 30, 2022 Fair value	Fair value as a % of amortized cost *(a)*	Unrealized gain (loss)	% Floating rate *(b)*	Ratings *(c)* AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
U.S. Treasury	$ 39,929	$ (271)	**$ 43,707**	**$ 42,547**	97 %	$ (1,160)	50 %	100 %	— %	— %	— %	— %
Agency RMBS	45,780	(1,244)	**45,448**	**42,241**	93	(3,207)	13	100	—	—	—	—
Sovereign debt/sovereign guaranteed *(d)*	13,131	(128)	**12,901**	**12,577**	97	(324)	14	86	4	9	1	—
Agency commercial mortgage-backed securities ("MBS")	12,423	(196)	**12,798**	**12,257**	96	(541)	37	100	—	—	—	—
Supranational	7,802	(59)	**8,131**	**7,949**	98	(182)	58	100	—	—	—	—
Collateralized loan obligations ("CLOs")	5,815	(144)	**6,230**	**6,046**	97	(184)	100	99	—	—	—	1
Foreign covered bonds *(e)*	6,252	(66)	**6,010**	**5,831**	97	(179)	48	100	—	—	—	—
U.S. government agencies	6,297	(119)	**6,064**	**5,671**	94	(393)	33	100	—	—	—	—
Non-agency commercial MBS	3,104	(101)	**3,270**	**3,045**	93	(225)	49	100	—	—	—	—
Foreign government agencies *(f)*	2,771	(24)	**2,684**	**2,599**	97	(85)	25	92	8	—	—	—
Non-agency RMBS	2,538	(82)	**2,447**	**2,346**	96	(101)	50	85	3	—	7	5
State and political subdivisions	2,161	(71)	**2,276**	**2,049**	90	(227)	23	90	9	—	—	1
Other asset-backed securities ("ABS")	1,880	(30)	**1,771**	**1,668**	94	(103)	18	100	—	—	—	—
Corporate bonds	1,483	(41)	**1,455**	**1,342**	92	(113)	43	17	67	16	—	—
Other	1	—	**1**	**1**	100	—	—	—	—	—	—	100
Total securities	$ 151,367 *(g)*	$ (2,576)	**$ 155,193**	**$ 148,169** *(g)*	95 %	$ (7,024) *(g)(h)*	36 %	98 %	1 %	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, UK, France, Singapore, Italy and Canada.
(e) Primarily consists of exposure to Canada, UK, Australia, Germany and Norway.
(f) Primarily consists of exposure to Canada, Norway, the Netherlands, Sweden, France and Finland.
(g) Includes net unrealized gains on derivatives hedging securities available-for-sale (including terminated hedges) of $914 million at March 31, 2022 and $1,764 million at June 30, 2022.
(h) At June 30, 2022, includes net unrealized losses of $2,585 million related to available-for-sale securities, net of hedges, and $4,439 million related to held-to-maturity securities.

The fair value of our securities portfolio, including related hedges, was $148.2 billion at June 30, 2022, compared with $158.0 billion at Dec. 31, 2021. The decrease primarily reflects unrealized pre-tax losses and lower agency RMBS, partially offset by an increase in U.S. Treasury securities.

At June 30, 2022, the securities portfolio had a net unrealized loss, including the impact of related hedges, of $7.0 billion, compared with a net unrealized gain, including the impact of related hedges, of $384 million at Dec. 31, 2021. The increase in the net unrealized loss, including the impact of hedges, was primarily driven by higher market interest rates.

The fair value of the available-for-sale securities totaled $93.0 billion at June 30, 2022, net of hedges, or 63% of the securities portfolio, net of hedges. The fair value of the held-to-maturity securities totaled $55.1 billion at June 30, 2022, or 37% 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 $2.0 billion at June 30, 2022, compared with an unrealized gain (after-tax), net of hedges, of $362 million at Dec. 31, 2021. The increase in the unrealized loss, net of tax, was primarily driven by higher market interest rates.

At June 30, 2022, 98% of the securities in our portfolio were rated AAA/AA-, compared with 96% at Dec. 31, 2021.

See Note 3 of the Notes to Consolidated Financial Statements for the pre-tax net securities gains (losses) by security type. See Note 14 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) related to the securities portfolio and accretable discount related to the 2009 restructuring of the securities portfolio.

Net premium amortization and discount accretion of securities *(a)* *(dollars in millions)*	**2Q22**	1Q22	4Q21	3Q21	2Q21
Amortizable purchase premium (net of discount) relating to securities:					
Balance at period-end	**$ 1,541**	$ 1,761	$ 1,972	$ 2,120	$ 2,067
Estimated average life remaining at period-end *(in years)*	**4.7**	4.7	4.4	4.5	4.4
Amortization	**$ 105**	$ 130	$ 158	$ 168	$ 183
Accretable discount related to the prior restructuring of the securities portfolio:					
Balance at period-end	**$ 55**	$ 62	$ 109	$ 115	$ 118
Estimated average life remaining at period-end *(in years)*	**7.3**	7.0	6.1	6.0	6.1
Accretion	**$ 7**	$ 9	$ 11	$ 11	$ 9

(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	**June 30, 2022**			Dec. 31, 2021		
(in billions)	Loans	Unfunded commitments	Total exposure	Loans	Unfunded commitments	Total exposure
Financial institutions	**$ 10.6**	**$ 32.2**	**$ 42.8**	$ 10.2	$ 30.6	$ 40.8
Commercial	**2.4**	**11.6**	**14.0**	2.1	11.9	14.0
Wealth management loans	**10.9**	**0.6**	**11.5**	9.8	0.5	10.3
Wealth management mortgages	**8.8**	**0.3**	**9.1**	8.2	0.4	8.6
Commercial real estate	**6.1**	**4.0**	**10.1**	6.0	3.3	9.3
Lease financings	**0.7**	**—**	**0.7**	0.7	—	0.7
Other residential mortgages	**0.4**	**—**	**0.4**	0.3	—	0.3
Overdrafts	**3.8**	**—**	**3.8**	3.1	—	3.1
Capital call financing	**3.6**	**2.5**	**6.1**	2.3	1.5	3.8
Other	**2.7**	**—**	**2.7**	2.6	—	2.6
Margin loans	**19.3**	**—**	**19.3**	22.5	—	22.5
Total	**$ 69.3**	**$ 51.2**	**$ 120.5**	$ 67.8	$ 48.2	$ 116.0

At June 30, 2022, total lending-related exposure of $120.5 billion increased 4% compared with Dec. 31, 2021, primarily reflecting higher exposure in the capital call financing, financial institutions, wealth management loans and commercial real estate portfolios and higher overdrafts, partially offset by lower margin loans.

Our financial institutions and commercial portfolios comprise our largest concentrated risk. These portfolios comprised 47% of our total exposure at June 30, 2022 and Dec. 31, 2021. 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)*	**June 30, 2022**					Dec. 31, 2021		
	Loans	Unfunded commitments	Total exposure	% Inv. grade	% due <1 yr.	Loans	Unfunded commitments	Total exposure
Securities industry	**$ 1.6**	**$ 18.0**	**$ 19.6**	**98 %**	**97 %**	$ 1.7	$ 17.5	$ 19.2
Asset managers	**2.0**	**7.5**	**9.5**	**98**	**82**	1.7	7.1	8.8
Banks	**6.4**	**1.7**	**8.1**	**86**	**96**	5.8	1.5	7.3
Insurance	**0.1**	**3.6**	**3.7**	**100**	**8**	0.2	3.4	3.6
Government	**0.1**	**0.2**	**0.3**	**100**	**45**	0.1	0.2	0.3
Other	**0.4**	**1.2**	**1.6**	**98**	**61**	0.7	0.9	1.6
Total	**$ 10.6**	**$ 32.2**	**$ 42.8**	**96 %**	**84 %**	$ 10.2	$ 30.6	$ 40.8

The financial institutions portfolio exposure was $42.8 billion at June 30, 2022, an increase of 5% compared with Dec. 31, 2021, primarily reflecting higher exposure in the banks, asset managers and securities industry portfolios.

Financial institution exposures are high-quality, with 96% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at June 30, 2022. 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 June 30, 2022, 14% of the exposure to financial institutions had an expiration within 90 days, compared with 17% at Dec. 31, 2021.

In addition, 65% of the financial institutions exposure is secured. For example, securities industry clients and asset managers often borrow against marketable securities held in custody.

At June 30, 2022, the secured intra-day credit provided to dealers in connection with their tri-party repo activity totaled $16.9 billion and was included in the securities industry portfolio. Dealers secure the outstanding intra-day 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 39% of the exposure in the financial institutions portfolio and are reviewed and reapproved annually.

The asset managers portfolio exposure is high-quality, with 98% of the exposures meeting our investment grade equivalent ratings criteria as of June 30, 2022. These exposures are generally short-term liquidity facilities, with the majority to regulated mutual funds.

Our banks portfolio exposure primarily relates to our global trade finance. These exposures are short-term in nature, with 96% due in less than one year. The investment grade percentage of our banks portfolio exposure was 86% at June 30, 2022, compared with 88% at Dec. 31, 2021. Our non-investment grade exposures are primarily trade finance loans in Brazil.

Commercial

The commercial portfolio is presented below.

Commercial portfolio exposure	**June 30, 2022**					Dec. 31, 2021		
(dollars in billions)	Loans	Unfunded commitments	Total exposure	% Inv. grade	% due <1 yr.	Loans	Unfunded commitments	Total exposure
Manufacturing	**$ 0.8**	**$ 4.0**	**$ 4.8**	**96 %**	**22 %**	$ 0.6	$ 3.9	$ 4.5
Services and other	**1.2**	**3.1**	**4.3**	**96**	**39**	1.0	3.2	4.2
Energy and utilities	**0.3**	**3.8**	**4.1**	**94**	**5**	0.4	3.9	4.3
Media and telecom	**0.1**	**0.7**	**0.8**	**87**	**2**	0.1	0.9	1.0
Total	**$ 2.4**	**$ 11.6**	**$ 14.0**	**95 %**	**21 %**	$ 2.1	$ 11.9	$ 14.0

The commercial portfolio exposure was $14.0 billion at June 30, 2022, unchanged from Dec. 31, 2021, primarily reflecting higher exposure to the manufacturing and services and other portfolios, partially offset by lower exposure to the energy and utilities and media and telecom portfolios.

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				
	June 30, 2022	March 31, 2022	Dec. 31, 2021	Sept. 30, 2021	June 30, 2021
Financial institutions	**96 %**	97 %	96 %	96 %	96 %
Commercial	**95 %**	94 %	94 %	93 %	93 %

Wealth management loans

Our wealth management loan exposure was $11.5 billion at June 30, 2022, compared with $10.3 billion at Dec. 31, 2021. 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 $9.1 billion at June 30, 2022, compared with $8.6 billion at Dec. 31, 2021. 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 June 30, 2022, less than 1% of the mortgages were past due.

At June 30, 2022, the wealth management mortgage portfolio consisted of the following geographic concentrations: California – 22%; New York – 15%; Florida – 10%; Massachusetts – 8%; and other – 45%.

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	**June 30, 2022**		Dec. 31, 2021	
(in billions)	Total exposure	Percentage secured *(a)*	Total exposure	Percentage secured *(a)*
Residential	**$ 4.0**	**83 %**	$ 3.6	81 %
Office	**2.8**	**77**	2.6	77
Retail	**0.9**	**57**	0.9	58
Mixed-use	**0.8**	**33**	0.7	37
Hotels	**0.7**	**44**	0.5	23
Healthcare	**0.4**	**47**	0.4	25
Other	**0.5**	**51**	0.6	45
Total commercial real estate	**$ 10.1**	**69 %**	$ 9.3	66 %

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

Our commercial real estate exposure totaled $10.1 billion at June 30, 2022 and $9.3 billion at Dec. 31, 2021. 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 June 30, 2022, the unsecured portfolio consisted of real estate investment trusts ("REITs") and real estate operating companies, which are both primarily investment grade.

At June 30, 2022, our commercial real estate portfolio consisted of the following concentrations: New York metro – 35%; REITs and real estate operating companies – 31%; and other – 34%.

Lease financings

The lease financings portfolio exposure totaled $702 million at June 30, 2022 and $731 million at Dec. 31, 2021. At June 30, 2022, approximately 99% 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 aircraft and freight-related rail cars. 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 $369 million at June 30, 2022 and $299 million at Dec. 31, 2021. Included in this portfolio at June 30, 2022 were $96 million of fixed-rate jumbo mortgage loans purchased in the second quarter of 2022 with a weighted-average loan-to-value ratio of 69% 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 $19.3 billion at June 30, 2022 and $22.5 billion at Dec. 31, 2021 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 $5.6 billion at June 30, 2022 and $7.7 billion at Dec. 31, 2021 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)*	**June 30, 2022**	March 31, 2022	Dec. 31, 2021	June 30, 2021
Beginning balance of allowance for credit losses	**$ 263**	$ 260	$ 291	$ 419
Provision for credit losses	**47**	2	(17)	(86)
Net recoveries (charge-offs):				
Loans:				
Other residential mortgages	**1**	1	2	—
Financial institutions	**—**	—	—	2
Other loans	**—**	—	(16)	—
Other financial instruments	**(1)**	—	—	—
Net recoveries (charge-offs)	**—**	1	(14)	2
Ending balance of allowance for credit losses	**$ 310**	$ 263	$ 260	$ 335
Allowance for loan losses	**$ 181**	$ 171	$ 196	$ 269
Allowance for lending-related commitments	**62**	53	45	50
Allowance for financial instruments *(a)*	**67**	39	19	16
Total allowance for credit losses	**$ 310**	$ 263	$ 260	$ 335
Total loans, at period end	**$ 69,347**	$ 68,052	$ 67,787	$ 63,547
Allowance for loan losses as a percentage of total loans	**0.26 %**	0.25 %	0.29 %	0.42 %
Allowance for loan losses and lending-related commitments as a percentage of total loans	**0.35 %**	0.33 %	0.36 %	0.50 %

(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 $47 million in the second quarter of 2022, primarily driven by changes in the macroeconomic forecast.

The allowance for loan losses and 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 2021 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)*	**June 30, 2022**		March 31, 2022		Dec. 31, 2021		June 30, 2021	
(dollars in millions)	**$**	%	$	%	$	%	$	%
Commercial real estate	**$ 184**	**75 %**	$ 176	78 %	$ 199	82 %	$ 289	90 %
Financial institutions	**21**	**9**	15	7	13	5	6	2
Commercial	**16**	**6**	12	5	12	5	8	2
Other residential mortgages	**7**	**3**	7	3	7	3	8	2
Wealth management mortgages	**7**	**3**	9	4	6	2	4	1
Capital call financing	**6**	**2**	3	1	2	1	1	1
Lease financings	**1**	**1**	1	1	1	1	2	1
Wealth management loans	**1**	**1**	1	1	1	1	1	1
Total	**$ 243**	**100 %**	$ 224	100 %	$ 241	100 %	$ 319	100 %

(a) The allowance allocated to margin loans, overdrafts and other loans was insignificant at June 30, 2022, March 31, 2022, Dec. 31, 2021 and June 30, 2021.

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 in 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 credit were rated one grade better, the quantitative allowance would have decreased by $36 million, and if commercial real estate property values were decreased 10% and all other credit were rated one grade worse, the quantitative allowance would have increased by $70 million. Our multi-scenario based macroeconomic forecast used in determining the June 30, 2022 allowance for credit losses consisted of three scenarios. The baseline scenario reflects flat GDP growth, continued moderate labor market recovery and continuing strong growth in commercial real estate prices through the end of 2022 that will begin to moderate in 2023. The upside scenario reflects faster GDP growth and labor market recovery and higher commercial real estate prices compared with the baseline. The downside scenario contemplates negative GDP growth through the first quarter of 2023 with subsequent stabilization as well as increasing unemployment through 2023 and lower commercial real estate prices than the baseline. In the second quarter of 2022, we placed the most weight on our baseline and downside scenarios, with the remaining weighting placed on the upside scenario. From a sensitivity perspective, at June 30, 2022, if we had applied 100% weighting to the downside scenario, the allowance for credit losses would have been approximately $93 million higher.

Nonperforming assets

The table below presents our nonperforming assets.

Nonperforming assets *(dollars in millions)*	**June 30, 2022**	Dec. 31, 2021
Nonperforming loans:		
Commercial real estate	**$ 54**	$ 54
Other residential mortgages	**35**	39
Wealth management mortgages	**22**	25
Total nonperforming loans	**111**	118
Other assets owned	**3**	2
Total nonperforming assets	**$ 114**	$ 120
Nonperforming assets ratio	**0.16 %**	0.18 %
Allowance for loan losses/nonperforming loans	**163.1**	166.1
Allowance for loan losses/nonperforming assets	**158.8**	163.3
Total allowance for credit losses/nonperforming loans	**218.9**	204.2
Total allowance for credit losses/nonperforming assets	**213.2**	200.8

Deposits

Total deposits were $325.8 billion at June 30, 2022, an increase of 2%, compared with $319.7 billion at Dec. 31, 2021. The increase reflects higher noninterest-bearing deposits (principally U.S. offices), partially offset by lower interest-bearing deposits in U.S. and non-U.S. offices.

Noninterest-bearing deposits were $106.1 billion at June 30, 2022, compared with $93.7 billion at Dec. 31, 2021. Interest-bearing deposits were primarily demand deposits and totaled $219.7 billion at June 30, 2022, compared with $226.0 billion at Dec. 31, 2021.

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 gross, 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 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 2021 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 June 30, 2022, 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)	**June 30, 2022**	Dec. 31, 2021	**2Q22**	1Q22	2Q21	**YTD22**	YTD21
Cash and due from banks	**$ 5,185**	$ 6,061	**$ 5,640**	$ 6,040	$ 5,938	**$ 5,839**	$ 5,830
Interest-bearing deposits with the Federal Reserve and other central banks	**125,372**	102,467	**102,844**	100,303	114,564	**101,600**	120,216
Interest-bearing deposits with banks	**16,639**	16,630	**18,097**	17,181	22,465	**17,641**	21,892
Federal funds sold and securities purchased under resale agreements	**22,940**	29,607	**24,212**	27,006	27,857	**25,602**	28,518
Total available funds	**$ 170,136**	$ 154,765	**$ 150,793**	$ 150,530	$ 170,824	**$ 150,682**	$ 176,456
Total available funds as a percentage of total assets	**38 %**	35 %	**34 %**	34 %	38 %	**34 %**	39 %

Total available funds were $170.1 billion at June 30, 2022, compared with $154.8 billion at Dec. 31, 2021. The increase was primarily due to higher interest-bearing deposits with the Federal Reserve and other central banks, partially offset by lower federal funds sold and securities purchased under resale agreements.

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 $16.5 billion for the first six months of 2022 and $17.1 billion for the first six months of 2021. The decrease primarily reflects lower federal funds purchased and securities sold under repurchase agreements, partially offset by higher trading liabilities 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 $104.8 billion for the first six months of 2022, compared with $114.5 billion for the first six months of 2021. Average interest-bearing domestic deposits were $116.4 billion for the first six months of 2022 and $127.7 billion for the first six months of 2021. The decreases primarily reflect client activity.

Average payables to customers and broker-dealers were $16.6 billion for the first six months of 2022 and $17.2 billion for the first six months of 2021.

Payables to customers and broker-dealers are driven by customer trading activity and market volatility.

Average long-term debt was $25.9 billion for the first six months of 2022 and $25.7 billion for the first six months of 2021.

