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

FORM 10-Q

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

For the Quarterly Period Ended September 30, 2020

or

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

Commission File No. 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
Depositary Shares, each representing 1/4,000th of a share of Series C Noncumulative Perpetual Preferred Stock	BK PrC	New York Stock Exchange
6.244% Fixed-to-Floating Rate Normal Preferred Capital Securities of Mellon Capital IV (fully and unconditionally guaranteed by The Bank of New York Mellon Corporation)	BK/P	New York Stock Exchange

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

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

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

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

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

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

As of Sept. 30, 2020, 886,135,805 shares of the registrant's common stock, $0.01 par value per share, were outstanding.

THE BANK OF NEW YORK MELLON CORPORATION

Third Quarter 2020 Form 10-Q
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The Bank of New York Mellon Corporation (and its subsidiaries)

Consolidated Financial Highlights (unaudited)

(dollars in millions, except per share amounts and unless otherwise noted)	Quarter ended			Year-to-date	
	Sept. 30, 2020	June 30, 2020	Sept. 30, 2019	**Sept. 30, 2020**	Sept. 30, 2019
Results applicable to common shareholders of The Bank of New York Mellon Corporation:					
Net income	**$ 876**	$ 901	$ 1,002	**$ 2,721**	$ 2,881
Basic earnings per share	**$ 0.98**	$ 1.01	$ 1.07	**$ 3.05**	$ 3.02
Diluted earnings per share	**$ 0.98**	$ 1.01	$ 1.07	**$ 3.04**	$ 3.01
Fee and other revenue	**$ 3,117**	$ 3,176	$ 3,128	**$ 9,625**	$ 9,272
Income from consolidated investment management funds	**27**	54	3	**43**	39
Net interest revenue	**703**	780	730	**2,297**	2,373
Total revenue	**$ 3,847**	$ 4,010	$ 3,861	**$ 11,965**	$ 11,684
Return on common equity *(annualized)*	**8.7 %**	9.4 %	10.6 %	**9.4 %**	10.3 %
Return on tangible common equity *(annualized)* – Non-GAAP *(a)*	**16.7 %**	18.5 %	21.4 %	**18.5 %**	21.1 %
Return on average assets *(annualized)*	**0.84 %**	0.87 %	1.13 %	**0.90 %**	1.12 %
Fee revenue as a percentage of total revenue	**81 %**	79 %	81 %	**80 %**	79 %
Non-U.S. revenue as a percentage of total revenue	**37 %**	36 %	37 %	**37 %**	36 %
Pre-tax operating margin	**30 %**	29 %	33 %	**30 %**	32 %
Net interest margin	**0.79 %**	0.88 %	0.99 %	**0.89 %**	1.10 %
Net interest margin on a fully taxable equivalent ("FTE") basis – Non-GAAP *(b)*	**0.79 %**	0.88 %	1.00 %	**0.89 %**	1.11 %
Assets under custody and/or administration ("AUC/A") at period end *(in trillions) (c)*	**$ 38.6**	$ 37.3	$ 35.8	**$ 38.6**	$ 35.8
Assets under management ("AUM") at period end *(in billions) (d)*	**$ 2,041**	$ 1,961	$ 1,881	**$ 2,041**	$ 1,881
Market value of securities on loan at period end *(in billions) (e)*	**$ 378**	$ 384	$ 362	**$ 378**	$ 362
Average common shares and equivalents outstanding *(in thousands)*:					
Basic	**889,499**	889,020	933,264	**891,050**	949,035
Diluted	**891,069**	890,561	935,677	**892,793**	951,876
Selected average balances:					
Interest-earning assets	**$ 357,634**	$ 357,562	$ 294,154	**$ 346,418**	$ 287,964
Total assets	**$ 414,865**	$ 415,359	$ 350,679	**$ 405,203**	$ 343,129
Interest-bearing deposits	**$ 211,500**	$ 210,643	$ 177,401	**$ 206,610**	$ 168,339
Noninterest-bearing deposits	**$ 67,610**	$ 72,411	$ 49,027	**$ 66,869**	$ 52,168
Long-term debt	**$ 26,511**	$ 28,122	$ 28,386	**$ 27,285**	$ 28,108
Preferred stock	**$ 4,532**	$ 4,010	$ 3,542	**$ 4,029**	$ 3,542
Total The Bank of New York Mellon Corporation common shareholders' equity	**$ 39,924**	$ 38,476	$ 37,597	**$ 38,693**	$ 37,392
Other information at period end:					
Cash dividends per common share	**$ 0.31**	$ 0.31	$ 0.31	**$ 0.93**	$ 0.87
Common dividend payout ratio	**32 %**	31 %	29 %	**31 %**	29 %
Common dividend yield *(annualized)*	**3.6 %**	3.2 %	2.7 %	**3.6 %**	2.6 %
Closing stock price per common share	**$ 34.34**	$ 38.65	$ 45.21	**$ 34.34**	$ 45.21
Market capitalization	**$ 30,430**	$ 34,239	$ 41,693	**$ 30,430**	$ 41,693
Book value per common share	**$ 45.58**	$ 44.21	$ 40.75	**$ 45.58**	$ 40.75
Tangible book value per common share – Non-GAAP *(a)*	**$ 24.60**	$ 23.31	$ 20.59	**$ 24.60**	$ 20.59
Full-time employees	**48,600**	48,300	48,700	**48,600**	48,700
Common shares outstanding *(in thousands)*	**886,136**	885,862	922,199	**886,136**	922,199

Consolidated Financial Highlights (unaudited) (continued)

Regulatory capital and other ratios	Sept. 30, 2020	June 30, 2020	Dec. 31, 2019
Average liquidity coverage ratio ("LCR")	**111 %**	112 %	120 %
Regulatory capital ratios: *(f)*			
Advanced:			
Common Equity Tier 1 ("CET1") ratio	**13.0 %**	12.6 %	11.5 %
Tier 1 capital ratio	**15.7**	15.4	13.7
Total capital ratio	**16.6**	16.3	14.4
Standardized:			
CET1 ratio	**13.5 %**	12.7 %	12.5 %
Tier 1 capital ratio	**16.3**	15.6	14.8
Total capital ratio	**17.4**	16.6	15.8
Tier 1 leverage ratio	**6.5 %**	6.2 %	6.6 %
Supplementary leverage ratio ("SLR") *(g)*	**8.5**	8.2	6.1
BNY Mellon shareholders' equity to total assets ratio	**10.5 %**	9.9 %	10.9 %
BNY Mellon common shareholders' equity to total assets ratio	**9.4**	8.9	9.9

(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 business and, to a lesser extent, the Clearance and Collateral Management, Issuer Services, Pershing and Wealth Management businesses. Includes the AUC/A of CIBC Mellon Global Securities Services Company ("CIBC Mellon"), a joint venture with the Canadian Imperial Bank of Commerce, of $1.4 trillion at Sept. 30, 2020, $1.3 trillion at June 30, 2020 and $1.4 trillion at Sept. 30, 2019.

(d) Excludes securities lending cash management assets and assets managed in the Investment Services business.