Average noninterest-bearing deposits increased to $91.1 billion for the first six months of 2022 from $84.6 billion for the first six months of 2021, 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 June 30, 2022	Moody's	S&P	Fitch	DBRS
Parent:				
Long-term senior debt	A1	A	AA-	AA
Subordinated debt	A2	A-	A	AA (low)
Preferred stock	Baa1	BBB	BBB+	A
Outlook – Parent	Stable	Stable	Stable	Stable
The Bank of New York Mellon:				
Long-term senior debt	Aa2	AA-	AA	AA (high)
Subordinated debt	NR	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)*	AA-	AA *(a)*	AA (high)
Long-term deposits	Aa1	AA-	AA+	AA (high)
Short-term deposits	P1	A-1+	F1+	R-1 (high)
Outlook – Banks	Stable	Stable	Stable	Stable

(a) Represents senior debt issuer default rating.
NR – Not rated.

Long-term debt totaled $27.6 billion at June 30, 2022 and $25.9 billion at Dec. 31, 2021. Issuances of $5.0 billion were partially offset by redemptions of $2.3 billion and a decrease in the fair value of hedged long-term debt. The Parent has $1.0 billion of long-term debt maturing in the remainder of 2022.

In July 2022, the Parent issued $1.25 billion of fixed to floating rate senior notes maturing in 2026. The annual fixed interest rate is 4.414% from issuance to, but excluding, July 24, 2025, and then an annual interest rate of the compounded secured overnight financing rate ("SOFR") plus 134.5 basis points. The Parent also issued $500 million of fixed to floating rate senior notes maturing in 2030. The annual fixed interest rate is 4.596% from issuance to, but excluding, July 26, 2029, and then an annual interest rate of SOFR plus 175.5 basis points.

The Bank of New York Mellon may issue notes and certificates of deposit ("CDs"). At June 30, 2022 and Dec. 31, 2021, $30 million of notes were outstanding. At June 30, 2022, $20 million of CDs were outstanding. There were no CDs outstanding at Dec. 31, 2021.

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 June 30, 2022 and Dec. 31, 2021. The average commercial paper outstanding was $5 million for the first six months of 2022. There was no average commercial paper outstanding for the first six months of 2021.

Subsequent to June 30, 2022, our U.S. bank subsidiaries could declare dividends to the Parent of approximately $2.3 billion, without the need for a regulatory waiver. In addition, at June 30, 2022, non-bank subsidiaries of the Parent had liquid assets of approximately $3.3 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 2021 Annual Report.

Pershing LLC has uncommitted lines of credit in place for liquidity purposes which are guaranteed by the Parent. Pershing LLC has two separate uncommitted lines of credit amounting to $350 million in aggregate. There were no average borrowings under these lines in the second quarter of 2022. Pershing Limited, an indirect UK-based subsidiary of BNY Mellon, has two separate uncommitted lines of credit amounting to $254 million in aggregate. Average borrowings under these lines were $5 million, in aggregate, in the second quarter of 2022.

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 78% of total revenue in the second quarter of 2022, and the dividend capacity of our banking subsidiaries. Our double leverage ratio was 119.2% at June 30, 2022 and 119.3% at Dec. 31, 2021, 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 May 2022, a quarterly dividend of $0.34 per common share was paid to common shareholders. Our common stock dividend payout ratio was 33% for the second quarter of 2022.

In July, our Board of Directors approved a 9% increase in the quarterly cash dividend on common stock, from $0.34 to $0.37 per share. The increased quarterly cash dividend is expected to be paid on Aug. 5, 2022.

In June 2021, our Board of Directors authorized the repurchase of up to $6.0 billion of common shares over the six quarters beginning in the third quarter of 2021 and continuing through the fourth quarter of 2022. This new share repurchase plan replaced all previously authorized share repurchase plans.

In the second quarter of 2022, we repurchased 46 thousand common shares at an average price of $60.87 per common share, for a total cost of $3 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 at June 30, 2022, and the average HQLA and average LCR for the second quarter of 2022.

Consolidated HQLA and LCR *(dollars in billions)*		**June 30, 2022**
Cash *(a)*	**$**	**125**
Securities *(b)*		**110**
Total consolidated HQLA *(c)*	**$**	**235**
Total consolidated HQLA – average *(c)*	**$**	**212**
Average LCR		**111 %**

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

(b) Primarily includes securities of U.S. government-sponsored enterprises, U.S. Treasury, sovereign securities, U.S. agency and investment-grade corporate debt.

(c) Consolidated HQLA presented before adjustments. After haircuts and the impact of trapped liquidity, consolidated HQLA totaled $163 billion at June 30, 2022 and averaged $146 billion for the second quarter of 2022.

BNY Mellon and each of our affected domestic bank subsidiaries were compliant with the U.S. LCR requirements of at least 100% throughout the second quarter of 2022.

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 $8.4 billion in the six months ended June 30, 2022, compared with net cash used for operating activities of $345 million in the six months ended June 30,

2021. In the six months ended June 30, 2022, cash flows provided by operations primarily resulted from changes in trading assets and liabilities and earnings. In the six months ended June 30, 2021, cash flows used for operations primarily resulted from changes in accruals, partially offset by earnings.

Net cash used for investing activities was $24.6 billion in the six months ended June 30, 2022, compared with net cash provided by investing activities of $3.9 billion in the six months ended June 30, 2021. In the six months ended June 30, 2022, net cash used for investing activities primarily reflects 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. In the six months ended June 30, 2021, net cash provided by investing activities primarily reflects changes in interest-bearing deposits with the Federal Reserve and other central banks, partially offset by net changes in loans and changes in interest-bearing deposits with banks.

Net cash provided by financing activities was $15.6 billion in the six months ended June 30, 2022, compared with net cash used for financing activities of $3.5 billion in the six months ended June 30, 2021. In the six months ended June 30, 2022, net cash provided by financing activities primarily reflects changes in deposits and net proceeds from the issuance of long-term debt, partially offset by repayments of long-term debt. In the six months ended June 30, 2021, net cash used for financing activities primarily reflects repayments of long-term debt, changes in deposits, changes in payables to customers and broker-dealers and treasury stock acquired, partially offset by net proceeds from the issuance of long-term debt and changes in federal funds purchased and securities sold under repurchase agreements.

Capital

Capital data *(dollars in millions, except per share amounts; common shares in thousands)*	**June 30, 2022**	March 31, 2022	Dec. 31, 2021
BNY Mellon shareholders' equity to total assets ratio	**9.1 %**	8.8 %	9.7 %
BNY Mellon common shareholders' equity to total assets ratio	**8.0 %**	7.8 %	8.6 %
Total BNY Mellon shareholders' equity	**$ 40,984**	$ 41,799	$ 43,034
Total BNY Mellon common shareholders' equity	**$ 36,146**	$ 36,961	$ 38,196
BNY Mellon tangible common shareholders' equity – Non-GAAP *(a)*	**$ 17,796**	$ 18,388	$ 19,547
Book value per common share	**$ 44.73**	$ 45.76	$ 47.50
Tangible book value per common share – Non-GAAP *(a)*	**$ 22.02**	$ 22.76	$ 24.31
Closing stock price per common share	**$ 41.71**	$ 49.63	$ 58.08
Market capitalization	**$ 33,706**	$ 40,091	$ 46,705
Common shares outstanding	**808,103**	807,798	804,145
Cash dividends per common share	**$ 0.34**	$ 0.34	$ 0.34
Common dividend payout ratio	**33 %**	40 %	34 %
Common dividend yield	**3.3 %**	2.8 %	2.3 %

(a) See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 45 for a reconciliation of GAAP to Non-GAAP.

The Bank of New York Mellon Corporation total shareholders' equity decreased to $41.0 billion at June 30, 2022 from $43.0 billion at Dec. 31, 2021. The decrease primarily reflects unrealized losses on securities available-for-sale, foreign currency translation and dividend payments, partially offset by earnings.

The unrealized loss (after-tax) on our available-for-sale securities portfolio, net of hedges, included in accumulated other comprehensive income was $2.0 billion at June 30, 2022, compared with an unrealized gain (after-tax), net of hedges, of $362 million at Dec. 31, 2021. The increase in the unrealized loss, net of tax, was primarily driven by higher market interest rates.

In the first six months of 2022, we repurchased 2.0 million common shares at an average price of $61.62 per common share for a total of $121 million.

In June 2021, our Board of Directors authorized the repurchase of up to $6.0 billion of common shares over the six quarters beginning in the third quarter of 2021 and continuing through the fourth quarter of 2022. This new share repurchase plan replaced all previously authorized share repurchase plans.

In July, our Board of Directors approved a 9% increase in the quarterly cash dividend on common stock, from $0.34 to $0.37 per share. The increased quarterly cash dividend is expected to be paid on Aug. 5, 2022.

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 ("FHC"), our U.S. bank subsidiaries and BNY Mellon must, among other things, qualify as "well capitalized." As of June 30, 2022 and Dec. 31, 2021, 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 2021 Annual Report.

The U.S. banking agencies' capital rules are based on the framework adopted by the Basel Committee on Banking Supervision ("BCBS"), as amended from time to time. For additional information on these capital requirements, see "Supervision and Regulation" in our 2021 Annual Report.

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

Consolidated and largest bank subsidiary regulatory capital ratios	**June 30, 2022**			March 31, 2022	Dec. 31, 2021
	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 %	**10.0 %**	10.4 %	11.4 %
Tier 1 capital ratio	6 %	10	**12.8**	13.2	14.2
Total capital ratio	10	12	**13.6**	13.9	15.0
Standardized Approach:					
CET1 ratio	N/A *(c)*	8.5 %	**10.1 %**	10.1 %	11.2 %
Tier 1 capital ratio	6 %	10	**12.9**	12.9	14.0
Total capital ratio	10	12	**13.8**	13.7	14.9
Tier 1 leverage ratio	N/A *(c)*	4	**5.2**	5.3	5.5
SLR *(d)*	N/A *(c)*	5	**6.2**	6.2	6.6
The Bank of New York Mellon regulatory capital ratios: *(b)*					
Advanced Approaches:					
CET1 ratio	6.5 %	7 %	**14.4 %**	15.1 %	16.5 %
Tier 1 capital ratio	8	8.5	**14.4**	15.1	16.5
Total capital ratio	10	10.5	**14.5**	15.1	16.5
Tier 1 leverage ratio	5	4	**5.8**	5.9	6.0
SLR *(d)*	6	3	**7.2**	7.1	7.6

(a) Minimum requirements for June 30, 2022 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 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.

Our CET1 ratio was 10.0% under the Advanced Approaches at June 30, 2022 and 11.2% at Dec. 31, 2021 under the Standardized Approach. The decrease was primarily driven by unrealized losses on securities available-for-sale, foreign currency translation, capital deployed through dividends and higher RWAs, partially offset by capital generated through earnings.

In the first quarter of 2022, we implemented the Standardized Approach for Counterparty Credit Risk ("SA-CCR"), which replaced the current exposure method used to measure derivative counterparty exposure. This resulted in increases to the RWA of $4 billion for the Advanced Approaches and $6 billion for the Standardized Approach, as well as an increase of $8 billion in the total leverage exposure used for the SLR at March 31, 2022.

Tier 1 leverage ratio was 5.2% at June 30, 2022, compared with 5.5% at Dec. 31, 2021. The decrease reflects the decrease in capital, partially offset by 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)*	**June 30, 2022**	March 31, 2022	Dec. 31, 2021
CET1:			
Common shareholders' equity	**$ 36,146**	$ 36,961	$ 38,196
Adjustments for:			
Goodwill and intangible assets *(a)*	**(18,350)**	(18,573)	(18,649)
Net pension fund assets	**(388)**	(410)	(400)
Embedded goodwill	**(291)**	(301)	(300)
Deferred tax assets	**(53)**	(55)	(55)
Other	**3**	(43)	(46)
Total CET1	**17,067**	17,579	18,746
Other Tier 1 capital:			
Preferred stock	**4,838**	4,838	4,838
Other	**(81)**	(82)	(99)
Total Tier 1 capital	**$ 21,824**	$ 22,335	$ 23,485
Tier 2 capital:			
Subordinated debt	**$ 1,248**	$ 1,248	$ 1,248
Allowance for credit losses	**300**	253	250
Other	**(6)**	(1)	(11)
Total Tier 2 capital – Standardized Approach	**1,542**	1,500	1,487
Excess of expected credit losses	**46**	—	—
Less: Allowance for credit losses	**300**	253	250
Total Tier 2 capital – Advanced Approaches	**$ 1,288**	$ 1,247	$ 1,237
Total capital:			
Standardized Approach	**$ 23,366**	$ 23,835	$ 24,972
Advanced Approaches	**$ 23,112**	$ 23,582	$ 24,722
Risk-weighted assets:			
Standardized Approach	**$ 169,710**	$ 173,629	$ 167,608
Advanced Approaches:			
Credit Risk	**$ 97,703**	$ 102,049	$ 98,310
Market Risk	**3,541**	2,942	3,069
Operational Risk	**68,675**	64,100	63,688
Total Advanced Approaches	**$ 169,919**	$ 169,091	$ 165,067
Average assets for Tier 1 leverage ratio	**$ 418,467**	$ 420,778	$ 430,102
Total leverage exposure for SLR	**$ 351,552**	$ 361,464	$ 354,033

(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)*		**2Q22**
CET1 – Beginning of period	**$**	**17,579**
Net income applicable to common shareholders of The Bank of New York Mellon Corporation		**835**
Goodwill and intangible assets, net of related deferred tax liabilities		**223**
Gross CET1 generated		**1,058**
Capital deployed:		
Common stock dividends *(a)*		**(279)**
Common stock repurchases		**(3)**
Total capital deployed		**(282)**
Other comprehensive loss:		
Unrealized loss on assets available-for-sale		**(882)**
Foreign currency translation		**(552)**
Unrealized loss on cash flow hedges		**(5)**
Defined benefit plans		**13**
Total other comprehensive loss		**(1,426)**
Additional paid-in capital *(b)*		**58**
Other additions:		
Net pension fund assets		**22**
Embedded goodwill		**10**
Deferred tax assets		**2**
Other		**46**
Total other additions		**80**
Net CET1 deployed		**(512)**
CET1 – End of period	**$**	**17,067**

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

The following table shows the impact on the consolidated capital ratios at June 30, 2022 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 June 30, 2022	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	6 bps	6 bps
Advanced Approaches	6	6
Tier 1 capital:		
Standardized Approach	6	8
Advanced Approaches	6	8
Total capital:		
Standardized Approach	6	8
Advanced Approaches	6	8
Tier 1 leverage	2	1
SLR	3	2

Stress capital buffer

In August 2021, the Federal Reserve announced that BNY Mellon's SCB requirement would be 2.5%, equal to the regulatory floor, effective as of Oct. 1, 2021. 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. In June 2022, the Federal Reserve notified BNY Mellon that its SCB requirement will remain at 2.5%, effective from Oct. 1, 2022. See "Recent Regulatory Developments" in this Form 10-Q and "Supervision and Regulation" in our 2021 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 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	June 30, 2022		
	Minimum required	Minimum ratios with buffers	Ratios
Eligible external TLAC:			
As a percentage of RWA	18.0 %	21.5 %	27.5 %
As a percentage of total leverage exposure	7.5 %	9.5 %	13.3 %
Eligible external LTD:			
As a percentage of RWA	7.5 %	N/A	13.0 %
As a percentage of total leverage exposure	4.5 %	N/A	6.3 %

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 account of potential variability of market liquidity; and
- Previous moves in market risk factors may not produce accurate predictions of all future market moves.

See Note 16 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)* *(in millions)*	**2Q22**			**June 30, 2022**
	Average	**Minimum**	**Maximum**	
Interest rate	**$ 5.8**	**$ 4.0**	**$ 9.3**	**$ 6.5**
Foreign exchange	**3.7**	**2.7**	**10.2**	**3.3**
Equity	**0.4**	**0.2**	**0.9**	**0.3**
Credit	**1.7**	**1.0**	**3.8**	**1.8**
Diversification	**(4.7)**	**N/M**	**N/M**	**(4.7)**
Overall portfolio	**6.9**	**4.7**	**11.4**	**7.2**

VaR *(a)* *(in millions)*	1Q22			March 31, 2022
	Average	Minimum	Maximum	
Interest rate	$ 3.4	$ 1.6	$ 6.9	$ 4.3
Foreign exchange	3.3	2.2	6.0	3.6
Equity	0.2	—	0.5	0.2
Credit	2.2	1.5	3.3	2.0
Diversification	(4.2)	N/M	N/M	(3.9)
Overall portfolio	4.9	2.8	8.1	6.2

VaR *(a)* *(in millions)*	2Q21			June 30, 2021
	Average	Minimum	Maximum	
Interest rate	$ 2.2	$ 1.6	$ 2.7	$ 1.9
Foreign exchange	2.6	1.9	3.7	2.3
Equity	0.1	—	0.3	0.2
Credit	1.8	1.4	2.6	2.0
Diversification	(3.7)	N/M	N/M	(3.5)
Overall portfolio	3.0	2.5	4.5	2.9

VaR *(a)*	**YTD22**		
(in millions)	**Average**	**Minimum**	**Maximum**
Interest rate	**$ 4.6**	**$ 1.6**	**$ 9.3**
Foreign exchange	**3.5**	**2.2**	**10.2**
Equity	**0.3**	**—**	**0.9**
Credit	**2.0**	**1.0**	**3.8**
Diversification	**(4.5)**	**N/M**	**N/M**
Overall portfolio	**5.9**	**2.8**	**11.4**

VaR *(a)*	YTD21		
(in millions)	Average	Minimum	Maximum
Interest rate	$ 2.1	$ 1.6	$ 2.7
Foreign exchange	2.7	1.9	3.9
Equity	0.1	—	0.9
Credit	1.8	1.3	2.8
Diversification	(3.6)	N/M	N/M
Overall portfolio	3.1	2.5	4.9

(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, 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 second quarter of 2022, interest rate risk generated 50% of average gross VaR, foreign exchange risk generated 32% of average gross VaR, equity risk generated 3% of average gross VaR and credit risk generated 15% of average gross VaR. During the second quarter of 2022, 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)	**June 30, 2022**	March 31, 2022	Dec. 31, 2021	Sept. 30, 2021	June 30, 2021
Revenue range:	Number of days				
Less than $(2.5)	**1**	1	—	—	—
$(2.5) – $0	**4**	8	3	2	7
$0 – $2.5	**10**	12	27	23	22
$2.5 – $5.0	**24**	23	21	30	25
More than $5.0	**24**	18	12	9	10

(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 interest rate and foreign exchange contracts, not designated as hedging instruments. Trading assets were $10.8 billion at June 30, 2022 and $16.6 billion at Dec. 31, 2021.

Trading liabilities include debt and equity instruments and derivative liabilities, primarily interest rate and foreign exchange contracts, not designated as hedging instruments. Trading liabilities were $5.6 billion at June 30, 2022 and $5.5 billion at Dec. 31, 2021.

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 June 30, 2022, our OTC derivative assets, including those in hedging relationships, of $3.6 billion included a credit valuation adjustment ("CVA") deduction of $23 million. Our OTC derivative liabilities, including those in hedging relationships, of $2.4 billion included a debit valuation adjustment ("DVA") of $4 million related to our own credit spread. Net of hedges, the CVA decreased by $1 million and the DVA increased by $1 million in the second quarter of 2022, which increased investment and other revenue - other trading revenue by $2 million. The net impact decreased investment and other revenue - other trading revenue by less than $1 million in the first quarter of 2022 and increased investment and other revenue - other trading revenue by $1 million in the second quarter of 2021.

The table below summarizes the distribution of credit ratings for our foreign exchange and interest rate derivative counterparties over the past five quarters, which indicates the level of counterparty credit associated with these trading activities. Significant changes in counterparty credit ratings could alter the level of credit risk faced by BNY Mellon. Total exposure to foreign exchange and interest rate derivative counterparties with an A+ to A- rating, and in the aggregate, increased at June 30, 2022 compared with June 30, 2021.

Foreign exchange and other trading counterparty risk rating profile *(a)*

	Quarter ended				
	June 30, 2022	March 31, 2022	Dec. 31, 2021	Sept. 30, 2021	June 30, 2021
Rating:					
AAA to AA-	**36 %**	39 %	51 %	52 %	52 %
A+ to A-	**44**	47	27	17	19
BBB+ to BBB-	**14**	11	18	25	24
BB+ and lower *(b)*	**6**	3	4	6	5
Total	**100 %**	100 %	100 %	100 %	100 %

(a) Represents credit rating agency equivalent of internal credit ratings.
(b) Non-investment grade.

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 June 30, 2022. 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. The scenarios assume instantaneous rate changes 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 scenarios are intended to provide information on a basis that is consistent with industry practice.

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

Estimated changes in net interest revenue *(in millions)*	**June 30, 2022**	March 31, 2022	June 30, 2021
Up 100 bps rate shock vs. baseline	**$ 161**	$ 268	$ 857
Long-term up 100 bps, short-term unchanged	**42**	24	214
Short-term up 100 bps, long-term unchanged	**119**	245	643
Long-term down 50 bps, short-term unchanged	**(18)**	(20)	(113)
Down 100 bps rate shock vs. baseline	**(370)**	(315)	648

The decrease in nearly all of the rate sensitivities compared with March 31, 2022 was primarily due to a higher baseline scenario, driven by higher market rates.

While the net interest revenue sensitivity scenario calculations assume static deposit balances to facilitate consistent period-over-period comparisons, it is likely that a portion of deposits would run off in a rising short-term rate environment. 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 of U.S. dollar denominated noninterest-bearing deposits would reduce the net interest revenue sensitivity results in the up 100 basis point scenario compared with the baseline in the table above by approximately $205 million. The impact would be smaller if the run-off was assumed to be a mixture of interest-bearing and noninterest-bearing deposits.

For a discussion of factors impacting the growth or contraction of deposits, see “Risk Factors – Our business, financial condition and results of operations could be adversely affected if we do not effectively manage our liquidity” in our 2021 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.

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 presented pre-tax operating margin, excluding an increase in litigation reserves for the Securities Services business segment. This measure is provided to permit investors to view the financial measures on a basis consistent with how management views the businesses.

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)*	**2Q22**	1Q22	2Q21	**YTD22**	YTD21
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	**$ 835**	$ 699	$ 991	**$ 1,534**	$ 1,849
Add: Amortization of intangible assets	**17**	17	20	**34**	44
Less: Tax impact of amortization of intangible assets	**4**	4	5	**8**	11
Adjusted net income applicable to common shareholders of The Bank of New York Mellon Corporation, excluding amortization of intangible assets – Non-GAAP	**$ 848**	$ 712	$ 1,006	**$ 1,560**	$ 1,882
Average common shareholders' equity	**$ 36,199**	$ 37,363	$ 40,393	**$ 36,778**	$ 40,556
Less: Average goodwill	**17,347**	17,490	17,517	**17,418**	17,506
Average intangible assets	**2,949**	2,979	2,975	**2,964**	2,987
Add: Deferred tax liability – tax deductible goodwill	**1,187**	1,184	1,163	**1,187**	1,163
Deferred tax liability – intangible assets	**668**	673	675	**668**	675
Average tangible common shareholders' equity – Non-GAAP	**$ 17,758**	$ 18,751	$ 21,739	**$ 18,251**	$ 21,901
Return on common equity *(annualized)* – GAAP	**9.3 %**	7.6 %	9.8 %	**8.4 %**	9.2 %
Return on tangible common equity *(annualized)* – Non-GAAP	**19.2 %**	15.4 %	18.6 %	**17.2 %**	17.3 %

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)*	**June 30, 2022**	March 31, 2022	Dec. 31, 2021	June 30, 2021
BNY Mellon shareholders' equity at period end – GAAP	**$ 40,984**	$ 41,799	$ 43,034	$ 45,281
Less: Preferred stock	**4,838**	4,838	4,838	4,541
BNY Mellon common shareholders' equity at period end – GAAP	**36,146**	36,961	38,196	40,740
Less: Goodwill	**17,271**	17,462	17,512	17,487
Intangible assets	**2,934**	2,968	2,991	2,964
Add: Deferred tax liability – tax deductible goodwill	**1,187**	1,184	1,178	1,163
Deferred tax liability – intangible assets	**668**	673	676	675
BNY Mellon tangible common shareholders' equity at period end – Non-GAAP	**$ 17,796**	$ 18,388	$ 19,547	$ 22,127
Period-end common shares outstanding *(in thousands)*	**808,103**	807,798	804,145	863,174
Book value per common share – GAAP	**$ 44.73**	$ 45.76	$ 47.50	$ 47.20
Tangible book value per common share – Non-GAAP	**$ 22.02**	$ 22.76	$ 24.31	$ 25.64

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 *(dollars in millions)*	**2Q22**	2Q21	**2Q22 vs. 2Q21**
Investment management and performance fees – GAAP	**$ 833**	$ 889	**(6)%**
Impact of changes in foreign currency exchange rates	—	(33)	
Adjusted investment management and performance fees – Non-GAAP	**$ 833**	$ 856	**(3)%**

The following table presents the reconciliation of the pre-tax operating margin for the Securities Services business segment.

Pre-tax operating margin reconciliation – Securities Services business segment *(dollars in millions)*	**2Q22**
Income before income taxes – GAAP	**$ 337**
Add: Increase in litigation reserves	**92**
Adjusted income before income taxes, excluding increase in litigation reserves – Non-GAAP	**$ 429**
Total revenue – GAAP	**$ 2,006**
Pre-tax operating margin - GAAP *(a)*	**17 %**
Adjusted pre-tax operating margin, excluding increase in litigation reserves – Non-GAAP	**21 %**

(a) Income before taxes divided by total revenue.

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 *(dollars in millions)*	**2Q22**	2Q21	**2Q22 vs. 2Q21**
Investment management and performance fees – GAAP	**$ 830**	$ 890	**(7)%**
Impact of changes in foreign currency exchange rates	—	(33)	
Adjusted investment management and performance fees – Non-GAAP	**$ 830**	$ 857	**(3)%**

The following table presents the reconciliation of the pre-tax operating margin for the Investment and Wealth Management business segment.

Pre-tax operating margin reconciliation – Investment and Wealth Management business segment *(dollars in millions)*	**2Q22**	1Q22	4Q21	3Q21	2Q21	**YTD22**	YTD21
Income before income taxes – GAAP	**$ 208**	$ 212	$ 278	$ 348	$ 326	**$ 420**	$ 604
Total revenue – GAAP	**$ 899**	$ 964	$ 1,020	$ 1,032	$ 999	**$ 1,863**	$ 1,990
Less: Distribution and servicing expense	**91**	79	75	76	74	**170**	149
Adjusted total revenue, net of distribution and servicing expense – Non-GAAP	**$ 808**	$ 885	$ 945	$ 956	$ 925	**$ 1,693**	$ 1,841
Pre-tax operating margin – GAAP *(a)*	**23 %**	22 %	27 %	34 %	33 %	**23 %**	30 %
Adjusted pre-tax operating margin, net of distribution and servicing expense – Non-GAAP *(a)*	**26 %**	24 %	29 %	36 %	35 %	**25 %**	33 %

(a) Income before 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") and Securities and Exchange Commission ("SEC") staff has not yet been adopted as of June 30, 2022.

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.

BNY Mellon is currently evaluating this guidance. This ASU is effective Jan. 1, 2023 with early adoption permitted.

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 are currently evaluating this guidance. The ASU is effective Jan. 1, 2023 with early adoption permitted.

Staff Accounting Bulletin No. 121

In March 2022, the SEC staff released Staff Accounting Bulletin No. 121 ("SAB 121"). SAB 121 expresses the staff's views regarding the accounting for entities that have obligations to safeguard "crypto-assets" held for their platform users. SAB 121 provides that these entities should present a liability and corresponding asset in respect of the crypto-assets safeguarded for their platform users, with the liability and asset measured at the fair value of the crypto-assets. This differs from the accounting treatment of non-crypto-assets held in custody, which do not result in assets recorded on a custodian's balance sheet. This guidance was effective for interim and annual periods ending after June 15, 2022 with retrospective application as of the beginning of the fiscal year to which the interim or annual period relates. Currently, BNY Mellon does not hold in custody any assets that would be impacted by the standards of SAB 121. We are currently evaluating the applicability and impact of SAB 121 to our digital asset custody initiatives.

Recent regulatory developments

For a summary of additional regulatory matters relevant to our operations, see "Recent regulatory developments" in our Form 10-Q for the quarter ended March 31, 2022, and "Supervision and Regulation" in our 2021 Annual Report. The following discussions summarize certain regulatory, legislative and other developments that may affect BNY Mellon.

Federal Reserve Stress Test 2022 Results

On June 23, 2022, the Federal Reserve released the results of its stress tests for 2022. The Federal Reserve also notified BNY Mellon that its indicative SCB requirement for the present stress test cycle will be 2.5%, which equals the regulatory floor. BNY Mellon expects that its final SCB will be confirmed later in 2022. The SCB will be effective on Oct. 1, 2022.

Consistent with the SCB framework, BNY Mellon increased its quarterly common stock dividend to $0.37 per share in the third quarter of 2022.

Securities and Exchange Commission ("SEC") Proposed Amendments to Disclosure, Naming and Investment Practices Rules for Funds and Advisers

On May 25, 2022, the SEC proposed for public comment a framework requiring certain registered investment companies ("RICs"), including mutual funds, closed end funds and exchange-traded funds, that consider environmental, social and governance ("ESG") factors in their investment process to provide additional disclosures in their registration statements and shareholder reports. The disclosure requirements would vary depending on the fund's investment strategy. The SEC also proposed similar amendments to the disclosure requirements for registered investment advisers ("RIAs") that consider ESG factors as part of their advisory business. Specifically, the proposal would require RIAs to provide a description of the ESG factors they consider in providing advisory services and how they are incorporated when formulating investment advice.

Also on May 25, 2022, the SEC proposed for comment amendments to RIC naming convention rules. The proposal would expand the scope of terms that the SEC considers materially deceptive and misleading in a RIC's name without a corresponding policy 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"). The proposal would require an 80% Policy for a RIC with a name that indicates that the fund's investment decisions incorporate one or more ESG factors and for any fund that includes "growth" or "value" in its name. BNY Mellon is evaluating the potential impact of the proposals.

EU Intermediate Parent Undertaking ("EU IPU") Requirements

Under the Capital Requirements Directive V, certain non-EU banking groups with more than EUR40 billion of assets in the EU are required to establish a single EU IPU to serve as an EU holding company for all EU credit institutions and certain EU investment firms in the group. Following further review, BNY Mellon currently is not required to establish an EU IPU structure on the basis of its existing legal entity structure and operations.

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 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; 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 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)	**June 30, 2022**	March 31, 2022	June 30, 2021	**June 30, 2022**	June 30, 2021
Fee and other revenue					
Investment services fees	**$ 2,206**	$ 1,993	$ 2,076	**$ 4,199**	$ 4,132
Investment management and performance fees	**833**	883	889	**1,716**	1,779
Foreign exchange revenue	**222**	207	184	**429**	415
Financing-related fees	**44**	45	48	**89**	99
Distribution and servicing fees	**34**	30	27	**64**	56
Total fee revenue	**3,339**	3,158	3,224	**6,497**	6,481
Investment and other revenue	**91**	70	91	**161**	100
Total fee and other revenue	**3,430**	3,228	3,315	**6,658**	6,581
Net interest revenue					
Interest revenue	**1,159**	778	685	**1,937**	1,423
Interest expense	**335**	80	40	**415**	123
Net interest revenue	**824**	698	645	**1,522**	1,300
Total revenue	**4,254**	3,926	3,960	**8,180**	7,881
Provision for credit losses	**47**	2	(86)	**49**	(169)
Noninterest expense					
Staff	**1,623**	1,702	1,518	**3,325**	3,120
Software and equipment	**405**	399	365	**804**	727
Professional, legal and other purchased services	**379**	370	363	**749**	706
Sub-custodian and clearing	**131**	118	132	**249**	256
Net occupancy	**125**	122	122	**247**	245
Distribution and servicing	**90**	79	73	**169**	147
Business development	**43**	30	22	**73**	41
Bank assessment charges	**37**	35	35	**72**	69
Amortization of intangible assets	**17**	17	20	**34**	44
Other	**262**	134	128	**396**	274
Total noninterest expense	**3,112**	3,006	2,778	**6,118**	5,629
Income					
Income before income taxes	**1,095**	918	1,268	**2,013**	2,421
Provision for income taxes	**231**	153	241	**384**	462
Net income	**864**	765	1,027	**1,629**	1,959
Net loss (income) attributable to noncontrolling interests related to consolidated investment management funds	**5**	8	(5)	**13**	(10)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	**869**	773	1,022	**1,642**	1,949
Preferred stock dividends	**(34)**	(74)	(31)	**(108)**	(100)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	**$ 835**	$ 699	$ 991	**$ 1,534**	$ 1,849

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 *(in millions)*	Quarter ended			Year-to-date	
	June 30, 2022	March 31, 2022	June 30, 2021	**June 30, 2022**	June 30, 2021
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	**$ 835**	$ 699	$ 991	**$ 1,534**	$ 1,849
Less: Earnings allocated to participating securities	**—**	—	1	**—**	2
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	**$ 835**	$ 699	$ 990	**$ 1,534**	$ 1,847

Average common shares and equivalents outstanding of The Bank of New York Mellon Corporation *(in thousands)*	Quarter ended			Year-to-date	
	June 30, 2022	March 31, 2022	June 30, 2021	**June 30, 2022**	June 30, 2021
Basic	**810,903**	809,469	869,460	**810,233**	876,006
Common stock equivalents	**2,834**	4,878	4,315	**3,915**	3,904
Less: Participating securities	**(147)**	(361)	(300)	**(254)**	(501)
Diluted	**813,590**	813,986	873,475	**813,894**	879,409
Anti-dilutive securities *(a)*	**4,112**	2,647	547	**3,205**	807

(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 *(in dollars)*	Quarter ended			Year-to-date	
	June 30, 2022	March 31, 2022	June 30, 2021	**June 30, 2022**	June 30, 2021
Basic	**$ 1.03**	$ 0.86	$ 1.14	**$ 1.89**	$ 2.11
Diluted	**$ 1.03**	$ 0.86	$ 1.13	**$ 1.88**	$ 2.10

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Comprehensive Income Statement (unaudited)

	Quarter ended			Year-to-date	
(in millions)	**June 30, 2022**	March 31, 2022	June 30, 2021	**June 30, 2022**	June 30, 2021
Net income	**$ 864**	$ 765	$ 1,027	**$ 1,629**	$ 1,959
Other comprehensive income (loss), net of tax:					
Foreign currency translation adjustments	**(555)**	(153)	51	**(708)**	(99)
Unrealized (loss) gain on assets available-for-sale:					
Unrealized (loss) gain arising during the period	**(882)**	(1,531)	77	**(2,413)**	(626)
Reclassification adjustment	**—**	(3)	(1)	**(3)**	(1)
Total unrealized (loss) gain on assets available-for-sale	**(882)**	(1,534)	76	**(2,416)**	(627)
Defined benefit plans:					
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost	**13**	18	25	**31**	47
Total defined benefit plans	**13**	18	25	**31**	47
Net unrealized (loss) on cash flow hedges	**(5)**	(2)	(3)	**(7)**	(6)
Total other comprehensive (loss), net of tax *(a)*	**(1,429)**	(1,671)	149	**(3,100)**	(685)
Total comprehensive (loss) income	**(565)**	(906)	1,176	**(1,471)**	1,274
Net loss (income) attributable to noncontrolling interests	**5**	8	(5)	**13**	(10)
Other comprehensive loss (gain) attributable to noncontrolling interests	**3**	3	—	**6**	—
Comprehensive (loss) income applicable to shareholders of The Bank of New York Mellon Corporation	**$ (557)**	$ (895)	$ 1,171	**$ (1,452)**	$ 1,264

(a) Other comprehensive (loss) income attributable to The Bank of New York Mellon Corporation shareholders was $(1,426) million for the quarter ended June 30, 2022, $(1,668) million for the quarter ended March 31, 2022, $149 million for the quarter ended June 30, 2021, $(3,094) million for the six months ended June 30, 2022 and $(685) million for the six months ended June 30, 2021.

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Balance Sheet (unaudited)

(dollars in millions, except per share amounts)	June 30, 2022	Dec. 31, 2021
Assets		
Cash and due from banks, net of allowance for credit losses of $51 and $3	**$ 5,185**	$ 6,061
Interest-bearing deposits with the Federal Reserve and other central banks	**125,372**	102,467
Interest-bearing deposits with banks, net of allowance for credit losses of $2 and $2 (includes restricted of $4,441 and $3,822)	**16,639**	16,630
Federal funds sold and securities purchased under resale agreements	**22,940**	29,607
Securities:		
Held-to-maturity, at amortized cost, net of allowance for credit losses of $1 and less than $1 (fair value of $55,127 and $56,775)	**59,566**	56,866
Available-for-sale, at fair value (amortized cost of $95,627 and $100,774, net of allowance for credit losses of $9 and $10)	**91,278**	101,839
Total securities	**150,844**	158,705
Trading assets	**10,759**	16,577
Loans	**69,347**	67,787
Allowance for credit losses	**(181)**	(196)
Net loans	**69,166**	67,591
Premises and equipment	**3,354**	3,431
Accrued interest receivable	**548**	457
Goodwill	**17,271**	17,512
Intangible assets	**2,934**	2,991
Other assets, net of allowance for credit losses on accounts receivable of $4 and $4 (includes $1,268 and $1,187, at fair value)	**27,609**	22,409
Total assets	**$ 452,621**	$ 444,438
Liabilities		
Deposits:		
Noninterest-bearing (principally U.S. offices)	**$ 106,060**	$ 93,695
Interest-bearing deposits in U.S. offices	**117,075**	120,903
Interest-bearing deposits in non-U.S. offices	**102,678**	105,096
Total deposits	**325,813**	319,694
Federal funds purchased and securities sold under repurchase agreements	**11,434**	11,566
Trading liabilities	**5,595**	5,469
Payables to customers and broker-dealers	**25,769**	25,150
Other borrowed funds	**520**	749
Accrued taxes and other expenses	**5,011**	5,767
Other liabilities (including allowance for credit losses on lending-related commitments of $62 and $45, also includes $31 and $496, at fair value)	**9,724**	6,721
Long-term debt	**27,610**	25,931
Total liabilities	**411,476**	401,047
Temporary equity		
Redeemable noncontrolling interests	**154**	161
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 $0.01 per share; authorized 3,500,000,000 shares; issued 1,395,313,459 and 1,389,397,912 shares	**14**	14
Additional paid-in capital	**28,316**	28,128
Retained earnings	**37,644**	36,667
Accumulated other comprehensive loss, net of tax	**(5,307)**	(2,213)
Less: Treasury stock of 587,210,236 and 585,252,546 common shares, at cost	**(24,521)**	(24,400)
Total The Bank of New York Mellon Corporation shareholders' equity	**40,984**	43,034
Nonredeemable noncontrolling interests of consolidated investment management funds	**7**	196
Total permanent equity	**40,991**	43,230
Total liabilities, temporary equity and permanent equity	**$ 452,621**	$ 444,438

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Statement of Cash Flows (unaudited)