(e) Represents the total amount of securities on loan in our agency securities lending program managed by the Investment Services business. Excludes securities for which BNY Mellon acts as an agent on behalf of CIBC Mellon clients, which totaled $62 billion at Sept. 30, 2020 and June 30, 2020 and $66 billion at Sept. 30, 2019.

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

(g) The SLR at Sept. 30, 2020 and June 30, 2020 reflect the exclusion of certain central bank placements and the temporary exclusion of U.S. Treasury securities from the leverage exposure. The temporary exclusion increased our consolidated SLR by 78 basis points at Sept. 30, 2020 and 40 basis points at June 30, 2020. See "Capital" beginning on page 36 for additional 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

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, 2019 ("2019 Annual Report").

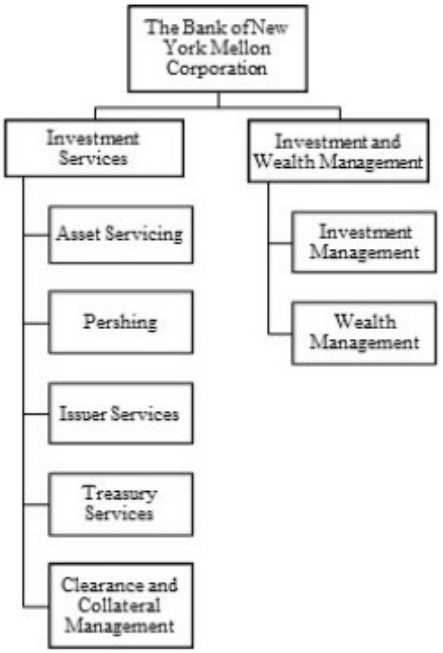
The following should be read in conjunction with the Consolidated Financial Statements included in this report. Investors should also read the sections titled "Forward-looking Statements" and "Risk Factors."

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 that manages and services assets for financial institutions, corporations and individual investors in 35 countries.

BNY Mellon has two business segments, Investment 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 two business segments and lines of business, with the remaining operations in the Other segment.



Key third quarter 2020 events

Emily Portney named Chief Financial Officer

In July 2020, Emily Portney was appointed Chief Financial Officer, succeeding Michael P. Santomassimo, and joined the Company's Executive Committee. Ms. Portney previously led the client management, sales and services teams for the Asset Servicing business globally and oversaw the Americas region for the Asset Servicing business. She has also previously held senior financial roles.

CCAR and common stock repurchases

In August 2020, the Federal Reserve announced that BNY Mellon's stress capital buffer ("SCB") requirement would be 2.5%, which equals the regulatory minimum, effective on Oct. 1, 2020.

The Federal Reserve also announced that it has required participating Comprehensive Capital Analysis and Review ("CCAR") firms, including us, to update and resubmit their capital plans and that, as

a result, unless otherwise approved by the Federal Reserve, participating firms were not permitted, during the third quarter of 2020, to conduct open market common stock repurchases, to increase their common stock dividends or to pay common stock dividends that exceed average net income for the preceding four quarters. On Sept. 30, 2020, the Federal Reserve extended these limitations through the fourth quarter of 2020.

Highlights of third quarter 2020 results

Net income applicable to common shareholders was $876 million, or $0.98 per diluted common share, in the third quarter of 2020. Net income applicable to common shareholders was $1.0 billion, or $1.07 per diluted common share, in the third quarter of 2019. The highlights below are based on the third quarter of 2020 compared with the third quarter of 2019, unless otherwise noted.

- Total revenue of $3.8 billion decreased less than 1% primarily reflecting:
  - Fee revenue decreased 1%, primarily reflecting higher money market fee waivers, partially offset by higher client activity and balances in Pershing and Asset Servicing, higher market values and the favorable impact of a weaker U.S. dollar. (See "Fee and other revenue" beginning on page 7.)
  - Net interest revenue decreased 4%. The decrease would have been 8% larger due to the impact of the third quarter 2019 lease-related impairment of $70 million. The decrease primarily reflects lower interest rates on interest-earning assets, partially offset by the benefit of lower deposit and funding rates, higher deposits, securities portfolio and loan balances. (See "Net interest revenue" on page 10.)
- Provision for credit losses of $9 million reflects a fairly consistent macroeconomic outlook compared with the second quarter of 2020. (See "Consolidated balance sheet review - Allowance for credit losses" beginning on page 28.)
- Noninterest expense increased 4%, 3% of which was due to the impact of the third quarter 2019 net reduction of reserves for a tax-related exposure of certain investment management funds. The remainder of the increase primarily reflects continued investments in technology, higher professional, legal and other purchased services expense and the unfavorable impact of a weaker U.S. dollar, partially offset by lower staff and business development (travel and marketing) expenses. (See "Noninterest expense" on page 13.)
- Effective tax rate of 18.4%. (See "Income taxes" on page 13.)

Capital and liquidity

- CET1 ratio was 13.0% at Sept. 30, 2020, compared with 12.6% at June 30, 2020. The increase in the CET1 ratio primarily reflects capital generated through earnings, foreign currency translation and unrealized gains on securities available-for-sale, partially offset by higher risk-weighted assets ("RWAs") and capital deployed through dividend payments. (See "Capital" beginning on page 36.)

Highlights of our principal businesses

Investment Services

- Total revenue decreased 4%.
- Income before income taxes decreased 17%.
- AUC/A of $38.6 trillion, increased 8%, primarily reflecting higher market values, net new business, client inflows and the favorable impact of a weaker U.S. dollar.

Investment and Wealth Management

- Total revenue increased 3%.
- Income before income taxes decreased 17%, driven by the third quarter 2019 tax-related reserve reduction.
- AUM of $2.0 trillion, increased 9%, primarily reflecting higher market values, the favorable impact of a weaker U.S. dollar (principally versus the British pound) and net inflows.

See "Review of businesses" and Note 19 of the Notes to Consolidated Financial Statements for additional information on our businesses.

Impact of coronavirus pandemic on our business

The coronavirus pandemic has had a significant effect on the global macroeconomic environment. The following discusses the areas of our business that have been impacted and could continue to be impacted by the current environment.

Since March 2020, the vast majority of our employees have worked from home. They have been fully operational with minimal disruption to servicing our clients. However, our continued reliance on work-from-home arrangements may result in increased operational risks.

Market volatility associated with the performance of global equity and fixed income markets and lower interest rates has had, and may continue to have, a considerable impact on all of our businesses. Our lower-risk diversified fee-based business model benefits from heightened volatility and a flight-to-quality on a relative basis compared with other credit-focused financial institutions.

Our Investment Services businesses were favorably impacted by higher client volumes in the first nine months of 2020 compared with the prior year. The significant increases in market volatility also resulted in increased client activity in foreign exchange, and higher asset servicing, clearing services in Pershing, as well as clearance and collateral management fee revenue. However, the heightened volumes and volatility were lower in the second and third quarters of 2020 compared with the first quarter of 2020.