(in millions)	Six months ended June 30, 2022	2021
Operating activities		
Net income	**$ 1,629**	$ 1,959
Net loss (income) attributable to noncontrolling interests	**13**	(10)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	**1,642**	1,949
Adjustments to reconcile net income to net cash provided by (used for) operating activities:		
Provision for credit losses	**49**	(169)
Pension plan contributions	**(2)**	(16)
Depreciation and amortization	**859**	938
Deferred tax (benefit)	**145**	274
Net securities (gains)	**(4)**	(2)
Change in trading assets and liabilities	**6,730**	176
Change in accruals and other, net	**(1,000)**	(3,495)
Net cash provided by (used for) operating activities	**8,419**	(345)
Investing activities		
Change in interest-bearing deposits with banks	**39**	(2,924)
Change in interest-bearing deposits with the Federal Reserve and other central banks	**(28,461)**	13,409
Purchases of securities held-to-maturity	**(1,836)**	(5,449)
Paydowns of securities held-to-maturity	**4,124**	5,869
Maturities of securities held-to-maturity	**748**	834
Purchases of securities available-for-sale	**(20,522)**	(25,820)
Sales of securities available-for-sale	**8,788**	7,624
Paydowns of securities available-for-sale	**3,204**	7,081
Maturities of securities available-for-sale	**5,970**	8,999
Net change in loans	**(1,957)**	(7,017)
Sales of loans and other real estate	**—**	1
Change in federal funds sold and securities purchased under resale agreements	**6,655**	1,129
Net change in seed capital investments	**(14)**	(55)
Purchases of premises and equipment/capitalized software	**(871)**	(465)
Proceeds from the sale of premises and equipment	**45**	27
Dispositions, net of cash	**—**	8
Other, net	**(507)**	648
Net cash (used for) provided by investing activities	**(24,595)**	3,899
Financing activities		
Change in deposits	**13,036**	(1,428)
Change in federal funds purchased and securities sold under repurchase agreements	**(60)**	1,214
Change in payables to customers and broker-dealers	**870**	(1,360)
Change in other borrowed funds	**(202)**	107
Net proceeds from the issuance of long-term debt	**4,939**	2,691
Repayments of long-term debt	**(2,250)**	(2,750)
Proceeds from the exercise of stock options	**9**	32
Issuance of common stock	**6**	6
Treasury stock acquired	**(121)**	(1,317)
Common cash dividends paid	**(557)**	(550)
Preferred cash dividends paid	**(108)**	(100)
Other, net	**(5)**	(6)
Net cash provided by (used for) financing activities	**15,557**	(3,461)
Effect of exchange rate changes on cash	**362**	(41)
Change in cash and due from banks and restricted cash		
Change in cash and due from banks and restricted cash	**(257)**	52
Cash and due from banks and restricted cash at beginning of period	**9,883**	9,419
Cash and due from banks and restricted cash at end of period	**$ 9,626**	$ 9,471
Cash and due from banks and restricted cash		
Cash and due from banks at end of period (unrestricted cash)	**$ 5,185**	$ 5,154
Restricted cash at end of period	**4,441**	4,317
Cash and due from banks and restricted cash at end of period	**$ 9,626**	$ 9,471
Supplemental disclosures		
Interest paid	**$ 374**	$ 145
Income taxes paid	**262**	266
Income taxes refunded	**38**	10

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 March 31, 2022	$ 4,838	$ 14	$ 28,258	$ 37,088	$ (3,881)	$ (24,518)	$ 198	$ 41,997 *(a)*	$ 155
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	**2**
Other net changes in noncontrolling interests	—	—	—	—	—	—	**(186)**	**(186)**	—
Net income (loss)	—	—	—	**869**	—	—	**(5)**	**864**	—
Other comprehensive (loss)	—	—	—	—	**(1,426)**	—	—	**(1,426)**	**(3)**
Dividends:									
Common stock at $0.34 per share *(b)*	—	—	—	**(279)**	—	—	—	**(279)**	—
Preferred stock	—	—	—	**(34)**	—	—	—	**(34)**	—
Repurchase of common stock	—	—	—	—	—	**(3)**	—	**(3)**	—
Common stock issued under employee benefit plans	—	—	**5**	—	—	—	—	**5**	—
Stock awards and options exercised	—	—	**53**	—	—	—	—	**53**	—
Balance at June 30, 2022	**$ 4,838**	**$ 14**	**$ 28,316**	**$ 37,644**	**$ (5,307)**	**$ (24,521)**	**$ 7**	**$ 40,991** *(a)*	**$ 154**

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $36,961 million at March 31, 2022 and $36,146 million at June 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), 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	—	—	—	—	—	—	—	—	7
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—	(14)
Other net changes in noncontrolling interests	—	—	(5)	—	—	—	10	5	4
Net income	—	—	—	773	—	—	(8)	765	—
Other comprehensive (loss)	—	—	—	—	(1,668)	—	—	(1,668)	(3)
Dividends:									
Common stock at $0.34 per share *(b)*	—	—	—	(278)	—	—	—	(278)	—
Preferred stock	—	—	—	(74)	—	—	—	(74)	—
Repurchase of common stock	—	—	—	—	—	(118)	—	(118)	—
Common stock issued under employee benefit plans	—	—	5	—	—	—	—	5	—
Stock awards and options exercised	—	—	130	—	—	—	—	130	—
Balance at March 31, 2022	$ 4,838	$ 14	$ 28,258	$ 37,088	$ (3,881)	$ (24,518)	$ 198	$ 41,997 *(a)*	$ 155

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $38,196 million at Dec. 31, 2021 and $36,961 million at March 31, 2022.
(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) income, net of tax	Treasury stock				
Balance at March 31, 2021	$ 4,541	$ 14	$ 27,928	$ 34,822	$ (1,819)	$ (20,532)	$ 262	$ 45,216	*(a)*	$ 187
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—		6
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—		(22)
Other net changes in noncontrolling interests	—	—	9	—	—	—	77	86		(2)
Net income	—	—	—	1,022	—	—	5	1,027		—
Other comprehensive income	—	—	—	—	149	—	—	149		—
Dividends:										
Common stock at $0.31 per share *(b)*	—	—	—	(273)	—	—	—	(273)		—
Preferred stock	—	—	—	(31)	—	—	—	(31)		—
Repurchase of common stock	—	—	—	—	—	(618)	—	(618)		—
Common stock issued under employee benefit plans	—	—	5	—	—	—	—	5		—
Stock awards and options exercised	—	—	64	—	—	—	—	64		—
Balance at June 30, 2021	$ 4,541	$ 14	$ 28,006	$ 35,540	$ (1,670)	$ (21,150)	$ 344	$ 45,625	*(a)*	$ 169

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $40,413 million at March 31, 2021 and $40,740 million at June 30, 2021.
(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 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	—	—	—	—	—	—	—	—		**9**
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—		**(14)**
Other net changes in noncontrolling interests	—	—	**(5)**	—	—	—	**(176)**	**(181)**		**4**
Net income (loss)	—	—	—	**1,642**	—	—	**(13)**	**1,629**		—
Other comprehensive (loss)	—	—	—	—	**(3,094)**	—	—	**(3,094)**		**(6)**
Dividends:										
Common stock at $0.68 per share *(b)*	—	—	—	**(557)**	—	—	—	**(557)**		—
Preferred stock	—	—	—	**(108)**	—	—	—	**(108)**		—
Repurchase of common stock	—	—	—	—	—	**(121)**	—	**(121)**		—
Common stock issued under employee benefit plans	—	—	**10**	—	—	—	—	**10**		—
Preferred stock issued	—	—	—	—	—	—	—	—		—
Stock awards and options exercised	—	—	**183**	—	—	—	—	**183**		—
Balance at June 30, 2022	**$ 4,838**	**$ 14**	**$ 28,316**	**$ 37,644**	**$ (5,307)**	**$ (24,521)**	**$ 7**	**$ 40,991**	*(a)*	**$ 154**

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $38,196 million at Dec. 31, 2021 and $36,146 million at June 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), net of tax	Treasury stock				
Balance at Dec. 31, 2020	$ 4,541	$ 14	$ 27,823	$ 34,241	$ (985)	$ (19,833)	$ 143	$ 45,944	*(a)*	$ 176
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—		29
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—		(52)
Other net changes in noncontrolling interests	—	—	(24)	—	—	—	191	167		16
Net income	—	—	—	1,949	—	—	10	1,959		—
Other comprehensive (loss)	—	—	—	—	(685)	—	—	(685)		—
Dividends:										
Common stock at $0.62 per share	—	—	—	(550)	—	—	—	(550)		—
Preferred stock	—	—	—	(100)	—	—	—	(100)		—
Repurchase of common stock	—	—	—	—	—	(1,317)	—	(1,317)		—
Common stock issued under employee benefit plans	—	—	10	—	—	—	—	10		—
Stock awards and options exercised	—	—	197	—	—	—	—	197		—
Balance at June 30, 2021	$ 4,541	$ 14	$ 28,006	$ 35,540	$ (1,670)	$ (21,150)	$ 344	$ 45,625	*(a)*	$ 169

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $41,260 million at Dec. 31, 2020 and $40,740 million at June 30, 2021.

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, 2021 (the "2021 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 2021 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–Acquisitions and dispositions

We sometimes structure our acquisitions with both an initial payment and later contingent payments tied to post-closing revenue or income growth. There were no contingent payments in the first six months of 2022.

At June 30, 2022, we are potentially obligated to pay additional consideration which, using reasonable assumptions and estimates, could range from $15 million to $45 million over the next three years.

Goodwill and intangible assets related to acquisitions completed in 2021 totaled $99 million and $70 million, respectively. See Note 3 of the Notes to Consolidated Financial Statements in our 2021 Annual Report for information related to the 2021 acquisitions.

Note 3–Securities

The following tables present the amortized cost, the gross unrealized gains and losses and the fair value of securities at June 30, 2022 and Dec. 31, 2021.

Securities at June 30, 2022		Gross unrealized		
(in millions)	Amortized cost	Gains	Losses	Fair value
Available-for-sale:				
U.S. Treasury	$ 32,360	$ 114	$ 2,007	$ 30,467
Sovereign debt/sovereign guaranteed	11,429	6	343	11,092
Agency residential mortgage-backed securities ("RMBS")	8,501	130	328	8,303
Agency commercial mortgage-backed securities ("MBS")	8,479	110	410	8,179
Supranational	7,806	6	264	7,548
Foreign covered bonds	6,010	3	185	5,828
Collateralized loan obligations ("CLOs")	5,247	1	151	5,097
Non-agency commercial MBS	3,270	—	267	3,003
Foreign government agencies	2,620	—	84	2,536
Non-agency RMBS	2,413	57	159	2,311
State and political subdivisions	2,262	2	241	2,023
U.S. government agencies	2,003	58	136	1,925
Other asset-backed securities ("ABS")	1,771	—	103	1,668
Corporate bonds	1,455	—	158	1,297
Other debt securities	1	—	—	1
Total securities available-for-sale *(a)(b)*	**$ 95,627**	**$ 487**	**$ 4,836**	**$ 91,278**
Held-to-maturity:				
Agency RMBS	$ 36,947	$ 12	$ 3,019	$ 33,940
U.S. Treasury	11,347	—	685	10,662
Agency commercial MBS	4,319	2	298	4,023
U.S. government agencies	4,061	—	380	3,681
Sovereign debt/sovereign guaranteed	1,472	2	28	1,446
CLOs	983	—	34	949
Supranational	325	—	10	315
Foreign government agencies	64	—	1	63
Non-agency RMBS	34	2	1	35
State and political subdivisions	14	—	1	13
Total securities held-to-maturity *(a)*	**$ 59,566**	**$ 18**	**$ 4,457**	**$ 55,127**
Total securities	**$ 155,193**	**$ 505**	**$ 9,293**	**$ 146,405**

(a) The amortized cost of available-for-sale and held-to-maturity securities are net of the allowance for credit loss of $9 million and $1 million, respectively. The allowance for credit loss related to available-for-sale securities primarily relates to CLOs.

(b) Includes gross unrealized gains of $407 million and gross unrealized losses of $200 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.

Securities at Dec. 31, 2021		Gross unrealized		
(in millions)	Amortized cost	Gains	Losses	Fair value
Available-for-sale:				
U.S. Treasury	$ 28,966	$ 771	$ 328	$ 29,409
Agency RMBS	14,333	270	73	14,530
Sovereign debt/sovereign guaranteed	13,367	79	67	13,379
Agency commercial MBS	8,102	345	42	8,405
Supranational	7,599	24	50	7,573
Foreign covered bonds	6,236	25	23	6,238
CLOs	4,441	3	5	4,439
Non-agency commercial MBS	3,083	65	23	3,125
Non-agency RMBS	2,641	132	25	2,748
Foreign government agencies	2,694	9	17	2,686
U.S. government agencies	2,464	99	27	2,536
State and political subdivisions	2,543	11	40	2,514
Other ABS	2,205	7	22	2,190
Corporate bonds	2,099	19	52	2,066
Other debt securities	1	—	—	1
Total securities available-for-sale *(a)(b)*	$ 100,774	$ 1,859	$ 794	$ 101,839
Held-to-maturity:				
Agency RMBS	$ 36,167	$ 428	$ 388	$ 36,207
U.S. Treasury	11,617	36	103	11,550
Agency commercial MBS	4,068	41	52	4,057
U.S. government agencies	2,998	—	71	2,927
CLOs	983	—	1	982
Sovereign debt/sovereign guaranteed	922	18	2	938
Supranational	54	—	—	54
Non-agency RMBS	43	2	—	45
State and political subdivisions	14	1	—	15
Total securities held-to-maturity	$ 56,866	$ 526	$ 617	$ 56,775
Total securities	$ 157,640	$ 2,385	$ 1,411	$ 158,614

(a) The amortized cost of available-for-sale securities is net of the allowance for credit loss of $10 million. The allowance for credit loss primarily relates to CLOs.

(b) Includes gross unrealized gains of $455 million and gross unrealized losses of $75 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 U.S. Treasury securities, agency RMBS and agency commercial MBS. The unrealized losses primarily relate to U.S. Treasury securities and agency RMBS. 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)*	**2Q22**	1Q22	2Q21	**YTD22**	YTD21
Realized gross gains	**$ 7**	$ 73	$ 6	**$ 80**	$ 18
Realized gross losses	**(7)**	(69)	(4)	**(76)**	(16)
Total net securities gains	**$ —**	$ 4	$ 2	**$ 4**	$ 2

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

Net securities gains (losses) *(in millions)*	**2Q22**	1Q22	2Q21	**YTD22**	YTD21
Non-agency RMBS	**$ —**	$ 49	$ —	**$ 49**	$ 2
U.S. Treasury	**1**	11	—	**12**	(4)
State and political subdivisions	**—**	(13)	—	**(13)**	—
Corporate bonds	**(4)**	(47)	—	**(51)**	—
Other	**3**	4	2	**7**	4
Total net securities gains	**$ —**	$ 4	$ 2	**$ 4**	$ 2

In the second quarter of 2022, agency RMBS and agency commercial MBS, with an aggregate amortized cost of $975 million and fair value of $906 million were transferred from available-for-sale securities to held-to-maturity securities. In the first quarter of 2022, agency RMBS, U.S. government agencies and agency commercial MBS, with an aggregate amortized cost of $5.3 billion and fair value of $5.2 billion were transferred from available-for-sale securities to held-to-maturity securities. Both transfers reduce the impact of changes in interest rates on accumulated other comprehensive income.

Allowance for credit losses – Securities

The allowance for credit losses related to securities was $10 million at June 30, 2022 and $10 million at Dec. 31, 2021, and primarily relates to the available-for-sale CLO portfolio.

Credit quality indicators – Securities

At June 30, 2022, 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, $200 million of the unrealized losses at June 30, 2022 and $75 million at Dec. 31, 2021 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 fair value and 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 June 30, 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	$ 26,959	$ 1,593	$ 3,198	$ 414	$ 30,157	$ 2,007
Sovereign debt/sovereign guaranteed	8,200	221	1,409	122	9,609	343
Agency RMBS	7,709	305	297	23	8,006	328
Agency commercial MBS	6,511	353	805	57	7,316	410
Supranational	4,480	179	904	85	5,384	264
CLOs	4,748	135	313	12	5,061	147
Foreign covered bonds	4,307	151	481	34	4,788	185
Non-agency commercial MBS	2,565	205	438	62	3,003	267
Foreign government agencies	1,966	59	381	25	2,347	84
Non-agency RMBS	1,245	73	823	86	2,068	159
State and political subdivisions	1,306	173	461	68	1,767	241
U.S. government agencies	1,517	113	182	23	1,699	136
Other ABS	1,087	71	495	32	1,582	103
Corporate bonds	653	49	559	109	1,212	158
Total securities available-for-sale *(a)*	**$ 73,253**	**$ 3,680**	**$ 10,746**	**$ 1,152**	**$ 83,999**	**$ 4,832**

(a) Includes $134 million gross unrealized losses for less than 12 months and $66 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.