This volatility, coupled with the interest rate environment, also led to an increase in deposit levels from the prior year as our clients increased the levels of cash placed with us. This favorably impacted net interest revenue. However, the low interest rate environment has more than offset that benefit and is expected to continue to reduce our net interest revenue and margin.

Given the recent levels of short-term interest rates, money market mutual fund fees have been waived and may continue to be waived, which reduced fee revenue in the second and third quarters of 2020. See further discussion of money market fee waivers in “Fee and other revenue.”

As discussed above under “Key third quarter 2020 events,” we and the other CCAR firms have suspended open market common stock repurchases through the fourth quarter of 2020, and we continued our current quarterly common stock dividend of $0.31 per share. See “Recent regulatory developments” for additional information related to the 2020 CCAR.

The significant changes in market values during 2020 have impacted revenue related to seed capital investments (net of hedges) in our Investment and Wealth Management business, which benefited the second and third quarters of 2020 and negatively impacted the first quarter of 2020. The Investment and Wealth Management business continued to be negatively impacted by higher money market fee waivers in the second and third quarters of 2020.

During the first quarter of 2020, we purchased $2.2 billion of commercial paper and certificates of deposit (“CDs”) from affiliated money market mutual funds in order to provide liquidity support to the funds. We also purchased $650 million in the first quarter of 2020 and $1.1 billion in the second quarter of 2020 of commercial paper and CDs from third-party money market mutual funds and funded this purchase through the Federal Reserve Bank of Boston’s Money Market Mutual Fund Liquidity Facility (“MMLF”) program. At Sept. 30, 2020, commercial paper and CDs totaled approximately $650 million. See “Recent regulatory developments” in the First Quarter 2020 Form 10-Q for additional information on the MMLF.

The need to apply macroeconomic forecasting in the current environment in conjunction with the new expected credit loss accounting guidance has resulted in and may continue to result in heightened levels of credit loss provisioning. The continuing effects of the pandemic could also result in increased credit losses and charge-offs. The macroeconomic outlook in the third quarter of 2020 was fairly consistent with the second quarter of 2020.

In addition, a prolonged economic downturn may result in other asset write-downs and impairments, including, but not limited to, equity investments, goodwill and intangibles.

It is difficult to forecast the impact of the coronavirus, together with related public health measures, on our results with certainty because so much depends on

how the health crisis evolves, its impact on the global economy as well as actions taken by central banks and governments to support the economy.

The current macroeconomic environment has also resulted in responses by governmental and regulatory bodies. See "Recent regulatory developments" in the first quarter 2020 Form 10-Q for additional information on legislative and regulatory developments in response to the coronavirus pandemic.

For further discussion of the current and potential impact of the coronavirus pandemic see Item 1A. Risk Factors "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."

Fee and other revenue

Fee and other revenue									**YTD20**
				3Q20 vs.					**vs.**
(dollars in millions, unless otherwise noted)	**3Q20**	2Q20	3Q19	**2Q20**	**3Q19**	**YTD20**	YTD19	**YTD19**
Investment services fees:								
Asset servicing fees *(a)*	**$ 1,168**	$ 1,173	$ 1,152	**— %**	**1 %**	**$ 3,500**	$ 3,415	**2 %**
Clearing services fees *(b)*	**397**	431	419	**(8)**	**(5)**	**1,298**	1,227	**6**
Issuer services fees	**295**	277	324	**6**	**(9)**	**835**	866	**(4)**
Treasury services fees	**152**	144	140	**6**	**9**	**445**	412	**8**
Total investment services fees	**2,012**	2,025	2,035	**(1)**	**(1)**	**6,078**	5,920	**3**
Investment management and performance fees	**835**	786	832	**6**	**—**	**2,483**	2,506	**(1)**
Foreign exchange and other trading revenue	**137**	166	150	**(17)**	**(9)**	**622**	486	**28**
Financing-related fees	**49**	58	49	**(16)**	**—**	**166**	150	**11**
Distribution and servicing	**29**	27	33	**7**	**(12)**	**87**	95	**(8)**
Investment and other income	**46**	105	30	**N/M**	**N/M**	**162**	108	**N/M**
Total fee revenue	**3,108**	3,167	3,129	**(2)**	**(1)**	**9,598**	9,265	**4**
Net securities gains (losses)	**9**	9	(1)	**N/M**	**N/M**	**27**	7	**N/M**
Total fee and other revenue	**$ 3,117**	$ 3,176	$ 3,128	**(2)%**	**— %**	**$ 9,625**	$ 9,272	**4 %**
Fee revenue as a percentage of total revenue	**81 %**	79 %	81 %			**80 %**	79 %	
AUC/A at period end *(in trillions) (c)*	**$ 38.6**	$ 37.3	$ 35.8	**3 %**	**8 %**	**$ 38.6**	$ 35.8	**8 %**
AUM at period end *(in billions) (d)*	**$ 2,041**	$ 1,961	$ 1,881	**4 %**	**9 %**	**$ 2,041**	$ 1,881	**9 %**

(a) Asset servicing fees include the fees from the Clearance and Collateral Management business and also include securities lending revenue of $40 million in the third quarter of 2020, $56 million in the second quarter of 2020, $43 million in the third quarter of 2019, $147 million in the first nine months of 2020 and $135 million in the first nine months of 2019.

(b) Clearing services fees are almost entirely earned by our Pershing business.

(c) Consists of AUC/A primarily from the Asset Servicing business and, to a lesser extent, the Clearance and Collateral Management, Issuer Services, Pershing and Wealth Management businesses. Includes the AUC/A of CIBC Mellon of $1.4 trillion at Sept. 30, 2020, $1.3 trillion at June 30, 2020 and $1.4 trillion at Sept. 30, 2019.

(d) Excludes securities lending cash management assets and assets managed in the Investment Services business.

N/M - Not meaningful.

Fee and other revenue decreased less than 1% compared with the third quarter of 2019 and decreased 2% compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 primarily reflects lower issuer services and clearing services fees, partially offset by higher asset servicing fees, investment and other income and treasury services fees. The decrease compared with the second quarter of 2020 primarily reflects lower investment and other income, clearing services fees and foreign exchange and other trading revenue, partially offset by higher investment management and performance fees and issuer services fees.

Money market fee waivers

Given the recent levels of short-term interest rates, money market mutual fund fees and other similar fees are being waived to protect investors from negative returns. The fee waivers have primarily impacted

clearing services fees in Pershing, and to a lesser extent revenue in our other businesses including investment management fees and distribution and servicing revenue in Investment and Wealth Management and fees in other Investment Services 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. A majority of the money market fee waivers were driven by low short-term interest rates.