Available-for-sale securities in an unrealized loss position without an allowance for credit losses at Dec. 31, 2021	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	$ 16,855	$ 235	$ 1,944	$ 93	$ 18,799	$ 328
Sovereign debt/sovereign guaranteed	6,040	66	58	1	6,098	67
Agency RMBS	4,089	44	457	29	4,546	73
Supranational	3,093	44	305	6	3,398	50
Agency commercial MBS	2,233	39	585	3	2,818	42
Foreign covered bonds	2,694	23	—	—	2,694	23
CLOs	1,808	3	318	2	2,126	5
Non-agency RMBS	1,573	20	345	5	1,918	25
State and political subdivisions	1,848	40	13	—	1,861	40
U.S. government agencies	1,780	27	—	—	1,780	27
Other ABS	1,383	20	201	2	1,584	22
Foreign government agencies	1,446	17	15	—	1,461	17
Corporate bonds	1,247	42	198	10	1,445	52
Non-agency commercial MBS	947	16	222	7	1,169	23
Total securities available-for-sale *(a)*	$ 47,036	$ 636	$ 4,661	$ 158	$ 51,697	$ 794

(a) Includes $47 million of gross unrealized losses for less than 12 months and $28 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 U.S. Treasury securities and agency RMBS 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 June 30, 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	$ 36,947	$ (3,007)	100 %	— %	— %	— %	— %
U.S. Treasury	11,347	(685)	100	—	—	—	—
Agency commercial MBS	4,319	(296)	100	—	—	—	—
U.S. government agencies	4,061	(380)	100	—	—	—	—
Sovereign debt/sovereign guaranteed *(b)*	1,472	(26)	100	—	—	—	—
CLOs	983	(34)	100	—	—	—	—
Supranational	325	(10)	100	—	—	—	—
Foreign government agencies	64	(1)	100	—	—	—	—
Non-agency RMBS	34	1	22	59	2	16	1
State and political subdivisions	14	(1)	3	2	3	—	92
Total held-to-maturity securities	**$ 59,566**	**$ (4,439)**	**100 %**	**— %**	**— %**	**— %**	**— %**

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

Held-to-maturity securities portfolio at Dec. 31, 2021			Ratings *(a)*				
(dollars in millions)	Amortized cost	Net unrealized gain (loss)	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Agency RMBS	$ 36,167	$ 40	100 %	— %	— %	— %	— %
U.S. Treasury	11,617	(67)	100	—	—	—	—
Agency commercial MBS	4,068	(11)	100	—	—	—	—
U.S. government agencies	2,998	(71)	100	—	—	—	—
CLOs	983	(1)	100	—	—	—	—
Sovereign debt/sovereign guaranteed *(b)*	922	16	100	—	—	—	—
Supranational	54	—	100	—	—	—	—
Non-agency RMBS	43	2	23	59	2	15	1
State and political subdivisions	14	1	5	2	5	—	88
Total held-to-maturity securities	$ 56,866	$ (91)	100 %	— %	— %	— %	— %

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

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 June 30, 2022	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	$ 3,978	1.84 %	$ 15,195	1.05 %	$ 9,052	1.15 %	$ 2,242	2.92 %	**$ 30,467**	**1.32 %**
Sovereign debt/sovereign guaranteed	3,750	1.27	6,242	0.79	1,020	0.38	80	1.78	**11,092**	**0.91**
Supranational	905	1.05	4,964	1.15	1,662	1.50	17	(0.09)	**7,548**	**1.21**
Foreign covered bonds	1,503	1.27	3,735	1.09	590	0.08	—	—	**5,828**	**1.03**
Foreign government agencies	583	0.91	1,918	0.99	35	0.16	—	—	**2,536**	**0.96**
State and political subdivisions	145	3.47	646	1.63	1,030	1.61	202	2.33	**2,023**	**1.81**
U.S. government agencies	—	—	579	2.19	1,160	2.22	186	2.52	**1,925**	**2.24**
Corporate bonds	114	2.30	357	2.59	804	1.61	22	2.01	**1,297**	**1.92**
Other debt securities	—	—	—	—	—	—	1	3.70	**1**	**3.70**
Mortgage-backed securities:										
Agency RMBS									**8,303**	**2.14**
Non-agency RMBS									**2,311**	**3.20**
Agency commercial MBS									**8,179**	**2.31**
Non-agency commercial MBS									**3,003**	**2.45**
CLOs									**5,097**	**2.15**
Other ABS									**1,668**	**1.72**
Total securities available-for-sale	$ 10,978	1.48 %	$ 33,636	1.06 %	$ 15,353	1.22 %	$ 2,750	2.78 %	**$ 91,278**	**1.57 %**
Held-to-maturity:										
U.S. Treasury	$ 1,590	1.91 %	$ 7,800	1.26 %	$ 1,957	1.16 %	$ —	— %	**$ 11,347**	**1.33 %**
U.S. government agencies	—	—	1,937	1.20	1,864	1.52	260	1.90	**4,061**	**1.39**
Sovereign debt/sovereign guaranteed	193	0.25	1,190	0.87	89	0.53	—	—	**1,472**	**0.77**
Supranational	—	—	325	0.70	—	—	—	—	**325**	**0.70**
Foreign government agencies	—	—	64	0.79	—	—	—	—	**64**	**0.79**
State and political subdivisions	1	5.51	1	5.76	4	4.65	8	4.80	**14**	**4.84**
Mortgage-backed securities:										
Agency RMBS									**36,947**	**2.29**
Non-agency RMBS									**34**	**1.80**
Agency commercial MBS									**4,319**	**2.28**
CLOs									**983**	**2.10**
Total securities held-to-maturity	$ 1,784	1.73 %	$ 11,317	1.19 %	$ 3,914	1.32 %	$ 268	1.98 %	**$ 59,566**	**2.00 %**
Total securities	$ 12,762	1.52 %	$ 44,953	1.09 %	$ 19,267	1.24 %	$ 3,018	2.72 %	**$ 150,844**	**1.73 %**

(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 June 30, 2022, BNY Mellon had pledged assets of $140 billion, including $111 billion pledged as collateral for potential borrowings 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 June 30, 2022 included $123 billion of securities, $13 billion of loans, $3 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.

At Dec. 31, 2021, BNY Mellon had pledged assets of $144 billion, including $112 billion pledged as collateral for potential borrowing at the Federal Reserve Discount Window and $7 billion pledged as collateral for borrowing at the Federal Home Loan Bank. The components of the assets pledged at Dec. 31, 2021 included $126 billion of securities, $12 billion of loans, $5 billion of trading assets and $1 billion of interest-bearing deposits with banks.

At June 30, 2022 and Dec. 31, 2021, pledged assets included $21 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 June 30, 2022 and Dec. 31, 2021, the market value of the securities received that can be sold or repledged was $92 billion and $122 billion, respectively. We routinely sell or repledge these securities through delivery to third parties. As of June 30, 2022 and Dec. 31, 2021, the market value of securities collateral sold or repledged was $57 billion and $78 billion, respectively.

Restricted cash and securities

Cash and securities may be segregated under federal and other regulations or requirements. At June 30, 2022 and Dec. 31, 2021, cash segregated under federal and other regulations or requirements was $4 billion. 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 $5 billion at June 30, 2022 and $4 billion at Dec. 31, 2021. 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 4–Loans and asset quality

Loans

The table below provides the details of our loan portfolio.

Loans *(in millions)*	**June 30, 2022**	Dec. 31, 2021
Commercial	**$ 2,423**	$ 2,128
Commercial real estate	**6,095**	6,033
Financial institutions	**10,627**	10,232
Lease financings	**702**	731
Wealth management loans	**10,853**	9,792
Wealth management mortgages	**8,777**	8,200
Other residential mortgages	**369**	299
Capital call financing	**3,602**	2,284
Other	**2,790**	2,541
Overdrafts	**3,793**	3,060
Margin loans	**19,316**	22,487
Total loans *(a)*	**$ 69,347**	$ 67,787

(a) Net of unearned income of $235 million at June 30, 2022 and $240 million at Dec. 31, 2021 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, held-to-maturity securities, available-for-sale securities and accounts receivable.

Allowance for credit losses activity for the quarter ended June 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	$ 176	$ 15	$ 1	$ 1	$ 9	$ 7	$ 3	$ 224
Charge-offs	—	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	1	—	1
Net (charge-offs) recoveries	—	—	—	—	—	—	1	—	1
Provision *(a)*	4	8	6	—	—	(2)	(1)	3	18
Ending balance	**$ 16**	**$ 184**	**$ 21**	**$ 1**	**$ 1**	**$ 7**	**$ 7**	**$ 6**	**$ 243**
Allowance for:									
Loan losses	$ 4	$ 147	$ 10	$ 1	$ 1	$ 6	$ 7	$ 5	$ 181
Lending-related commitments	12	37	11	—	—	1	—	1	62
Individually evaluated for impairment:									
Loan balance *(b)*	$ —	$ 121	$ —	$ —	$ —	$ 14	$ 1	$ —	$ 136
Allowance for loan losses	—	1	—	—	—	—	—	—	1

(a) Does not include the provision for credit losses related to other financial instruments of $29 million for the quarter ended June 30, 2022.
(b) Includes collateral-dependent loans of $136 million with $179 million of collateral at fair value.

Allowance for credit losses activity for the quarter ended March 31, 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	—	—	—	—	—	—	1	—	1
Net recoveries	—	—	—	—	—	—	1	—	1
Provision *(a)*	—	(23)	2	—	—	3	(1)	1	(18)
Ending balance	$ 12	$ 176	$ 15	$ 1	$ 1	$ 9	$ 7	$ 3	$ 224
Allowance for:									
Loan losses	$ 2	$ 142	$ 7	$ 1	$ 1	$ 8	$ 7	$ 3	$ 171
Lending-related commitments	10	34	8	—	—	1	—	—	53
Individually evaluated for impairment:									
Loan balance *(b)*	$ —	$ 121	$ —	$ —	$ —	$ 18	$ 1	$ —	$ 140
Allowance for loan losses	—	1	—	—	—	1	—	—	2

(a) Does not include the provision for credit losses related to other financial instruments of $20 million for the quarter ended March 31, 2022.
(b) Includes collateral-dependent loans of $140 million with $183 million of collateral at fair value.

Allowance for credit losses activity for the quarter ended June 30, 2021

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans *(a)*	Wealth management mortgages *(a)*	Other residential mortgages	Capital call financing *(a)*	Total
Beginning balance	$ 11	$ 365	$ 6	$ 2	$ —	$ 6	$ 9	$ 1	$ 400
Charge-offs	—	—	—	—	—	—	(1)	—	(1)
Recoveries	—	—	2	—	—	—	1	—	3
Net recoveries	—	—	2	—	—	—	—	—	2
Provision *(b)*	(3)	(76)	(2)	—	1	(2)	(1)	—	(83)
Ending balance	$ 8	$ 289	$ 6	$ 2	$ 1	$ 4	$ 8	$ 1	$ 319
Allowance for:									
Loan losses	$ 3	$ 248	$ 3	$ 2	$ 1	$ 3	$ 8	$ 1	$ 269
Lending-related commitments	5	41	3	—	—	1	—	—	50
Individually evaluated for impairment:									
Loan balance *(c)*	$ —	$ 26	$ —	$ —	$ —	$ 17	$ 1	$ —	$ 44
Allowance for loan losses	—	3	—	—	—	—	—	—	3

(a) In 2021, we began disclosing wealth management loans and wealth management mortgages separately and capital call financing loans. Beginning balances and the activity for the second quarter of 2021 have been revised to be comparable.
(b) Does not include the provision for credit losses benefit related to other financial instruments of $3 million for the second quarter of 2021.
(c) Includes collateral-dependent loans of $44 million with $50 million of collateral at fair value.

Allowance for credit losses activity for the six months ended June 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	—	—	—	—	—	—	2	—	2
Net recoveries	—	—	—	—	—	—	2	—	2
Provision *(b)*	4	(15)	8	—	—	1	(2)	4	—
Ending balance	**$ 16**	**$ 184**	**$ 21**	**$ 1**	**$ 1**	**$ 7**	**$ 7**	**$ 6**	**$ 243**

(a) Does not include provision for credit losses related to other financial instruments of $49 million for the six months ended June 30, 2022.

Allowance for credit losses activity for the six months ended June 30, 2021

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans *(a)*	Wealth management mortgages *(a)*	Other residential mortgages	Capital call financing *(a)*	Total
Beginning balance	$ 16	$ 430	$ 10	$ 2	$ 1	$ 7	$ 13	$ —	$ 479
Charge-offs	—	—	—	—	—	(1)	(1)	—	(2)
Recoveries	—	—	2	—	—	—	3	—	5
Net recoveries (charge-offs)	—	—	2	—	—	(1)	2	—	3
Provision *(b)*	(8)	(141)	(6)	—	—	(2)	(7)	1	(163)
Ending balance	$ 8	$ 289	$ 6	$ 2	$ 1	$ 4	$ 8	$ 1	$ 319

(a) In 2021, we began disclosing wealth management loans and wealth management mortgages separately and capital call financing loans. Beginning balances and the activity for the first six months of 2021 have been revised to be comparable.
(b) Does not include provision for credit losses benefit related to other financial instruments of $6 million for the six months ended June 30, 2021.

Nonperforming assets

The table below presents our nonperforming assets.

Nonperforming assets	**June 30, 2022**			Dec. 31, 2021		
	Recorded investment			Recorded investment		
(in millions)	With an allowance	Without an allowance	Total	With an allowance	Without an allowance	Total
Nonperforming loans:						
Commercial real estate	**$ — $**	**54 $**	**54**	$ 12 $	42 $	54
Other residential mortgages	**34**	**1**	**35**	38	1	39
Wealth management mortgages	**9**	**13**	**22**	8	17	25
Total nonperforming loans	**43**	**68**	**111**	58	60	118
Other assets owned	**—**	**3**	**3**	—	2	2
Total nonperforming assets	**$ 43 $**	**71 $**	**114**	$ 58 $	62 $	120

Past due loans

The table below presents our past due loans.

Past due loans and still accruing interest	**June 30, 2022**				Dec. 31, 2021			
	Days past due			Total	Days past due			Total
(in millions)	30-59	60-89	≥90	past due	30-59	60-89	≥90	past due
Capital call financing	**$ —**	**$ 120**	**$ — $**	**120**	$ — $	— $	— $	—
Commercial real estate	**39**	**—**	**—**	**39**	3	—	—	3
Wealth management loans	**26**	**1**	**—**	**27**	33	—	—	33
Financial institutions	**9**	**10**	**—**	**19**	31	—	—	31
Other residential mortgages	**8**	**—**	**—**	**8**	2	1	—	3
Wealth management mortgages	**—**	**—**	**—**	**—**	24	—	—	24
Total past due loans	**$ 82** *(a)*	**$ 131** *(a)*	**$ — $**	**213**	$ 93 $	1 $	— $	94

(a) Past due loans for 30-59 days of $26 million and past due loans for 60-89 days of $121 million have been collected since June 30, 2022.

Loan modifications

A modified loan is considered a troubled debt restructuring ("TDR") 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. There were no TDRs in the first six months of 2022.

Due to the coronavirus pandemic, there were two forms of relief provided for classifying loans as TDRs: The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), the relevant provisions of which were extended by the Consolidated Appropriations Act, 2021, and the Interagency Guidance. The extension period ended Jan. 1, 2022. See Note 1 of the Notes to Consolidated Financial Statements in our 2021 Annual Report for additional details on the CARES Act, Consolidated Appropriations Act, 2021, and Interagency Guidance. Loans modified under the CARES Act or Interagency Guidance totaled $3 million in the second quarter of 2021. Nearly all of the modifications were short-term loan payment forbearances or modified principal and/or interest payments. These loans were primarily residential mortgage and commercial real estate loans. We did not identify any of the modifications as TDRs. At June 30, 2022, the unpaid principal balance of the loans modified under the CARES Act or Interagency Guidance was $122 million.

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	**June 30, 2022**									
	Originated, at amortized cost						Revolving loans			
(in millions)	YTD22	2021	2020	2019	2018	Prior to 2018	Amortized cost	Converted to term loans – Amortized cost	Total *(a)*	Accrued interest receivable
Commercial:										
Investment grade	**$ 375**	$ 324	$ 20	$ —	$ 17	$ 145	**$ 1,409**	**$ —**	**$ 2,290**	
Non-investment grade	**86**	6	—	—	—	—	**41**	**—**	**133**	
Total commercial	**461**	330	20	—	17	145	**1,450**	**—**	**2,423**	**$ 2**
Commercial real estate:										
Investment grade	**568**	1,288	452	814	173	890	**233**	**—**	**4,418**	
Non-investment grade	**387**	469	156	378	189	50	**23**	**25**	**1,677**	
Total commercial real estate	**955**	1,757	608	1,192	362	940	**256**	**25**	**6,095**	**12**
Financial institutions:										
Investment grade	**162**	566	—	—	—	38	**8,240**	**—**	**9,006**	
Non-investment grade	**60**	—	—	—	—	—	**1,561**	**—**	**1,621**	
Total financial institutions	**222**	566	—	—	—	38	**9,801**	**—**	**10,627**	**26**
Wealth management loans:										
Investment grade	**22**	105	18	71	—	226	**10,353**	**—**	**10,795**	
Non-investment grade	**—**	—	—	—	—	—	**58**	**—**	**58**	
Total wealth management loans	**22**	105	18	71	—	226	**10,411**	**—**	**10,853**	**22**
Wealth management mortgages	**1,169**	2,031	959	805	508	3,289	**16**	**—**	**8,777**	**17**
Lease financings	**19**	—	54	13	8	608	**—**	**—**	**702**	**—**
Other residential mortgages	**—**	—	—	—	—	369	**—**	**—**	**369**	**1**
Capital call financing	**—**	—	—	—	—	—	**3,602**	**—**	**3,602**	**10**
Other loans	**—**	—	—	—	—	—	**2,790**	**—**	**2,790**	**3**
Margin loans	**5,119**	500	—	—	—	—	**13,697**	**—**	**19,316**	**17**
Total loans	**$ 7,967**	$ 5,289	$ 1,659	$ 2,081	$ 895	$ 5,615	**$ 42,023**	**$ 25**	**$ 65,554**	**$ 110**

(a) Excludes overdrafts of $3,793 million. Overdrafts occur on a daily basis primarily in the custody and securities clearance business and are generally repaid within two business days.

Credit profile of the loan portfolio	Dec. 31, 2021									
							Revolving loans			
	Originated, at amortized cost									
(in millions)	2021	2020	2019	2018	2017	Prior to 2017	Amortized cost	Converted to term loans – Amortized cost	Total *(a)*	Accrued interest receivable
Commercial:										
Investment grade	$ 348	$ 20	$ —	$ 8	$ 145	$ —	$ 1,450	$ —	$ 1,971	
Non-investment grade	81	—	—	—	—	—	76	—	157	
Total commercial	429	20	—	8	145	—	1,526	—	2,128	$ 1
Commercial real estate:										
Investment grade	1,577	528	683	173	298	601	205	—	4,065	
Non-investment grade	660	97	568	351	50	95	121	26	1,968	
Total commercial real estate	2,237	625	1,251	524	348	696	326	26	6,033	7
Financial institutions:										
Investment grade	705	—	—	—	—	60	8,015	—	8,780	
Non-investment grade	20	—	—	—	—	—	1,432	—	1,452	
Total financial institutions	725	—	—	—	—	60	9,447	—	10,232	11
Wealth management loans:										
Investment grade	117	18	73	6	104	122	9,320	—	9,760	
Non-investment grade	1	—	—	—	—	—	31	—	32	
Total wealth management loans	118	18	73	6	104	122	9,351	—	9,792	12
Wealth management mortgages	2,058	1,008	855	542	885	2,838	14	—	8,200	14
Lease financings	25	67	15	10	2	612	—	—	731	—
Other residential mortgages	—	—	—	—	—	299	—	—	299	1
Capital call financing	—	—	—	—	—	—	2,284	—	2,284	3
Other loans	—	—	—	—	—	—	2,541	—	2,541	2
Margin loans	7,697	—	—	—	—	—	14,790	—	22,487	10
Total loans	$ 13,289	$ 1,738	$ 2,194	$ 1,090	$ 1,484	$ 4,627	$ 40,279	$ 26	$ 64,727	$ 61

(a) Excludes overdrafts of $3,060 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 96% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at June 30, 2022. In addition, 65% 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 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 the wealth management portfolio. At June 30, 2022, less than 1% of the mortgages were past due.

At June 30, 2022, the wealth management mortgage portfolio consisted of the following geographic concentrations: California – 22%; New York – 15%; Florida – 10%; Massachusetts – 8%; and other – 45%.

Lease financings

At June 30, 2022, 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 aircraft and freight-related rail cars. 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 $369 million at June 30, 2022 and $299 million at Dec. 31, 2021. Included in this portfolio at June 30, 2022 were $96 million of fixed-rate jumbo mortgage loans purchased in the second quarter of 2022 with a weighted-average loan-to-value ratio of 69% 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 $19.3 billion of secured margin loans at June 30, 2022, compared with $22.5 billion at Dec. 31, 2021. 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 $3.8 billion at June 30, 2022 and $3.1 billion at Dec. 31, 2021. Overdrafts occur on a daily basis and are generally repaid within two business days.

Reverse repurchase agreements

Reverse repurchase agreements at June 30, 2022 and Dec. 31, 2021 were fully secured with high quality collateral. As a result, there was no allowance for credit losses related to these assets at June 30, 2022 and Dec. 31, 2021.