Money market fee waivers *(in millions)*	**3Q20**	2Q20	**YTD20**
Investment services fees:			
Asset servicing fees	**$ (1)**	$ —	**$ (1)**
Clearing services fees	**(57)**	(50)	**(116)**
Issuer services fees	**(1)**	(1)	**(2)**
Treasury services fees	**(3)**	(2)	**(5)**
Total investment services fees	**(62)**	(53)	**(124)**
Investment management and performance fees	**(42)**	(30)	**(86)**
Distribution and servicing revenue	**(6)**	(3)	**(9)**
Total fee and other revenue	**(110)**	(86)	**(219)**
Less: Distribution and servicing expense	**9**	7	**16**
Net impact of money market fee waivers	**$ (101)**	$ (79)	**$ (203)**
Impact to revenue by line of business *(a)*:			
Asset Servicing	**$ (4)**	$ (1)	**$ (5)**
Pershing	**(73)**	(60)	**(142)**
Issuer Services	**(2)**	(1)	**(3)**
Treasury Services	**(1)**	—	**(1)**
Investment Management	**(28)**	(24)	**(66)**
Wealth Management	**(2)**	—	**(2)**
Total impact to revenue by line of business	**$ (110)**	$ (86)	**$ (219)**

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

We expect the impact from money market fee waivers, net of distribution and servicing expense, to be $135 million to $150 million in the fourth quarter of 2020. We also expect the quarterly run rate in 2021 to be at the higher end of that range. This impact may be partially offset depending on the levels of money market balances.

Investment services fees

Investment services fees decreased 1% compared with both the third quarter of 2019 and second quarter of 2020 reflecting the following:

- Asset servicing fees increased 1% compared with the third quarter of 2019 and decreased less than 1% compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects higher client volumes. The decrease compared with the second quarter of 2020 primarily reflects lower securities lending revenue driven by tighter spreads.
- Clearing services fees decreased 5% compared with the third quarter of 2019 and 8% compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 primarily reflects the impact of rate-driven money market fee waivers, partially offset by higher money market balances. The decrease compared with the second quarter of 2020 primarily reflects lower clearing volumes and higher rate-driven money market fee waivers.
- Issuer services fees decreased 9% compared with the third quarter of 2019 and increased 6% compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 primarily reflects lower Depositary Receipts revenue. The increase compared with the second quarter of 2020 primarily reflects seasonally higher Depositary Receipts revenue.
- Treasury services fees increased 9% compared with the third quarter of 2019 and 6% compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects lower compensating balance credits provided to clients driven by lower rates and higher money market balances. The increase compared with the second quarter of 2020 primarily reflects higher payment volumes and other fees.

See “Investment Services business” in “Review of businesses” for additional details.

Investment management and performance fees

Investment management and performance fees increased slightly compared with the third quarter of 2019 and 6% compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects higher market values, the

favorable impact of a weaker U.S. dollar and higher performance fees, partially offset by the impact of money market fee waivers. The increase compared with the second quarter of 2020 primarily reflects higher market values and the favorable impact of a weaker U.S. dollar. On a constant currency basis (Non-GAAP), investment management and performance fees decreased 1% compared with the third quarter of 2019. Performance fees were $7 million in the third quarter of 2020, $2 million in the third quarter of 2019 and $5 million in the second quarter of 2020.

AUM was $2.0 trillion at Sept. 30, 2020, an increase of 9% compared with Sept. 30, 2019, primarily reflecting higher market values, the favorable impact of a weaker U.S. dollar (principally versus the British pound) and net inflows.

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

Foreign exchange and other trading revenue

Foreign exchange and other trading revenue						
(in millions)	**3Q20**	2Q20	3Q19	**YTD20**	YTD19
Foreign exchange	**$ 151**	$ 174	$ 129	**$ 578**	$ 439
Other trading (loss) revenue	**(14)**	(8)	21	**44**	47
Total foreign exchange and other trading revenue	**$ 137**	$ 166	$ 150	**$ 622**	$ 486

Foreign exchange and other trading revenue decreased 9% compared with the third quarter of 2019 and 17% compared with the second quarter of 2020.

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, and the impact of foreign currency hedging activities. In the third quarter of 2020, foreign exchange revenue totaled $151 million, an increase of 17% compared with the third quarter of 2019 and a decrease of 13% compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects the impact of foreign currency hedging activity. The decrease compared with the second quarter of 2020 primarily reflects lower volumes and volatility. Foreign exchange revenue is primarily reported in the Investment Services business and, to a lesser extent, the Investment and Wealth Management business and the Other segment.

Other trading losses totaled $14 million in the third quarter of 2020 compared with other trading revenue of $21 million in the third quarter of 2019 and other trading losses of $8 million in the second quarter of 2020. Both decreases primarily reflect lower derivative and fixed income trading and hedging, which is partially offset in net interest revenue. Other trading revenue is reported in all three business segments.

Investment and other income

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

Investment and other income					
(in millions)	**3Q20**	2Q20	3Q19	**YTD20**	YTD19
Corporate/bank-owned life insurance	**$ 33**	$ 36	$ 33	**$ 105**	$ 95
Expense reimbursements from joint venture	**23**	19	21	**63**	59
Asset-related gains	**4**	3	2	**11**	4
Seed capital gains *(a)*	**9**	23	—	**1**	10
Other (loss) income	**(23)**	24	(26)	**(18)**	(60)
Total investment and other income	**$ 46**	$ 105	$ 30	**$ 162**	$ 108

(a) Excludes seed capital gains related to consolidated investment management funds, which are reflected in operations of consolidated investment management funds.

Investment and other income increased compared with the third quarter of 2019 and decreased compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects higher seed capital gains. The decrease compared with the second quarter of 2020 primarily reflects the impact of foreign currency translation, a one-time fee in the Asset Servicing business recorded in the second quarter of 2020 and lower seed capital gains.

Year-to-date 2020 compared with year-to-date 2019

Fee and other revenue increased 4% compared with the first nine months of 2019, primarily reflecting higher foreign exchange and other trading revenue, asset servicing fees, clearing services fees and investment and other income. The 28% increase in foreign exchange and other trading revenue primarily reflects higher volatility and volumes. The 2% increase in asset servicing fees primarily reflects

higher client volumes. The 6% increase in clearing services fees primarily reflects higher clearing volumes and money market balances, partially offset by money market fee waivers. The increase in investment and other income revenue primarily reflects one-time fees in the Asset Servicing and Pershing businesses and the impact of foreign currency translation.

Net interest revenue

Net interest revenue								**YTD20**
				3Q20 vs.				**vs.**
(dollars in millions)	**3Q20**	2Q20	3Q19	**2Q20**	**3Q19**	**YTD20**	YTD19	**YTD19**
Net interest revenue – GAAP	**$ 703**	$ 780	$ 730	**(10)%**	**(4)%**	**$ 2,297**	$ 2,373	**(3) %**
Add: Tax equivalent adjustment	**2**	2	3	**N/M**	**N/M**	**6**	11	**N/M**
Net interest revenue (FTE) – Non-GAAP *(a)*	**$ 705**	$ 782	$ 733	**(10)%**	**(4)%**	**$ 2,303**	$ 2,384	**(3) %**
Average interest-earning assets	**$ 357,634**	$ 357,562	$ 294,154	**— %**	**22 %**	**$ 346,418**	$ 287,964	**20 %**
Net interest margin – GAAP	**0.79 %**	0.88 %	0.99 %	**(9) bps**	**(20) bps**	**0.89 %**	1.10 %	**(21) bps**
Net interest margin (FTE) – Non-GAAP *(a)*	**0.79 %**	0.88 %	1.00 %	**(9) bps**	**(21) bps**	**0.89 %**	1.11 %	**(22) 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 decreased 4% compared with the third quarter of 2019 and 10% compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 would have been 8% larger due to the impact of the third quarter 2019 lease-related impairment of $70 million. The decrease primarily reflects lower interest rates on interest-earning assets, partially offset by the benefit of lower deposit and funding rates, higher deposits, securities portfolio and loan balances. The decrease compared with the second quarter of 2020 was primarily driven by lower interest rates on interest-earning assets, partially offset by the benefit of lower deposit and funding rates and a larger securities portfolio.