Note 5–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, 2021	$ 7,062	$ 1,435	$ 9,015	$ 17,512
Foreign currency translation	(87)	(10)	(144)	(241)
Balance at June 30, 2022	**$ 6,975**	**$ 1,425**	**$ 8,871**	**$ 17,271**

Goodwill by business segment *(in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management	Consolidated
Balance at Dec. 31, 2020	$ 7,033	$ 1,423	$ 9,040	$ 17,496
Dispositions	—	—	(5)	(5)
Foreign currency translation	(22)	1	17	(4)
Balance at June 30, 2021	$ 7,011	$ 1,424	$ 9,052	$ 17,487

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, 2021	$ 230	$ 392	$ 1,520	$ 849	$ 2,991
Amortization	(17)	(4)	(13)	—	(34)
Foreign currency translation	(6)	—	(17)	—	(23)
Balance at June 30, 2022	**$ 207**	**$ 388**	**$ 1,490**	**$ 849**	**$ 2,934**

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, 2020	$ 194	$ 414	$ 1,555	$ 849	$ 3,012
Disposition	—	—	(6)	—	(6)
Amortization	(15)	(14)	(15)	—	(44)
Foreign currency translation	—	—	2	—	2
Balance at June 30, 2021	$ 179	$ 400	$ 1,536	$ 849	$ 2,964

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

Intangible assets	**June 30, 2022**				Dec. 31, 2021		
(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	**$ 739**	**$ (532)**	**$ 207**	**11 years**	$ 747	$ (518)	$ 229
Customer contracts—Market and Wealth Services	**314**	**(297)**	**17**	**4 years**	378	(356)	22
Customer relationships—Investment and Wealth Management	**553**	**(451)**	**102**	**9 years**	568	(456)	112
Other	**47**	**(11)**	**36**	**13 years**	47	(8)	39
Total subject to amortization	**1,653**	**(1,291)**	**362**	**10 years**	1,740	(1,338)	402
Not subject to amortization: *(b)*							
Tradename	**1,290**	**N/A**	**1,290**	**N/A**	1,294	N/A	1,294
Customer relationships	**1,282**	**N/A**	**1,282**	**N/A**	1,295	N/A	1,295
Total not subject to amortization	**2,572**	**N/A**	**2,572**	**N/A**	2,589	N/A	2,589
Total intangible assets	**$ 4,225**	**$ (1,291)**	**$ 2,934**	**N/A**	$ 4,329	$ (1,338)	$ 2,991

(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)*
2022	**$ 67**
2023	**57**
2024	**50**
2025	**43**
2026	**34**

Impairment testing

The goodwill impairment test is performed at least annually at the reporting unit level. Intangible assets not subject to amortization are tested for impairment annually or more often if events or circumstances indicate they may be impaired.

BNY Mellon's business segments include six reporting units for which goodwill impairment testing is performed on an annual basis. As a result of the annual goodwill impairment test of the six reporting units conducted in the second quarter of 2022, no goodwill impairment was recognized.

Note 6–Other assets

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

Other assets *(in millions)*	**June 30, 2022**	Dec. 31, 2021
Corporate/bank-owned life insurance	**$ 5,380**	$ 5,359
Fails to deliver	**5,037**	1,561
Accounts receivable	**4,199**	4,178
Software	**2,147**	2,096
Prepaid pension assets	**1,996**	1,946
Qualified affordable housing project investments	**1,258**	1,153
Renewable energy investments	**944**	1,027
Equity method investments	**850**	939
Prepaid expense	**756**	476
Other equity investments *(a)*	**622**	449
Income taxes receivable	**577**	538
Fair value of hedging derivatives	**525**	206
Federal Reserve Bank stock	**476**	472
Seed capital *(b)*	**374**	357
Assets of consolidated investment management funds	**196**	462
Other *(c)*	**2,272**	1,190
Total other assets	**$ 27,609**	$ 22,409

(a) Includes strategic equity, private equity and other investments.
(b) Includes investments in BNY Mellon funds which hedge deferred incentive awards.
(c) At June 30, 2022 and Dec. 31, 2021, other assets include $6 million and $7 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 $424 million at June 30, 2022 and $264 million at Dec. 31, 2021 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)	**2Q22**	1Q22	2Q21	**YTD22**	YTD21	Life-to-date
Upward adjustments	**$ 76**	$ 46	$ 6	**$ 122**	$ 6	$ 280
Downward adjustments	**(7)**	—	—	**(7)**	—	(11)
Net adjustments	**$ 69**	$ 46	$ 6	**$ 115**	$ 6	$ 269

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 $1.3 billion at June 30, 2022 and $1.2 billion at Dec. 31, 2021. Commitments to fund future investments in qualified affordable housing projects totaled $623 million at June 30, 2022 and $543 million at Dec. 31, 2021 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 2022 – $150 million; 2023 – $205 million; 2024 – $125 million; 2025 – $90 million; 2026 – $21 million; and 2027 and thereafter – $32 million.

Tax credits and other tax benefits recognized were $38 million in the second quarter of 2022, $38 million in the first quarter of 2022, $38 million in the second quarter of 2021, $76 million in the first six months of 2022 and $76 million in the first six months of 2021.

Amortization expense included in the provision for income taxes was $33 million in the second quarter of 2022, $32 million in the first quarter of 2022, $32 million in the second quarter of 2021, $65 million in the first six months of 2022 and $64 million in the first six months of 2021.

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	**June 30, 2022**		Dec. 31, 2021	
(in millions)	Fair value	Unfunded commitments	Fair value	Unfunded commitments
Seed capital *(a)(b)*	**$ 90**	**$ 19**	$ 101	$ 21
Private equity investments *(c)*	**129**	**62**	113	61
Other	**4**	**—**	4	—
Total	**$ 223**	**$ 81**	$ 218	$ 82

(a) Primarily includes leveraged loans and structured credit funds, which are generally not redeemable. Distributions from such investments will be received as the underlying investments in the funds, which have lives of three to 11 years at both June 30, 2022 and Dec. 31, 2021, 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 7–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 fee schedules. See Note 10 of the Notes to Consolidated Financial Statements in our 2021 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 2021 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									
	June 30, 2022					June 30, 2021				
(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	**$ 1,294**	**$ 898**	**$ 24**	**$ (17)**	**$ 2,199**	$ 1,238	$ 817	$ 24	$ (17)	$ 2,062
Investment management and performance fees	**—**	**6**	**822**	**(2)**	**826**	—	4	870	(4)	870
Financing-related fees	**11**	**4**	**—**	**—**	**15**	4	12	—	—	16
Distribution and servicing fees	**1**	**(17)**	**51**	**(1)**	**34**	1	(1)	28	(1)	27
Investment and other revenue	**54**	**38**	**(66)**	**1**	**27**	32	—	(7)	—	25
Total fee and other revenue – contract revenue	**1,360**	**929**	**831**	**(19)**	**3,101**	1,275	832	915	(22)	3,000
Fee and other revenue – not in scope of Accounting Standards Codification ("ASC") 606 *(a)(b)*	**189**	**45**	**6**	**94**	**334**	158	71	37	44	310
Total fee and other revenue	**$ 1,549**	**$ 974**	**$ 837**	**$ 75**	**$ 3,435**	$ 1,433	$ 903	$ 952	$ 22	$ 3,310

(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 (loss) income attributable to noncontrolling interests related to consolidated investment management funds of $(5) million in the second quarter of 2022 and $5 million in the second quarter of 2021.

Disaggregation of contract revenue by business segment

	Quarter ended				
	March 31, 2022				
(in millions)	Securities Services	Market and Wealth Services	Investment and Wealth Management	Other	Total
Fee and other revenue – contract revenue:					
Investment services fees	$ 1,130	$ 846	$ 25	$ (17)	$ 1,984
Investment management and performance fees	—	6	887	(6)	887
Financing-related fees	3	14	—	—	17
Distribution and servicing fees	1	(4)	32	1	30
Investment and other revenue	47	9	(27)	(1)	28
Total fee and other revenue – contract revenue	1,181	871	917	(23)	2,946
Fee and other revenue – not in scope of ASC 606 *(a)(b)*	222	35	(10)	43	290
Total fee and other revenue	$ 1,403	$ 906	$ 907	$ 20	$ 3,236

(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 (loss) attributable to noncontrolling interests related to consolidated investment management funds of $(8) million in the first quarter of 2022.

Disaggregation of contract revenue by business segment

	Year-to-date									
	June 30, 2022					June 30, 2021				
(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	**$ 2,424**	**$ 1,744**	**$ 49**	**$ (34)**	**$ 4,183**	$ 2,425	$ 1,664	$ 49	$ (34)	$ 4,104
Investment management and performance fees	**—**	**12**	**1,709**	**(8)**	**1,713**	—	8	1,753	(9)	1,752
Financing-related fees	**14**	**18**	**—**	**—**	**32**	9	27	—	—	36
Distribution and servicing fees	**2**	**(21)**	**83**	**—**	**64**	3	(2)	56	(1)	56
Investment and other revenue	**101**	**47**	**(93)**	**—**	**55**	65	3	(18)	—	50
Total fee and other revenue – contract revenue	**2,541**	**1,800**	**1,748**	**(42)**	**6,047**	2,502	1,700	1,840	(44)	5,998
Fee and other revenue – not in scope of ASC 606 *(a)(b)*	**411**	**80**	**(4)**	**137**	**624**	362	117	55	39	573
Total fee and other revenue	**$ 2,952**	**$ 1,880**	**$ 1,744**	**$ 95**	**$ 6,671**	$ 2,864	$ 1,817	$ 1,895	$ (5)	$ 6,571

(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 (loss) income attributable to noncontrolling interests related to consolidated investment management funds of $(13) million in the first six months of 2022 and $10 million in the first six months of 2021.

Contract balances

Our clients are billed based on fee schedules that are agreed upon in each customer contract. Receivables from customers were $2.5 billion at June 30, 2022 and Dec. 31, 2021.

Contract assets represent accrued revenues that have not yet been billed to the customers due to certain contractual terms other than the passage of time and were $79 million at June 30, 2022 and $42 million at Dec. 31, 2021. 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 $193 million at June 30, 2022 and $163 million at Dec. 31, 2021. Contract liabilities are included in other liabilities on the consolidated balance sheet. Revenue recognized in the second quarter of 2022 relating to contract liabilities as of March 31, 2022 was $63 million. Revenue recognized in the first six months of 2022 relating to contract liabilities as of Dec. 31, 2021 was $85 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 $60 million at June 30, 2022 and $64 million at Dec. 31, 2021. Capitalized sales incentives are amortized based on the transfer of goods or services to which the assets relate and typically average nine years. The amortization of capitalized sales incentives, which is primarily included in staff expense on the consolidated income statement, totaled $4 million in the second quarter of 2022, $5 million in the second quarter of 2021 and first quarter of 2022, $9 million in the first six months of 2022 and $10 million in the first six months of 2021.

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 $20 million at June 30, 2022 and $23 million at Dec. 31, 2021. These capitalized costs are amortized on a straight-line basis over the expected contract period, which generally ranges from seven to nine years. The amortization is included in professional, legal and other purchased services and other expenses on the

consolidated income statement and totaled less than $1 million in the second quarter of 2022, second quarter of 2021 and first quarter of 2022 and $1 million in the first six months of 2022 and first six months of 2021.

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 8–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)	**June 30, 2022**	March 31, 2022	June 30, 2021	**June 30, 2022**	June 30, 2021
Interest revenue					
Deposits with the Federal Reserve and other central banks	**$ 99**	$ 2	$ (25)	**$ 101**	$ (41)
Deposits with banks	**33**	14	11	**47**	25
Federal funds sold and securities purchased under resale agreements	**116**	37	25	**153**	57
Loans	**370**	260	237	**630**	467
Securities:					
Taxable	**509**	434	415	**943**	865
Exempt from federal income taxes	**10**	10	11	**20**	20
Total securities	**519**	444	426	**963**	885
Trading securities	**22**	21	11	**43**	30
Total interest revenue	**1,159**	778	685	**1,937**	1,423
Interest expense					
Deposits	**90**	(37)	(49)	**53**	(86)
Federal funds purchased and securities sold under repurchase agreements	**77**	12	(5)	**89**	(8)
Trading liabilities	**10**	4	2	**14**	5
Other borrowed funds	**2**	3	1	**5**	3
Customer payables	**9**	—	—	**9**	(1)
Long-term debt	**147**	98	91	**245**	210
Total interest expense	**335**	80	40	**415**	123
Net interest revenue	**824**	698	645	**1,522**	1,300
Provision for credit losses	**47**	2	(86)	**49**	(169)
Net interest revenue after provision for credit losses	**$ 777**	$ 696	$ 731	**$ 1,473**	$ 1,469

Note 9–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								
	June 30, 2022			March 31, 2022			June 30, 2021		
(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 $**	**—**	$ — $	3 $	—	$ — $	3 $	—
Interest cost	**35**	**7**	**1**	35	8	1	34	7	1
Expected return on assets	**(78)**	**(9)**	**(1)**	(78)	(10)	(2)	(75)	(8)	(1)
Other	**17**	**1**	**(1)**	17	1	(1)	24	3	—
Net periodic benefit (credit) cost	**$ (26) $**	**2 $**	**(1)**	$ (26) $	2 $	(2)	$ (17) $	5 $	—

Net periodic benefit (credit) cost	Year-to-date					
	June 30, 2022			June 30, 2021		
(in millions)	Domestic pension benefits	Foreign pension benefits	Health care benefits	Domestic pension benefits	Foreign pension benefits	Health care benefits
Service cost	**$ — $**	**6 $**	**—**	$ — $	7 $	—
Interest cost	**70**	**15**	**2**	68	13	2
Expected return on assets	**(156)**	**(19)**	**(3)**	(150)	(17)	(3)
Other	**34**	**2**	**(2)**	49	7	—
Net periodic benefit (credit) cost	**$ (52) $**	**4 $**	**(3)**	$ (33) $	10 $	(1)

Note 10–Income taxes

BNY Mellon recorded an income tax provision of $231 million (21.1% effective tax rate) in the second quarter of 2022, $241 million (19.0% effective tax rate) in the second quarter of 2021 and $153 million (16.7% effective tax rate) in the first quarter of 2022.

Our total tax reserves as of June 30, 2022 were $143 million compared with $138 million at Dec. 31, 2021. If these tax reserves were unnecessary, $143 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 June 30, 2022 is accrued interest, where applicable, of $43 million. The additional tax expense related to interest
for the six months ended June 30, 2022 was $4 million, compared with $4 million for the six months ended June 30, 2021.

It is reasonably possible the total reserve for uncertain tax positions could decrease within the next 12 months by approximately $21 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 income tax returns are closed to examination through 2014. Our New York City income tax returns are closed to examination through 2012. Our UK income tax returns are closed to examination through 2019.

Note 11–Variable interest entities

We have variable interests in variable interest entities (“VIEs”), which include investments in retail, institutional and alternative investment funds, including CLO structures in which we provide asset management services, some of which are consolidated.

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 in the consolidated balance sheet as of June 30, 2022 and Dec. 31, 2021. 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)	**June 30, 2022**	Dec. 31, 2021
Trading assets	**$ 191**	$ 443
Other assets	**5**	19
Total assets *(a)*	**$ 196**	$ 462
Other liabilities	**$ 1**	$ 3
Total liabilities *(b)*	**$ 1**	$ 3
Nonredeemable noncontrolling interests *(c)*	**$ 7**	$ 196

(a) Includes voting model entities ("VMEs") with assets of $105 million at June 30, 2022 and $187 million at Dec. 31, 2021.

(b) Includes VMEs with liabilities of $1 million at June 30, 2022 and $2 million at Dec. 31, 2021.

(c) Includes VMEs with nonredeemable noncontrolling interests of $7 million at June 30, 2022 and $43 million at Dec. 31, 2021.

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 June 30, 2022 and Dec. 31, 2021, the following assets and liabilities related to the VIEs where we are not the primary beneficiary were included in our consolidated balance sheets 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	**June 30, 2022**			Dec. 31, 2021		
(in millions)	Assets	Liabilities	Maximum loss exposure	Assets	Liabilities	Maximum loss exposure
Securities – Available-for-sale *(a)*	**$ 162**	**$ —**	**$ 162**	$ 189	$ —	$ 189
Other	**2,384**	**623**	**3,022**	2,385	543	2,946

(a) Includes investments in the Company's sponsored CLOs.

Note 12–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 June 30, 2022 and Dec. 31, 2021.

Preferred stock summary *(a)*		Total shares issued and outstanding		Carrying value *(b)* *(in millions)*	
	Per annum dividend rate	**June 30, 2022**	Dec. 31, 2021	**June 30, 2022**	Dec. 31, 2021
Series A	Greater of (i) three-month LIBOR plus 0.565% for the related distribution period or (ii) 4.000%	**5,001**	5,001	**$ 500**	$ 500
Series D	4.500% to but excluding June 20, 2023, then a floating rate equal to the three-month LIBOR plus 2.46%	**5,000**	5,000	**494**	494
Series F	4.625% to but excluding Sept. 20, 2026, then a floating rate equal to the three-month LIBOR 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.

The table below presents the Parent's preferred dividends.

Preferred dividends *(dollars in millions, except per share amounts)*	Depositary shares per share	**2Q22**		1Q22		2Q21		**YTD22**		YTD21	
		Per share	Total dividend	Per share	Total dividend	Per share	Total dividend	Per share	Total dividend	Per share	Total dividend
Series A	100 *(a)*	**$ 1,022.22**	**$ 5**	$ 1,011.11	$ 5	$ 1,011.11	$ 5	**$ 2,033.33**	**$ 10**	$ 2,022.22	$ 10
Series D	100	**2,250.00**	**11**	N/A	—	2,250.00	11	**2,250.00**	**11**	2,250.00	11
Series E	100	**N/A**	**N/A**	N/A	N/A	911.68	9	**N/A**	**N/A**	1,836.50	18
Series F	100	**N/A**	**—**	2,312.50	23	N/A	—	**2,312.50**	**23**	2,312.50	23
Series G	100	**N/A**	**—**	2,350.00	24	N/A	—	**2,350.00**	**24**	2,350.00	24
Series H	100	**925.00**	**6**	925.00	5	925.00	6	**1,850.00**	**11**	2,333.06	14
Series I	100	**937.50**	**12**	1,270.83	17	N/A	N/A	**2,208.33**	**29**	N/A	N/A
Total			**$ 34**		$ 74		$ 31		**$ 108**		$ 100

(a) Represents Normal Preferred Capital Securities.
N/A – Not applicable.

In December 2021, all of the outstanding shares of the Series E preferred stock were redeemed.

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 the preferred stock, see Note 15 of the Notes to Consolidated Financial Statements in our 2021 Annual Report.

Note 13–Other comprehensive income (loss)

Components of other comprehensive income (loss)	Quarter ended								
	June 30, 2022			March 31, 2022			June 30, 2021		
(in millions)	Pre-tax amount	Tax (expense) benefit	After-tax amount	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)*	**$ (436)**	**$ (119)**	**$ (555)**	$ (120)	$ (33)	$ (153)	$ 38	$ 13	$ 51
Total foreign currency translation	**(436)**	**(119)**	**(555)**	(120)	(33)	(153)	38	13	51
Unrealized (loss) gain on assets available-for-sale:									
Unrealized (loss) gain arising during period	**(1,167)**	**285**	**(882)**	(2,021)	490	(1,531)	106	(29)	77
Reclassification adjustment *(b)*	**—**	**—**	**—**	(4)	1	(3)	(2)	1	(1)
Net unrealized (loss) gain on assets available-for-sale	**(1,167)**	**285**	**(882)**	(2,025)	491	(1,534)	104	(28)	76
Defined benefit plans:									
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost *(b)*	**17**	**(4)**	**13**	17	1	18	27	(2)	25
Total defined benefit plans	**17**	**(4)**	**13**	17	1	18	27	(2)	25
Unrealized (loss) on cash flow hedges:									
Unrealized hedge (loss) arising during period	**(8)**	**2**	**(6)**	(3)	1	(2)	—	—	—
Reclassification of net loss (gain) to net income:									
Foreign exchange ("FX") contracts – staff expense	**1**	**—**	**1**	—	—	—	(4)	1	(3)
Total reclassifications to net income	**1**	**—**	**1**	—	—	—	(4)	1	(3)
Net unrealized (loss) on cash flow hedges	**(7)**	**2**	**(5)**	(3)	1	(2)	(4)	1	(3)
Total other comprehensive (loss) income	**$ (1,593)**	**$ 164**	**$ (1,429)**	$ (2,131)	$ 460	$ (1,671)	$ 165	$ (16)	$ 149

(a) Includes the impact of hedges of net investments in foreign subsidiaries. See Note 16 for additional information.