Net interest margin decreased 20 basis points compared with the third quarter of 2019 and 9 basis points compared with the second quarter of 2020. The decreases reflect the factors mentioned above.

Average interest-earning assets increased 22% compared with the third quarter of 2019 and increased slightly compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects a larger securities portfolio and higher interest-bearing deposits with the Federal Reserve and other central banks.

Average non-U.S. dollar deposits comprised approximately 25% of our average total deposits in the third quarter of 2020. Approximately 40% of the average non-U.S. dollar deposits in the third quarter of 2020 were euro denominated.

Net interest revenue in future quarters will depend on the level and mix of client deposits, deposit rates, as well as the level and shape of the yield curve, which may result in lower yields on interest-earning assets.

Year-to-date 2020 compared with year-to-date 2019

Net interest revenue decreased 3% compared with the first nine months of 2019. The decrease would have been 3% larger due to the impact of the third quarter 2019 lease-related impairment of $70 million. The decrease is primarily driven by lower interest rates on interest-earning assets, partially offset by the benefit of lower deposit and funding rates, higher deposits, securities portfolio and loan balances. The decrease in the net interest margin primarily reflects the factors mentioned above.

Average interest-earning assets increased 20% compared with the first nine months of 2019. The increase primarily reflects a larger securities portfolio and higher interest-bearing deposits with the Federal Reserve and other central banks.

Average balances and interest rates	Quarter ended									
	Sept. 30, 2020			June 30, 2020			Sept. 30, 2019			
(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	**$ 90,670**	**$ (10)**	**(0.04) %**	$ 94,229	$ (7)	(0.03) %	$ 60,030	$ 102	0.67 %	
Interest-bearing deposits with banks (primarily foreign banks)	**19,202**	**20**	**0.42**	21,093	40	0.76	15,324	73	1.89	
Federal funds sold and securities purchased under resale agreements *(a)*	**30,342**	**48**	**0.63**	30,265	61	0.82	40,816	660	6.42	
Margin loans	**12,870**	**41**	**1.24**	12,791	40	1.28	10,303	104	4.02	
Non-margin loans:										
Domestic offices	**30,053**	**160**	**2.12**	31,185	172	2.21	29,285	202	2.75	*(b)*
Foreign offices	**10,693**	**39**	**1.45**	12,743	58	1.84	11,247	85	2.97	
Total non-margin loans	**40,746**	**199**	**1.94**	43,928	230	2.10	40,532	287	2.81	*(b)*
Securities:										
U.S. government obligations	**30,073**	**102**	**1.36**	27,901	105	1.52	19,315	103	2.11	
U.S. government agency obligations	**78,300**	**328**	**1.68**	74,583	358	1.92	67,235	418	2.49	
State and political subdivisions *(c)*	**1,500**	**9**	**2.51**	1,025	7	2.98	1,217	9	3.05	
Other securities *(c)*	**46,719**	**69**	**0.59**	45,511	93	0.82	33,729	148	1.75	
Trading securities *(c)*	**7,212**	**16**	**0.91**	6,236	18	1.13	5,653	41	2.80	
Total securities *(c)*	**163,804**	**524**	**1.28**	155,256	581	1.50	127,149	719	2.25	
Total interest-earning assets *(c)*	**$ 357,634**	**$ 822**	**0.92 %**	$ 357,562	$ 945	1.06 %	$ 294,154	$ 1,945	2.63 %	*(b)*
Noninterest-earning assets	**57,231**			57,797			56,525			
Total assets	**$ 414,865**			$ 415,359			$ 350,679			
Liabilities										
Interest-bearing liabilities:										
Interest-bearing deposits:										
Domestic offices	**$ 102,767**	**$ (4)**	**(0.01) %**	$ 102,135	$ 15	0.06 %	$ 82,663	$ 267	1.28 %	
Foreign offices	**108,733**	**(25)**	**(0.09)**	108,508	(32)	(0.12)	94,738	170	0.71	
Total interest-bearing deposits	**211,500**	**(29)**	**(0.05)**	210,643	(17)	(0.03)	177,401	437	0.98	
Federal funds purchased and securities sold under repurchase agreements *(a)*	**16,850**	**6**	**0.13**	14,209	1	0.03	13,432	443	13.08	
Trading liabilities	**2,692**	**2**	**0.30**	1,974	2	0.39	1,371	8	2.33	
Other borrowed funds	**873**	**3**	**1.40**	2,272	7	1.30	1,148	10	3.24	
Commercial paper	**2,274**	**—**	**0.09**	191	1	1.02	3,796	22	2.26	
Payables to customers and broker-dealers	**18,501**	**—**	**(0.01)**	18,742	(1)	(0.01)	15,440	59	1.52	
Long-term debt	**26,511**	**135**	**2.01**	28,122	170	2.42	28,386	233	3.24	
Total interest-bearing liabilities	**$ 279,201**	**$ 117**	**0.16 %**	$ 276,153	$ 163	0.24 %	$ 240,974	$ 1,212	1.99 %	
Total noninterest-bearing deposits	**67,610**			72,411			49,027			
Other noninterest-bearing liabilities	**23,393**			24,121			19,280			
Total liabilities	**370,204**			372,685			309,281			
Temporary equity										
Redeemable noncontrolling interests	**82**			74			64			
Permanent equity										
Total The Bank of New York Mellon Corporation shareholders' equity	**44,456**			42,486			41,139			
Noncontrolling interests	**123**			114			195			
Total permanent equity	**44,579**			42,600			41,334			
Total liabilities, temporary equity and permanent equity	**$ 414,865**			$ 415,359			$ 350,679			
Net interest revenue (FTE) – Non-GAAP *(d)*	**$ 705**			$ 782			$ 733			
Net interest margin (FTE) – Non-GAAP *(c)(d)*	**0.79 %**			0.88 %			1.00 %			*(b)*
Less: Tax equivalent adjustment *(c)*	**2**			2			3			
Net interest revenue – GAAP	**$ 703**			$ 780			$ 730			
Net interest margin – GAAP	**0.79 %**			0.88 %			0.99 %			*(b)*

(a) Includes the average impact of offsetting under enforceable netting agreements of approximately $43 billion for the third quarter of 2020, $67 billion for the second quarter of 2020 and $68 billion for the third quarter of 2019. 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 0.26% for the third quarter of 2020 and second quarter of 2020 and 2.42% for the third quarter of 2019. 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 0.04% for the third quarter of 2020, 0.00% for the second quarter of 2020 and 2.17% for the third quarter of 2019. 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) Includes the impact of the lease-related impairment of $70 million. On a Non-GAAP basis, excluding the lease-related impairment, the yield on non-margin loans in domestic offices would have been 3.70%, the yield on total non-margin loans would have been 3.50%, the yield on total interest-earning assets would have been 2.72% and the net interest margin and the net interest margin (FTE) – Non-GAAP would have been 1.09%. We believe providing the rates excluding the lease-related impairment is useful to investors as it is more reflective of the actual rates earned.