(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains 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					
	June 30, 2022			June 30, 2021		
(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)*	**$ (556)**	**$ (152)**	**$ (708)**	$ (89)	$ (10)	$ (99)
Total foreign currency translation	**(556)**	**(152)**	**(708)**	(89)	(10)	(99)
Unrealized (loss) on assets available-for-sale:						
Unrealized (loss) arising during period	**(3,188)**	**775**	**(2,413)**	(820)	194	(626)
Reclassification adjustment *(b)*	**(4)**	**1**	**(3)**	(2)	1	(1)
Net unrealized (loss) on assets available-for-sale	**(3,192)**	**776**	**(2,416)**	(822)	195	(627)
Defined benefit plans:						
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost *(b)*	**34**	**(3)**	**31**	55	(8)	47
Total defined benefit plans	**34**	**(3)**	**31**	55	(8)	47
Unrealized (loss) on cash flow hedges:						
Unrealized hedge (loss) gain arising during period	**(11)**	**3**	**(8)**	1	—	1
Reclassification of net losses (gains) to net income:						
FX contracts – staff expense	**1**	**—**	**1**	(9)	2	(7)
Total reclassifications to net income	**1**	**—**	**1**	(9)	2	(7)
Net unrealized (loss) on cash flow hedges	**(10)**	**3**	**(7)**	(8)	2	(6)
Total other comprehensive (loss)	**$ (3,724)**	**$ 624**	**$ (3,100)**	$ (864)	$ 179	$ (685)

(a) Includes the impact of hedges of net investments in foreign subsidiaries. See Note 16 for additional information.

(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains 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 14–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 2021 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 June 30, 2022 and Dec. 31, 2021, 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 measured at fair value on a recurring basis at June 30, 2022 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Available-for-sale securities:					
U.S. Treasury	$ 30,467	$ —	$ —	$ —	$ 30,467
Sovereign debt/sovereign guaranteed	4,933	6,159	—	—	11,092
Agency RMBS	—	8,303	—	—	8,303
Agency commercial MBS	—	8,179	—	—	8,179
Supranational	—	7,548	—	—	7,548
Foreign covered bonds	—	5,828	—	—	5,828
CLOs	—	5,097	—	—	5,097
Non-agency commercial MBS	—	3,003	—	—	3,003
Foreign government agencies	—	2,536	—	—	2,536
Non-agency RMBS	—	2,311	—	—	2,311
State and political subdivisions	—	2,023	—	—	2,023
U.S. government agencies	—	1,925	—	—	1,925
Other ABS	—	1,668	—	—	1,668
Corporate bonds	—	1,297	—	—	1,297
Other debt securities	—	1	—	—	1
Total available-for-sale securities	35,400	55,878	—	—	91,278
Trading assets:					
Debt instruments	1,059	1,203	—	—	2,262
Equity instruments	5,428	—	—	—	5,428
Derivative assets not designated as hedging:					
Interest rate	18	1,632	—	(920)	730
Foreign exchange	—	10,555	—	(8,387)	2,168
Equity and other contracts	3	240	—	(72)	171
Total derivative assets not designated as hedging	21	12,427	—	(9,379)	3,069
Total trading assets	6,508	13,630	—	(9,379)	10,759
Other assets:					
Derivative assets designated as hedging:					
Interest rate	—	57	—	—	57
Foreign exchange	—	468	—	—	468
Total derivative assets designated as hedging	—	525	—	—	525
Other assets *(b)*	285	235	—	—	520
Total other assets	285	760	—	—	1,045
Assets measured at NAV *(b)*					223
Total assets	**$ 42,193**	**$ 70,268**	**$ —**	**$ (9,379)**	**$ 103,305**
Percentage of total assets prior to netting	38 %	62 %	— %		

Liabilities measured at fair value on a recurring basis at June 30, 2022 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Trading liabilities:					
Debt instruments	$ 3,067	$ 38	$ —	$ —	$ 3,105
Equity instruments	90	—	—	—	90
Derivative liabilities not designated as hedging:					
Interest rate	7	1,766	—	(1,255)	518
Foreign exchange	—	10,426	—	(8,563)	1,863
Equity and other contracts	1	54	—	(36)	19
Total derivative liabilities not designated as hedging	8	12,246	—	(9,854)	2,400
Total trading liabilities	3,165	12,284	—	(9,854)	5,595
Other liabilities:					
Derivative liabilities designated as hedging:					
Interest rate	—	3	—	—	3
Foreign exchange	—	27	—	—	27
Total derivative liabilities designated as hedging	—	30	—	—	30
Other liabilities	—	1	—	—	1
Total other liabilities	—	31	—	—	31
Total liabilities	**$ 3,165**	**$ 12,315**	**$ —**	**$ (9,854)**	**$ 5,626**
Percentage of total liabilities prior to netting	20 %	80 %	— %		

(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, 2021 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Assets					
Available-for-sale securities:					
U.S. Treasury	$ 29,409	$ —	$ —	$ —	$ 29,409
Agency RMBS	—	14,530	—	—	14,530
Sovereign debt/sovereign guaranteed	6,017	7,362	—	—	13,379
Agency commercial MBS	—	8,405	—	—	8,405
Supranational	—	7,573	—	—	7,573
Foreign covered bonds	—	6,238	—	—	6,238
CLOs	—	4,439	—	—	4,439
Non-agency commercial MBS	—	3,125	—	—	3,125
Non-agency RMBS	—	2,748	—	—	2,748
Foreign government agencies	—	2,686	—	—	2,686
U.S. government agencies	—	2,536	—	—	2,536
State and political subdivisions	—	2,514	—	—	2,514
Other ABS	—	2,190	—	—	2,190
Corporate bonds	—	2,066	—	—	2,066
Other debt securities	—	1	—	—	1
Total available-for-sale securities	35,426	66,413	—	—	101,839
Trading assets:					
Debt instruments	1,447	2,750	—	—	4,197
Equity instruments	9,766	—	—	—	9,766
Derivative assets not designated as hedging:					
Interest rate	6	3,253	—	(1,424)	1,835
Foreign exchange	—	6,279	—	(5,501)	778
Equity and other contracts	—	49	—	(48)	1
Total derivative assets not designated as hedging	6	9,581	—	(6,973)	2,614
Total trading assets	11,219	12,331	—	(6,973)	16,577
Other assets*:*					
Derivative assets designated as hedging:					
Foreign exchange	—	206	—	—	206
Total derivative assets designated as hedging	—	206	—	—	206
Other assets *(b)*	438	325	—	—	763
Total other assets	438	531	—	—	969
Assets measured at NAV *(b)*					218
Total assets	$ 47,083	$ 79,275	$ —	$ (6,973)	$ 119,603
Percentage of total assets prior to netting	37 %	63 %	— %		
Liabilities					
Trading liabilities:					
Debt instruments	$ 2,452	$ 46	$ —	$ —	$ 2,498
Equity instruments	40	—	—	—	40
Derivative liabilities not designated as hedging:					
Interest rate	1	2,834	—	(2,028)	807
Foreign exchange	—	6,215	—	(4,111)	2,104
Equity and other contracts	5	211	—	(196)	20
Total derivative liabilities not designated as hedging	6	9,260	—	(6,335)	2,931
Total trading liabilities	2,498	9,306	—	(6,335)	5,469
Other liabilities:					
Derivative liabilities designated as hedging:					
Interest rate	—	453	—	—	453
Foreign exchange	—	40	—	—	40
Total derivative liabilities designated as hedging	—	493	—	—	493
Other liabilities	1	2	—	—	3
Total other liabilities	1	495	—	—	496
Total liabilities	$ 2,499	$ 9,801	$ —	$ (6,335)	$ 5,965
Percentage of total liabilities prior to netting	20 %	80 %	— %		

(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 *(dollars in millions)*	June 30, 2022							Dec. 31, 2021						
		Ratings *(a)*						Ratings *(a)*						
	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:														
2008-2022	$ 1,970	100 %	— %	— %	— %	— %		$ 2,190	100 %	— %	— %	— %	— %	
2007	59	—	6	—	50	44		114	—	4	—	39	57	
2006	100	—	34	—	50	16		181	—	24	—	33	43	
2005	102	5	4	1	41	49		167	3	5	1	37	54	
2004 and earlier	80	15	9	5	57	14		96	16	10	5	57	12	
Total non-agency RMBS	$ 2,311	86 %	2 %	— %	7 %	5 %		$ 2,748	81 %	2 %	— %	8 %	9 %	
Non-agency commercial MBS originated in:														
2009-2022	$ 3,003	100 %	— %	— %	— %	— %		$ 3,125	100 %	— %	— %	— %	— %	
Foreign covered bonds:														
Canada	$ 2,307	100 %	— %	— %	— %	— %		$ 2,332	100 %	— %	— %	— %	— %	
UK	1,168	100	—	—	—	—		1,141	100	—	—	—	—	
Australia	648	100	—	—	—	—		762	100	—	—	—	—	
Germany	593	100	—	—	—	—		638	100	—	—	—	—	
Norway	385	100	—	—	—	—		457	100	—	—	—	—	
Other	727	100	—	—	—	—		908	100	—	—	—	—	
Total foreign covered bonds	$ 5,828	100 %	— %	— %	— %	— %		$ 6,238	100 %	— %	— %	— %	— %	
Sovereign debt/sovereign guaranteed:														
Germany	$ 3,077	100 %	— %	— %	— %	— %		$ 3,585	100 %	— %	— %	— %	— %	
UK	1,879	100	—	—	—	—		1,969	100	—	—	—	—	
France	1,532	100	—	—	—	—		1,921	100	—	—	—	—	
Singapore	1,184	100	—	—	—	—		1,018	100	—	—	—	—	
Italy	773	—	—	100	—	—		1,382	—	—	100	—	—	
Canada	613	100	—	—	—	—		630	100	—	—	—	—	
Spain	470	—	18	82	—	—		782	—	8	92	—	—	
Hong Kong	448	100	—	—	—	—		531	100	—	—	—	—	
Japan	412	—	100	—	—	—		363	—	100	—	—	—	
Other *(c)*	704	78	5	—	17	—		1,198	71	19	—	10	—	
Total sovereign debt/sovereign guaranteed	$ 11,092	84 %	5 %	10 %	1 %	— %		$ 13,379	78 %	5 %	16 %	1 %	— %	
Foreign government agencies:														
Canada	$ 640	83 %	17 %	— %	— %	— %		$ 566	78 %	22 %	— %	— %	— %	
Norway	478	100	—	—	—	—		269	100	—	—	—	—	
Netherlands	406	100	—	—	—	—		765	100	—	—	—	—	
Sweden	280	100	—	—	—	—		252	100	—	—	—	—	
France	249	100	—	—	—	—		301	100	—	—	—	—	
Finland	248	100	—	—	—	—		267	100	—	—	—	—	
Other	235	64	36	—	—	—		266	64	36	—	—	—	
Total foreign government agencies	$ 2,536	92 %	8 %	— %	— %	— %		$ 2,686	92 %	8 %	— %	— %	— %	

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

(b) At June 30, 2022 and Dec. 31, 2021, 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 $120 million at June 30, 2022 and $119 million at Dec. 31, 2021.

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. Examples would be the recording of an impairment of an asset and non-readily marketable equity securities carried at cost with upward or downward adjustments.

The following table presents the financial instruments carried on the consolidated balance sheet by caption and level in the fair value hierarchy as of June 30, 2022 and Dec. 31, 2021.

Assets measured at fair value on a nonrecurring basis	**June 30, 2022**				Dec. 31, 2021			
(in millions)	Level 1	Level 2	Level 3	Total carrying value	Level 1	Level 2	Level 3	Total carrying value
Loans *(a)*	**$ — $**	**37 $**	**— $**	**37**	$ — $	42 $	— $	42
Other assets *(b)*	**—**	**426**	**—**	**426**	—	265	—	265
Total assets at fair value on a nonrecurring basis	**$ — $**	**463 $**	**— $**	**463**	$ — $	307 $	— $	307

(a) The fair value of these loans was unchanged in the second quarter of 2022 and the fourth quarter of 2021, 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 June 30, 2022 and Dec. 31, 2021, by caption on the consolidated balance sheet and by the valuation hierarchy.

Summary of financial instruments	**June 30, 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	$ — $	125,372 $	— $	125,372 $	125,372
Interest-bearing deposits with banks	—	16,645	—	16,645	16,639
Federal funds sold and securities purchased under resale agreements	—	22,940	—	22,940	22,940
Securities held-to-maturity	11,823	43,304	—	55,127	59,566
Loans *(a)*	—	68,107	—	68,107	68,464
Other financial assets	5,185	1,484	—	6,669	6,669
Total	**$ 17,008 $**	**277,852 $**	**— $**	**294,860 $**	**299,650**
Liabilities:					
Noninterest-bearing deposits	$ — $	106,060 $	— $	106,060 $	106,060
Interest-bearing deposits	—	216,221	—	216,221	219,753
Federal funds purchased and securities sold under repurchase agreements	—	11,434	—	11,434	11,434
Payables to customers and broker-dealers	—	25,769	—	25,769	25,769
Borrowings	—	768	—	768	768
Long-term debt	—	26,531	—	26,531	27,610
Total	**$ — $**	**386,783 $**	**— $**	**386,783 $**	**391,394**

(a) Does not include the leasing portfolio.

Summary of financial instruments	Dec. 31, 2021				
(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	$ —	$ 102,467	$ —	$ 102,467	$ 102,467
Interest-bearing deposits with banks	—	16,636	—	16,636	16,630
Federal funds sold and securities purchased under resale agreements	—	29,607	—	29,607	29,607
Securities held-to-maturity	12,488	44,287	—	56,775	56,866
Loans *(a)*	—	67,026	—	67,026	66,860
Other financial assets	6,061	1,239	—	7,300	7,300
Total	$ 18,549	$ 261,262	$ —	$ 279,811	$ 279,730
Liabilities:					
Noninterest-bearing deposits	$ —	$ 93,695	$ —	$ 93,695	$ 93,695
Interest-bearing deposits	—	224,665	—	224,665	225,999
Federal funds purchased and securities sold under repurchase agreements	—	11,566	—	11,566	11,566
Payables to customers and broker-dealers	—	25,150	—	25,150	25,150
Borrowings	—	956	—	956	956
Long-term debt	—	26,701	—	26,701	25,931
Total	$ —	$ 382,733	$ —	$ 382,733	$ 383,297

(a) Does not include the leasing portfolio.

Note 15–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)	**June 30, 2022**	Dec. 31, 2021
Assets of consolidated investment management funds:		
Trading assets	**$ 191**	$ 443
Other assets	**5**	19
Total assets of consolidated investment management funds	**$ 196**	$ 462
Liabilities of consolidated investment management funds:		
Other liabilities	**1**	3
Total liabilities of consolidated investment management funds	**$ 1**	$ 3

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 in the consolidated income statement.

We elected the fair value option on $15 million of subordinated notes associated with certain equity investments. The fair value of these of subordinated notes was $15 million at June 30, 2022 and Dec. 31, 2021. The subordinated notes were valued using observable market inputs and included in Level 2 of the valuation hierarchy.

Note 16–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 second quarter of 2022.

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, state and political subdivisions, corporate bonds and foreign covered bonds. At June 30, 2022, $30.4 billion par value of available-for-sale securities were hedged with interest rate swaps designated as fair value hedges that had notional values of $30.4 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 June 30, 2022, $22.2 billion par value of debt was hedged with interest rate swaps designated as fair value hedges that had notional values of $22.2 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 12 months or less as cash flow hedges to hedge our foreign exchange exposure to currencies such as Indian rupee, British pound, euro, Hong Kong dollar, Polish zloty and Singapore dollar used in revenue and expense transactions for entities that have the U.S. dollar as their functional currency. As of June 30, 2022, the hedged forecasted foreign currency transactions and designated forward foreign exchange contract hedges were $343 million (notional), with a net pre-tax loss of $8 million recorded in accumulated other comprehensive income (“OCI”). This loss will be reclassified to earnings over the next 12 months.

We also utilize forward foreign exchange contracts as fair value hedges of the foreign exchange risk associated with available-for-sale securities. Forward points are designated as an excluded component and amortized into earnings over the hedge period. The unamortized derivative value associated with the excluded component is recognized in accumulated OCI. At June 30, 2022, $125 million par value of available-for-sale securities was hedged with foreign currency forward contracts that had a notional value of $125 million.

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 June 30, 2022, forward foreign exchange contracts with notional amounts totaling $8.6 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 June 30, 2022, 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)	**2Q22**	1Q22	2Q21	**YTD22**	YTD21
Interest rate fair value hedges of available-for-sale securities						
Derivative	Interest revenue	**$ 866**	$ 1,484	$ (325)	**$ 2,350**	$ 466
Hedged item	Interest revenue	**(858)**	(1,480)	322	**(2,338)**	(463)
Interest rate fair value hedges of long-term debt						
Derivative	Interest expense	**(292)**	(741)	22	**(1,033)**	(331)
Hedged item	Interest expense	**291**	740	(21)	**1,031**	330
Foreign exchange fair value hedges of available-for-sale securities						
Derivative *(a)*	Foreign exchange revenue	**(1)**	(1)	(1)	**(2)**	7
Hedged item	Foreign exchange revenue	**2**	1	1	**3**	(6)
Cash flow hedges of forecasted FX exposures						
(Loss) gain reclassified from OCI into income	Staff expense	**(1)**	—	4	**(1)**	9
Gain recognized in the consolidated income statement due to fair value and cash flow hedging relationships		**$ 7**	$ 3	$ 2	**$ 10**	$ 12

(a) Includes gains of $1 million in the second quarter of 2022, less than $1 million in the first quarter of 2022 and second quarter of 2021, $1 million in the first six months of 2022 and less than $1 million in the first six months of 2021 associated with the amortization of the excluded component. At June 30, 2022 and Dec. 31, 2021, the remaining accumulated OCI balance associated with the excluded component was de minimis.

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	**2Q22**	1Q22	2Q21	**YTD22**	YTD21		**2Q22**	1Q22	2Q21	**YTD22**	YTD21
FX contracts	**$ 505**	$ 143	$ (62)	**$ 648**	$ 20	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)	**June 30, 2022**	Dec. 31, 2021	**June 30, 2022**	Dec. 31, 2021
Available-for-sale securities *(b)(c)*	**$ 30,383**	$ 24,400	**$ (1,764)**	$ 590
Long-term debt	**$ 21,416**	$ 22,447	**$ (833)**	$ 183

(a) Includes $104 million and $165 million of basis adjustment increases on discontinued hedges associated with available-for-sale securities at June 30, 2022 and Dec. 31, 2021, respectively, and $56 million and $72 million of basis adjustment decreases on discontinued hedges associated with long-term debt at June 30, 2022 and Dec. 31, 2021, respectively.

(b) Excludes hedged items where only foreign currency risk is the designated hedged risk, as the basis adjustments related to foreign currency hedges will not reverse through the consolidated income statement in future periods. The carrying amount excluded for available-for-sale securities was $125 million at June 30, 2022 and $141 million at Dec. 31, 2021.