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

(d) See "Net interest revenue" on page 10 for the reconciliation of this Non-GAAP measure.

Average balances and interest rates	Year-to-date							
	Sept. 30, 2020				Sept. 30, 2019			
(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	**$ 88,442**	**$ 63**	**0.09 %**		$ 61,777	$ 354	0.75 %	
Interest-bearing deposits with banks (primarily foreign banks)	**19,126**	**118**	**0.83**		14,288	200	1.87	
Federal funds sold and securities purchased under resale agreements *(a)*	**31,567**	**505**	**2.14**		35,984	1,702	6.32	
Margin loans	**12,882**	**168**	**1.74**		11,289	358	4.25	
Non-margin loans:								
Domestic offices	**30,983**	**570**	**2.45**		28,989	755	3.48	*(b)*
Foreign offices	**11,532**	**168**	**1.95**		10,576	252	3.18	
Total non-margin loans	**42,515**	**738**	**2.32**		39,565	1,007	3.40	*(b)*
Securities:								
U.S. government obligations	**27,061**	**316**	**1.56**		20,578	335	2.17	
U.S. government agency obligations	**73,992**	**1,086**	**1.96**		66,191	1,273	2.56	
State and political subdivisions *(c)*	**1,187**	**24**	**2.80**		1,716	37	2.86	
Other securities *(c)*	**42,883**	**247**	**0.77**		31,068	456	1.96	
Trading securities *(c)*	**6,763**	**74**	**1.46**		5,508	116	2.80	
Total securities *(c)*	**151,886**	**1,747**	**1.53**		125,061	2,217	2.37	
Total interest-earning assets *(c)*	**$ 346,418**	**$ 3,339**	**1.29 %**		$ 287,964	$ 5,838	2.71 %	*(b)*
Noninterest-earning assets	**58,785**				55,165			
Total assets	**$ 405,203**				$ 343,129			
Liabilities								
Interest-bearing liabilities:								
Interest-bearing deposits:								
Domestic offices	**$ 101,610**	**$ 181**	**0.24 %**		$ 75,846	$ 742	1.31 %	
Foreign offices	**105,000**	**13**	**0.02**		92,493	518	0.75	
Total interest-bearing deposits	**206,610**	**194**	**0.13**		168,339	1,260	1.00	
Federal funds purchased and securities sold under repurchase agreements *(a)*	**15,000**	**282**	**2.51**		12,393	1,146	12.36	
Trading liabilities	**2,099**	**11**	**0.66**		1,470	26	2.36	
Other borrowed funds	**1,286**	**14**	**1.50**		2,295	54	3.11	
Commercial paper	**1,352**	**7**	**0.70**		2,718	48	2.35	
Payables to customers and broker-dealers	**17,879**	**29**	**0.22**		15,736	198	1.68	
Long-term debt	**27,285**	**499**	**2.43**		28,108	722	3.40	
Total interest-bearing liabilities	**$ 271,511**	**$ 1,036**	**0.51 %**		$ 231,059	$ 3,454	1.99 %	
Total noninterest-bearing deposits	**66,869**				52,168			
Other noninterest-bearing liabilities	**23,913**				18,760			
Total liabilities	**362,293**				301,987			
Temporary equity								
Redeemable noncontrolling interests	**74**				65			
Permanent equity								
Total The Bank of New York Mellon Corporation shareholders' equity	**42,722**				40,934			
Noncontrolling interests	**114**				143			
Total permanent equity	**42,836**				41,077			
Total liabilities, temporary equity and permanent equity	**$ 405,203**				$ 343,129			
Net interest revenue (FTE) – Non-GAAP *(d)*		**$ 2,303**				$ 2,384		
Net interest margin (FTE) – Non-GAAP *(c)(d)*			**0.89 %**				1.11 %	*(b)*
Less: Tax equivalent adjustment *(c)*		**6**				11		
Net interest revenue – GAAP		**$ 2,297**				$ 2,373		
Net interest margin – GAAP			**0.89 %**				1.10 %	*(b)*

(a) Includes the average impact of offsetting under enforceable netting agreements of approximately $63 billion for the first nine months of 2020 and $54 billion for the first nine months of 2019. 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 0.71% for the first nine months of 2020 and 2.52% for the first nine months of 2019. 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 0.48% for the first nine months of 2020 and 2.30% for the first nine months of 2019. 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) Includes the impact of the lease-related impairment of $70 million. On a Non-GAAP basis, excluding the lease-related impairment, the yield on non-margin loans in domestic offices would have been 3.80%, the yield on total non-margin loans would have been 3.64%, the yield on total interest-earning assets would have been 2.74%, the net interest margin would have been 1.13% and the net interest margin (FTE) – Non-GAAP would have been 1.14%. We believe providing the rates excluding the lease-related impairment is useful to investors as it is more reflective of the actual rates earned.

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

(d) See "Net interest revenue" on page 10 for the reconciliation of this Non-GAAP measure.

Noninterest expense

Noninterest expense (dollars in millions)	3Q20	2Q20	3Q19	3Q20 vs. 2Q20	3Q20 vs. 3Q19	YTD20	YTD19	YTD20 vs. YTD19
Staff	**$ 1,466**	$ 1,464	$ 1,479	**— %**	**(1)%**	**$ 4,412**	$ 4,424	**— %**
Professional, legal and other purchased services	**355**	337	316	**5**	**12**	**1,022**	978	**4**
Software and equipment	**340**	345	309	**(1)**	**10**	**1,011**	896	**13**
Net occupancy	**136**	137	138	**(1)**	**(1)**	**408**	413	**(1)**
Sub-custodian and clearing	**119**	120	111	**(1)**	**7**	**344**	331	**4**
Distribution and servicing	**85**	85	97	**—**	**(12)**	**261**	282	**(7)**
Bank assessment charges	**30**	35	31	**(14)**	**(3)**	**100**	93	**8**
Business development	**17**	20	47	**(15)**	**(64)**	**79**	148	**(47)**
Amortization of intangible assets	**26**	26	30	**—**	**(13)**	**78**	89	**(12)**
Other	**107**	117	32	**(9)**	**234**	**364**	282	**29**
Total noninterest expense	**$ 2,681**	$ 2,686	$ 2,590	**— %**	**4 %**	**$ 8,079**	$ 7,936	**2 %**
Full-time employees at period end	**48,600**	48,300	48,700	**1 %**	**— %**			

Total noninterest expense increased 4% compared with the third quarter of 2019 and decreased slightly compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects a reduction of previously established reserves for a tax-related exposure of certain investment management funds that we manage, net of staff expense. The increase compared with the third quarter of 2019 also reflects continued investments in technology, higher professional, legal and other purchased services expense and the unfavorable impact of a weaker U.S. dollar, partially offset by lower staff and business development (travel and marketing) expenses. The investments in technology are included in staff, professional, legal and other purchased services, and software and equipment expenses. The slight decrease compared with the second quarter of 2020 primarily reflects decreases in most expense categories, partially offset by the unfavorable impact of a weaker U.S. dollar and higher professional, legal and other purchased services expense.

Our investments in technology infrastructure and platforms are expected to continue. As a result, we expect to incur higher technology-related expenses in 2020 than in 2019 and higher pension expense as a result of a lower expected rate of return on plan assets. These increases are expected to be offset by decreases in other expenses as we continue to manage overall expenses.

Year-to-date 2020 compared with year-to-date 2019

Noninterest expense increased 2% compared with the first nine months of 2019, primarily reflecting continued investments in technology and a reduction of previously established reserves for a tax-related exposure of certain investment management funds that we manage, net of staff expense recorded in 2019, partially offset by lower business development (travel and marketing) expense.

Income taxes

BNY Mellon recorded an income tax provision of $213 million (18.4% effective tax rate) in the third quarter of 2020, $246 million (19.1% effective tax rate) in the third quarter of 2019 and $216 million (18.3% effective tax rate) in the second quarter of 2020. For additional information, see Note 11 of the Notes to Consolidated Financial Statements.

Review of businesses

We have an internal information system that produces performance data along product and service lines for our two principal businesses, Investment Services and Investment and Wealth Management, and the Other segment.

Business accounting principles

Our business data has been determined on an internal management basis of accounting, rather than the generally accepted accounting principles 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 19 of the Notes to Consolidated Financial Statements. For information on the primary products and services in each line of business, the primary types of revenue by business and how our businesses are presented and analyzed, see Note 24 of the Notes to Consolidated Financial Statements in our 2019 Annual Report.

Business 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 significant organizational changes in the second or third quarters of 2020. In the first quarter of 2020, we reclassified the results of certain services provided between the segments from noninterest expense to fee and other revenue. The intersegment activity is eliminated in the Other segment and relates to services that are also provided to third parties and provides consistency with the reporting of the revenues. This adjustment had no impact on income before taxes of the businesses. Also in the first quarter of 2020, we reclassified the results related to certain lending activities from the Wealth Management business to the Pershing business. These loans were originated by the Wealth Management business as a service to Pershing clients. This resulted in an increase in total revenue, noninterest expense and income before taxes in the Pershing business and a corresponding decrease in the Wealth Management business. Prior periods were restated in the first quarter of 2020 for both reclassifications.

The results of our businesses may be influenced by client and other activities that vary by quarter. In the first quarter, staff expense typically increases reflecting the vesting of long-term stock awards for retirement-eligible employees. In the third quarter, Depositary Receipts revenue is typically higher due to an increased level of client dividend payments. Also in the third quarter, volume-related fees may decline due to reduced client activity, and staff expense typically increases reflecting the annual employee merit increase. In the fourth quarter, we typically incur higher business development and marketing expenses; however, 2020 is expected to be different given the impact of the coronavirus pandemic. In our Investment and Wealth Management business, 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 businesses 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 Investment Services business, we typically have more foreign currency-denominated expenses than revenues. However, our Investment and Wealth Management business 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 more than the Investment Services business. However, currency fluctuations, in isolation, are not expected to significantly impact net income on a consolidated basis.

Fee revenue in Investment and Wealth Management, and to a lesser extent in Investment Services, is impacted by the value of market indices. At Sept. 30, 2020, 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 $0.03 to $0.06.

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

Investment Services business

(dollars in millions)	3Q20	2Q20	1Q20	4Q19	3Q19	3Q20 vs. 2Q20	3Q20 vs. 3Q19	YTD20	YTD19	YTD20 vs. YTD19
Revenue:										
Investment services fees:										
Asset servicing fees *(a)*	**$ 1,156**	$ 1,164	$ 1,147	$ 1,138	$ 1,138	**(1)%**	**2 %**	**$ 3,467**	$ 3,375	**3 %**
Clearing services fees *(b)*	**397**	431	470	421	419	**(8)**	**(5)**	**1,298**	1,228	**6**
Issuer services fees	**295**	277	263	264	324	**6**	**(9)**	**835**	866	**(4)**
Treasury services fees	**152**	144	149	147	139	**6**	**9**	**445**	411	**8**
Total investment services fees	**2,000**	2,016	2,029	1,970	2,020	**(1)**	**(1)**	**6,045**	5,880	**3**
Foreign exchange and other trading revenue	**146**	178	261	151	160	**(18)**	**(9)**	**585**	470	**24**
Other *(c)*	**100**	145	146	115	116	**(31)**	**(14)**	**391**	340	**15**
Total fee and other revenue	**2,246**	2,339	2,436	2,236	2,296	**(4)**	**(2)**	**7,021**	6,690	**5**
Net interest revenue	**681**	768	806	778	761	**(11)**	**(11)**	**2,255**	2,348	**(4)**
Total revenue	**2,927**	3,107	3,242	3,014	3,057	**(6)**	**(4)**	**9,276**	9,038	**3**
Provision for credit losses	**(10)**	145	149	(5)	(15)	**N/M**	**N/M**	**284**	(11)	**N/M**
Noninterest expense (excluding amortization of intangible assets)	**2,002**	1,971	1,969	2,160	1,952	**2**	**3**	**5,942**	5,856	**1**
Amortization of intangible assets	**18**	18	18	19	21	**—**	**(14)**	**54**	61	**(11)**
Total noninterest expense	**2,020**	1,989	1,987	2,179	1,973	**2**	**2**	**5,996**	5,917	**1**
Income before income taxes	**$ 917**	$ 973	$ 1,106	$ 840	$ 1,099	**(6)%**	**(17)%**	**$ 2,996**	$ 3,132	**(4) %**
Pre-tax operating margin	**31 %**	31 %	34 %	28 %	36 %			**32 %**	35 %	
Securities lending revenue	**$ 37**	$ 51	$ 46	$ 40	$ 39	**(27)%**	**(5)%**	**$ 134**	$ 123	**9 %**
Total revenue by line of business:										
Asset Servicing	**$ 1,354**	$ 1,463	$ 1,531	$ 1,411	$ 1,411	**(7)%**	**(4)%**	**$ 4,348**	$ 4,223	**3 %**
Pershing	**538**	578	653	579	575	**(7)**	**(6)**	**1,769**	1,708	**4**
Issuer Services	**435**	431	419	415	466	**1**	**(7)**	**1,285**	1,308	**(2)**
Treasury Services	**323**	340	339	329	312	**(5)**	**4**	**1,002**	946	**6**
Clearance and Collateral Management	**277**	295	300	280	293	**(6)**	**(5)**	**872**	853	**2**
Total revenue by line of business	**$ 2,927**	$ 3,107	$ 3,242	$ 3,014	$ 3,057	**(6)%**	**(4)%**	**$ 9,276**	$ 9,038	**3 %**
Average balances:										
Average loans	**$ 40,308**	$ 43,113	$ 41,789	$ 38,721	$ 37,005	**(7)%**	**9 %**	**$ 41,731**	$ 36,881	**13 %**
Average deposits	**$ 263,621**	$ 268,467	$ 242,187	$ 215,388	$ 208,044	**(2)%**	**27 %**	**$ 258,112**	$ 201,472	**28 %**

(a) Asset servicing fees include the fees from the Clearance and Collateral Management business.
(b) Clearing services fees are almost entirely earned by our Pershing business.
(c) Other revenue includes investment management and performance fees, financing-related fees, distribution and servicing revenue, securities gains and losses and investment and other income.
N/M - Not meaningful.