(c) 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)	**June 30, 2022**	Dec. 31, 2021	**June 30, 2022**	Dec. 31, 2021	**June 30, 2022**	Dec. 31, 2021
Derivatives designated as hedging instruments: *(a)(b)*						
Interest rate contracts	**$ 52,621**	$ 46,717	**$ 57**	$ —	**$ 3**	$ 453
Foreign exchange contracts	**9,074**	10,367	**468**	206	**27**	40
Total derivatives designated as hedging instruments			**$ 525**	$ 206	**$ 30**	$ 493
Derivatives not designated as hedging instruments: *(b)(c)*						
Interest rate contracts	**$ 233,360**	$ 193,747	**$ 1,650**	$ 3,259	**$ 1,773**	$ 2,835
Foreign exchange contracts	**936,363**	915,694	**10,555**	6,279	**10,426**	6,215
Equity contracts	**5,419**	9,659	**243**	49	**52**	211
Credit contracts	**255**	190	**—**	—	**3**	5
Total derivatives not designated as hedging instruments			**$ 12,448**	$ 9,587	**$ 12,254**	$ 9,266
Total derivatives fair value *(d)*			**$ 12,973**	$ 9,793	**$ 12,284**	$ 9,759
Effect of master netting agreements *(e)*			**(9,379)**	(6,973)	**(9,854)**	(6,335)
Fair value after effect of master netting agreements			**$ 3,594**	$ 2,820	**$ 2,430**	$ 3,424

(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 $1,965 million and $2,440 million, respectively, at June 30, 2022, and $1,424 million and $786 million, respectively, at Dec. 31, 2021.

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)	**2Q22**	1Q22	2Q21	**YTD22**	YTD21
Foreign exchange revenue	**$ 222**	$ 207	$ 184	**$ 429**	$ 415
Other trading revenue (loss)	**45**	5	(1)	**50**	(8)

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 a loss of $30 million in the second quarter of 2022, a gain of $13 million in the second quarter of 2021, losses of $13 million in the first quarter of 2022 and $43 million in the first six months of 2022, and a gain of $23 million in the first six months of 2021.

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 14.

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)	**June 30, 2022**	Dec. 31, 2021
Aggregate fair value of OTC derivatives in net liability positions *(a)*	**$ 3,603**	$ 3,606
Collateral posted	**$ 4,210**	$ 5,388

(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)*	**June 30, 2022**	Dec. 31, 2021
If The Bank of New York Mellon's rating changed to: *(b)*		
A3/A-	**$ 138**	$ 56
Baa2/BBB	**$ 463**	$ 563
Ba1/BB+	**$ 1,589**	$ 1,778

(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 June 30, 2022 and Dec. 31, 2021, existing collateral arrangements would have required us to post additional collateral of $146 million and $71 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 June 30, 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	**$ 1,227**	**$ 920**		**$ 307**	**$ 69**	**$ —**	**$ 238**
Foreign exchange contracts	**10,402**	**8,387**		**2,015**	**59**	**—**	**1,956**
Equity and other contracts	**228**	**72**		**156**	**41**	**—**	**115**
Total derivatives subject to netting arrangements	**11,857**	**9,379**		**2,478**	**169**	**—**	**2,309**
Total derivatives not subject to netting arrangements	**1,116**	**—**		**1,116**	**—**	**—**	**1,116**
Total derivatives	**12,973**	**9,379**		**3,594**	**169**	**—**	**3,425**
Reverse repurchase agreements	**51,894**	**37,436**	***(b)***	**14,458**	**14,458**	**—**	**—**
Securities borrowing	**8,482**	**—**		**8,482**	**8,082**	**—**	**400**
Total	**$ 73,349**	**$ 46,815**		**$ 26,534**	**$ 22,709**	**$ —**	**$ 3,825**

(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, 2021

(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	$ 2,132	$ 1,424		$ 708	$ 206	$ —	$ 502
Foreign exchange contracts	6,122	5,501		621	69	—	552
Equity and other contracts	48	48		—	—	—	—
Total derivatives subject to netting arrangements	8,302	6,973		1,329	275	—	1,054
Total derivatives not subject to netting arrangements	1,491	—		1,491	—	—	1,491
Total derivatives	9,793	6,973		2,820	275	—	2,545
Reverse repurchase agreements	72,661	54,709	*(b)*	17,952	17,922	—	30
Securities borrowing	11,655	—		11,655	11,036	—	619
Total	$ 94,109	$ 61,682		$ 32,427	$ 29,233	$ —	$ 3,194

(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 June 30, 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	**$ 1,639**	**$ 1,255**		**$ 384**	**$ 103**	**$ —**	**$ 281**
Foreign exchange contracts	**9,723**	**8,563**		**1,160**	**143**	**—**	**1,017**
Equity and other contracts	**52**	**36**		**16**	**—**	**—**	**16**
Total derivatives subject to netting arrangements	**11,414**	**9,854**		**1,560**	**246**	**—**	**1,314**
Total derivatives not subject to netting arrangements	**870**	**—**		**870**	**—**	**—**	**870**
Total derivatives	**12,284**	**9,854**		**2,430**	**246**	**—**	**2,184**
Repurchase agreements	**47,048**	**37,436**	***(b)***	**9,612**	**9,597**	**9**	**6**
Securities lending	**1,822**	**—**		**1,822**	**1,723**	**—**	**99**
Total	**$ 61,154**	**$ 47,290**		**$ 13,864**	**$ 11,566**	**$ 9**	**$ 2,289**

(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, 2021

(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	$ 3,263	$ 2,028		$ 1,235	$ 1,197	$ —	$ 38
Foreign exchange contracts	5,619	4,111		1,508	29	—	1,479
Equity and other contracts	211	196		15	—	—	15
Total derivatives subject to netting arrangements	9,093	6,335		2,758	1,226	—	1,532
Total derivatives not subject to netting arrangements	666	—		666	—	—	666
Total derivatives	9,759	6,335		3,424	1,226	—	2,198
Repurchase agreements	64,734	54,709	*(b)*	10,025	10,025	—	—
Securities lending	1,541	—		1,541	1,478	—	63
Total	$ 76,034	$ 61,044		$ 14,990	$ 12,729	$ —	$ 2,261

(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

	June 30, 2022					Dec. 31, 2021				
	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	**$ 39,367**	**$ —**	**$ 1,358**	**$ 83**	**$ 40,808**	$ 56,556	$ 304	$ 450	$ —	$ 57,310
Agency RMBS	**1,401**	**1**	**—**	**—**	**1,402**	2,795	1	—	—	2,796
Corporate bonds	**58**	**180**	**743**	**227**	**1,208**	97	77	870	270	1,314
Sovereign debt/sovereign guaranteed	**695**	**223**	**—**	**—**	**918**	160	—	—	—	160
U.S. government agencies	**430**	**—**	**—**	**—**	**430**	503	—	—	—	503
State and political subdivisions	**17**	**39**	**179**	**64**	**299**	44	16	630	155	845
Other debt securities	**7**	**59**	**17**	**1**	**84**	—	30	245	—	275
Equity securities	**—**	**121**	**1,778**	**—**	**1,899**	—	276	1,255	—	1,531
Total	**$ 41,975**	**$ 623**	**$ 4,075**	**$ 375**	**$ 47,048**	$ 60,155	$ 704	$ 3,450	$ 425	$ 64,734
Securities lending:										
Agency RMBS	**$ 138**	**$ —**	**$ —**	**$ —**	**$ 138**	$ 152	$ —	$ —	$ —	$ 152
Other debt securities	**71**	**—**	**—**	**—**	**71**	88	—	—	—	88
Equity securities	**1,613**	**—**	**—**	**—**	**1,613**	1,301	—	—	—	1,301
Total	**$ 1,822**	**$ —**	**$ —**	**$ —**	**$ 1,822**	$ 1,541	$ —	$ —	$ —	$ 1,541
Total secured borrowings	**$ 43,797**	**$ 623**	**$ 4,075**	**$ 375**	**$ 48,870**	$ 61,696	$ 704	$ 3,450	$ 425	$ 66,275

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 17–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)*	**June 30, 2022**	Dec. 31, 2021
Lending commitments	**$ 48,976**	$ 46,183
Standby letters of credit ("SBLC") *(a)*	**2,029**	1,971
Commercial letters of credit	**144**	56
Securities lending indemnifications *(b)(c)*	**491,439**	487,298

(a) Net of participations totaling $141 million at June 30, 2022 and $128 million at Dec. 31, 2021.

(b) Excludes the indemnification for securities for which BNY Mellon acts as an agent on behalf of CIBC Mellon clients, which totaled $67 billion at June 30, 2022 and $67 billion at Dec. 31, 2021.

(c) Includes cash collateral, invested in indemnified repurchase agreements, held by us as securities lending agent of $53 billion at June 30, 2022 and $48 billion at Dec. 31, 2021.

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: $28.2 billion in less than one year, $20.0 billion in one to five years and $0.8 billion over five years.

SBLCs principally support obligations of corporate clients and were collateralized with cash and securities of $162 million at June 30, 2022 and $172 million at Dec. 31, 2021. At June 30, 2022, $1.3 billion of the SBLCs will expire within one year, $736 million in one to five years and none 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	**June 30, 2022**	Dec. 31, 2021
Investment grade	**77 %**	85 %
Non-investment grade	**23 %**	15 %

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 $144 million at June 30, 2022 and $56 million at Dec. 31, 2021.

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 $62 million at June 30, 2022 and $45 million at Dec. 31, 2021.

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 $516 billion at June 30, 2022 and $511 billion at Dec. 31, 2021.

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 June 30, 2022 and Dec. 31, 2021, $67 billion of borrowings at CIBC Mellon, for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, were secured by collateral of $71 billion. 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 June 30, 2022, we had $921 million of unsettled repurchase agreements and $4.1 billion of unsettled reverse repurchase agreements. At Dec. 31, 2021, we had $2.6 billion of unsettled repurchase agreements and $9.1 billion of unsettled reverse repurchase agreements.

Industry concentrations

We have significant industry concentrations related to credit exposure at June 30, 2022. The tables below present our credit exposure in the financial institutions and commercial portfolios.

Financial institutions portfolio exposure *(in billions)*	**June 30, 2022**		
	Loans	Unfunded commitments	Total exposure
Securities industry	$ 1.6	$ 18.0	$ 19.6
Asset managers	2.0	7.5	9.5
Banks	6.4	1.7	8.1
Insurance	0.1	3.6	3.7
Government	0.1	0.2	0.3
Other	0.4	1.2	1.6
Total	**$ 10.6**	**$ 32.2**	**$ 42.8**

Commercial portfolio exposure *(in billions)*	**June 30, 2022**		
	Loans	Unfunded commitments	Total exposure
Manufacturing	$ 0.8	$ 4.0	$ 4.8
Services and other	1.2	3.1	4.3
Energy and utilities	0.3	3.8	4.1
Media and telecom	0.1	0.7	0.8
Total	**$ 2.4**	**$ 11.6**	**$ 14.0**

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 16 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 June 30, 2022 and Dec. 31, 2021, 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 June 30, 2022 and Dec. 31, 2021, 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 $550 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

The Bank of New York 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. Three actions commenced in December 2014, December 2015 and February 2017 are pending in New York federal court. In New York state court, actions commenced in May 2016; September 2021; and October 2021, December 2021 and February 2022 (three related cases) are pending.

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. 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 and that matter has concluded.

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 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. DTVM and Ativos intend to file a further appeal. 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. In addition, the Tribunal de Contas da União ("TCU"), an administrative tribunal, has initiated three 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 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 challenging the decision rendered by the Arbitration Court with respect to its jurisdiction over the case. 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; they intend to appeal. 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, we received secondary liability notices from the German tax authorities totaling approximately $150 million 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.

Note 18–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 2021 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 reclassification or organization changes in the second quarter of 2022.

The accounting policies of the businesses are the same as those described in Note 1 of the Notes to Consolidated Financial Statements in our 2021 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.
- 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 June 30, 2022 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	**$ 1,549**	**$ 974**	**$ 837**	*(a)*	**$ 75**	**$ 3,435**	*(a)*
Net interest revenue (expense)	**457**	**340**	**62**		**(35)**	**824**	
Total revenue	**2,006**	**1,314**	**899**	*(a)*	**40**	**4,259**	*(a)*
Provision for credit losses	**13**	**4**	**—**		**30**	**47**	
Noninterest expense	**1,656**	**702**	**691**		**63**	**3,112**	
Income (loss) before income taxes	**$ 337**	**$ 608**	**$ 208**	*(a)*	**$ (53)**	**$ 1,100**	*(a)*
Pre-tax operating margin *(b)*	**17 %**	**46 %**	**23 %**		**N/M**	**26 %**	
Average assets	**$ 219,797**	**$ 141,952**	**$ 33,668**		**$ 42,206**	**$ 437,623**	

(a) Total fee and other revenue, total revenue and income before taxes are net of loss attributable to noncontrolling interests related to consolidated investment management funds of $5 million.
(b) Income before income taxes divided by total revenue.
N/M – Not meaningful.

For the quarter ended March 31, 2022 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	$ 1,403	$ 906	$ 907	*(a)*	$ 20	$ 3,236	*(a)*
Net interest revenue (expense)	377	296	57		(32)	698	
Total revenue (loss)	1,780	1,202	964	*(a)*	(12)	3,934	*(a)*
Provision for credit losses	(10)	(2)	(3)		17	2	
Noninterest expense	1,510	708	755		33	3,006	
Income (loss) before income taxes	$ 280	$ 496	$ 212	*(a)*	$ (62)	$ 926	*(a)*
Pre-tax operating margin *(b)*	16 %	41 %	22 %		N/M	23 %	
Average assets	$ 220,889	$ 141,183	$ 35,629		$ 42,501	$ 440,202	

(a) Total fee and other revenue, total revenue and income before taxes are net of loss attributable to noncontrolling interests related to consolidated investment management funds of $8 million.
(b) Income before income taxes divided by total revenue.
N/M – Not meaningful.

For the quarter ended June 30, 2021 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	$ 1,433	$ 903	$ 952	*(a)*	$ 22	$ 3,310	*(a)*
Net interest revenue (expense)	354	289	47		(45)	645	
Total revenue (loss)	1,787	1,192	999	*(a)*	(23)	3,955	*(a)*
Provision for credit losses	(58)	(19)	(4)		(5)	(86)	
Noninterest expense	1,400	652	677		49	2,778	
Income (loss) before income taxes	$ 445	$ 559	$ 326	*(a)*	$ (67)	$ 1,263	*(a)*
Pre-tax operating margin *(b)*	25 %	47 %	33 %		N/M	32 %	
Average assets	$ 231,152	$ 144,297	$ 30,370		$ 46,510	$ 452,329	

(a) Total fee and other revenue, total revenue and income before taxes are net of income attributable to noncontrolling interests related to consolidated investment management funds of $5 million.
(b) Income before income taxes divided by total revenue.
N/M – Not meaningful.

For the six months ended June 30, 2022 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	**$ 2,952**	**$ 1,880**	**$ 1,744**	*(a)*	**$ 95**	**$ 6,671**	*(a)*
Net interest revenue (expense)	**834**	**636**	**119**		**(67)**	**1,522**	
Total revenue	**3,786**	**2,516**	**1,863**	*(a)*	**28**	**8,193**	*(a)*
Provision for credit losses	**3**	**2**	**(3)**		**47**	**49**	
Noninterest expense	**3,166**	**1,410**	**1,446**		**96**	**6,118**	
Income (loss) before income taxes	**$ 617**	**$ 1,104**	**$ 420**	*(a)*	**$ (115)**	**$ 2,026**	*(a)*
Pre-tax operating margin *(b)*	**16 %**	**44 %**	**23 %**		**N/M**	**25 %**	
Average assets	**$ 220,340**	**$ 141,570**	**$ 34,643**		**$ 42,371**	**$ 438,924**	

(a) Total fee and other revenue, total revenue and income before 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.

For the six months ended June 30, 2021 *(dollars in millions)*	Securities Services	Market and Wealth Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue (loss)	$ 2,864	$ 1,817	$ 1,895	*(a)*	$ (5)	$ 6,571	*(a)*
Net interest revenue (expense)	710	578	95		(83)	1,300	
Total revenue	3,574	2,395	1,990	*(a)*	(88)	7,871	*(a)*
Provision for credit losses	(108)	(48)	—		(13)	(169)	
Noninterest expense	2,819	1,334	1,386		90	5,629	
Income before income taxes	$ 863	$ 1,109	$ 604	*(a)*	$ (165)	$ 2,411	*(a)*
Pre-tax operating margin *(b)*	24 %	46 %	30 %		N/M	31 %	
Average assets	$ 229,620	$ 146,546	$ 31,213		$ 48,953	$ 456,332	

(a) Total fee and other revenue, total revenue and income before taxes are net of income attributable to noncontrolling interests related to consolidated investment management funds of $10 million.

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

N/M – Not meaningful.

Note 19–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)*	Six months ended June 30, **2022**	2021
Transfers from loans to other assets for other real estate owned	**$ 2**	$ 1
Change in assets of consolidated investment management funds	**266**	74
Change in liabilities of consolidated investment management funds	**2**	4
Change in nonredeemable noncontrolling interests of consolidated investment management funds	**189**	201
Securities purchased not settled	**323**	866
Securities sold not settled	**64**	100
Available-for-sale securities transferred to held-to-maturity	**906**	5,945
Premises and equipment/operating lease obligations	**67**	56

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 second quarter of 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Some statements in this Quarterly Report are forward-looking. 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, expenses, nonperforming assets, products, impacts of currency fluctuations, impacts of money market fee waivers, deposits, 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 and initiatives, including the potential effects of the coronavirus pandemic on any of the foregoing.

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 the war in Ukraine, as well as those discussed in "Risk Factors" in our 2021 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 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;
- changes in interest rates and yield curves have had, and may in the future continue to have, a material adverse effect on our profitability;
- we may experience losses on securities related to volatile and illiquid market conditions, reducing our earnings and impacting our financial condition;

- 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;
- the coronavirus pandemic is adversely affecting us and creates significant risks and uncertainties for our business, and the ultimate impact of the pandemic on us will depend on future developments, which are highly uncertain and cannot be predicted;
- 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; and
- 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.

Investors should consider all risk factors discussed in our 2021 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 17 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 and Use of Proceeds.

(c) The following table discloses repurchases of our common stock made in the second quarter of 2022. 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 – second quarter of 2022 *(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 June 30, 2022
April 2022	4	$ 53.27	4	$ 2,632
May 2022	1	53.47	1	2,632
June 2022	41	61.82	41	2,629
Second quarter of 2022 *(a)*	**46**	**$ 60.87**	**46**	**$ 2,629** *(b)*

(a) Includes 46 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. There were no open market repurchases in the second quarter of 2022.

(b) Represents the maximum value of the shares to be repurchased through the fourth quarter of 2022 under the share repurchase plan announced in June 2021 and includes shares repurchased in connection with employee benefit plans.

In June 2021, in connection with the Federal Reserve's release of the 2021 CCAR stress tests, we announced a share repurchase program approved by our Board of Directors providing for the repurchase of up to $6.0 billion of common shares beginning in the third quarter of 2021 and continuing through the fourth quarter of 2022. 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 6. Exhibits.

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

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 Feb. 12, 2018.	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 Feb. 13, 2018, 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 June 30, 2022. 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 June 30, 2022, 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: August 5, 2022

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, Thomas P. Gibbons, 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: August 5, 2022

/s/ Thomas P. Gibbons

Name: Thomas P. Gibbons
Title: Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Emily Portney, 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: August 5, 2022

/s/ Emily Portney

Name: Emily Portney
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 June 30, 2022 (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: August 5, 2022

/s/ Thomas P. Gibbons

Name: Thomas P. Gibbons
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 her knowledge, that BNY Mellon's Quarterly Report on Form 10-Q for the quarter ended June 30, 2022 (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: August 5, 2022

/s/ Emily Portney

Name: Emily Portney

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.