Investment Services business metrics						3Q20 vs.	
(dollars in millions, unless otherwise noted)	**3Q20**	2Q20	1Q20	4Q19	3Q19	**2Q20**	**3Q19**
AUC/A at period end *(in trillions) (a)*	**$ 38.6**	$ 37.3	$ 35.2	$ 37.1	$ 35.8	**3 %**	**8 %**
Market value of securities on loan at period end *(in billions) (b)*	**$ 378**	$ 384	$ 389	$ 378	$ 362	**(2) %**	**4 %**
Pershing:							
Net new assets (U.S. platform) *(in billions) (c)*	**$ 12**	$ 11	$ 31	$ 33	$ 19	**N/M**	**N/M**
Average active clearing accounts (U.S. platform) *(in thousands)*	**6,556**	6,507	6,437	6,340	6,283	**1 %**	**4 %**
Average long-term mutual fund assets (U.S. platform)	**$ 597,312**	$ 547,579	$ 549,206	$ 573,475	$ 547,522	**9 %**	**9 %**
Average investor margin loans (U.S. platform)	**$ 9,350**	$ 9,235	$ 9,419	$ 9,420	$ 9,222	**1 %**	**1 %**
Clearance and Collateral Management:							
Average tri-party collateral management balances *(in billions)*	**$ 3,417**	$ 3,573	$ 3,724	$ 3,562	$ 3,550	**(4) %**	**(4) %**

(a) Consists of AUC/A primarily from the Asset Servicing business and, to a lesser extent, the Clearance and Collateral Management, Issuer Services, Pershing and Wealth Management businesses. Includes the AUC/A of CIBC Mellon of $1.4 trillion at Sept. 30, 2020, $1.3 trillion at June 30, 2020, $1.2 trillion at March 31, 2020, $1.5 trillion at Dec. 31, 2019 and $1.4 trillion at Sept. 30, 2019.

(b) Represents the total amount of securities on loan in our agency securities lending program managed by the Investment Services business. Excludes securities for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, which totaled $62 billion at Sept. 30, 2020 and June 30, 2020, $59 billion at March 31, 2020, $60 billion at Dec. 31, 2019 and $66 billion at Sept. 30, 2019.

(c) Net new assets represent net flows of assets excluding dividends and interest (e.g., net cash deposits and net securities transfers) in customer accounts in Pershing LLC, a U.S. broker-dealer.

N/M - Not meaningful.

Business description

BNY Mellon Investment Services provides business services and technology solutions to entities including financial institutions, corporations, foundations and endowments, public funds and government agencies. Our lines of business include: Asset Servicing, Pershing, Issuer Services, Treasury Services and Clearance and Collateral Management. For information on the drivers of the Investment Services fee revenue, see Note 10 of the Notes to Consolidated Financial Statements in our 2019 Annual Report.

We are one of the leading global investment services providers with $38.6 trillion of AUC/A at Sept. 30, 2020.

The Asset Servicing business provides a comprehensive suite of solutions. As one of the largest global custody and fund accounting providers and a trusted partner, we offer services for the safekeeping of assets in capital markets globally as well as alternative investment and structured product strategies. We provide custody and foreign exchange services, support exchange-traded funds and unit investment trusts and provide our clients outsourcing capabilities. Our robust digital and data offerings enable us to provide fully integrated technology solutions for our clients. We deliver 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.

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

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.

Our Treasury Services business provides 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 liquidity, financing, risk and balance sheet challenges. We are a leading provider of tri-party collateral management services with an average of $3.4 trillion serviced globally including approximately $2.4 trillion of the U.S. tri-party repo market at Sept. 30, 2020.

Review of financial results

AUC/A of $38.6 trillion increased 8% compared with Sept. 30, 2019, primarily reflecting higher market values, net new business, client inflows and the favorable impact of a weaker U.S. dollar. AUC/A consisted of 34% equity securities and 66% fixed-income securities at Sept. 30, 2020 and Sept. 30, 2019.

Total revenue of $2.9 billion decreased 4% compared with the third quarter of 2019 and 6% compared with the second quarter of 2020. The drivers of total revenue by line of business are indicated below.

Asset Servicing revenue of $1.4 billion decreased 4% compared with the third quarter of 2019 and 7% compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 primarily reflects lower interest rates, partially offset by higher client deposits and client volumes. The decrease compared with the second quarter of 2020 primarily reflects lower foreign exchange volumes, lower net interest revenue, a one-time fee recorded in the second quarter of 2020 and lower securities lending revenue driven by tighter spreads.

Pershing revenue of $538 million decreased 6% compared with the third quarter of 2019 and 7% compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 primarily reflects the impact of rate-driven money market fee waivers, partially offset by higher money market balances. The decrease compared with the second quarter of 2020 primarily reflects lower clearing volumes and higher rate-driven money market fee waivers.

Issuer Services revenue of $435 million decreased 7% compared with the third quarter of 2019 and increased 1% compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 primarily reflects lower Depositary Receipts revenue. The increase compared with the second quarter of 2020 primarily reflects seasonally higher Depositary Receipts revenue, partially offset by lower net interest revenue.

Treasury Services revenue of $323 million increased 4% compared with the third quarter of 2019 and decreased 5% compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects higher client deposits and money market balances. The decrease compared with the second quarter of 2020 primarily reflects lower net interest revenue, partially offset by higher payment volumes.

Clearance and Collateral Management revenue of $277 million decreased 5% compared with the third quarter of 2019 and 6% compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 primarily reflects lower investment income due to the fourth quarter 2019 sale of an equity investment. The decrease compared with the second quarter of 2020 primarily reflects lower clearance volumes and net interest revenue.

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

Noninterest expense of $2.0 billion increased 2% compared with both the third quarter of 2019 and the second quarter of 2020. The increase compared with the third quarter of 2019 was primarily driven by continued investments in technology. The increase compared with the second quarter of 2020 primarily reflects higher staff expense and the unfavorable impact of a weaker U.S. dollar.

Year-to-date 2020 compared with year-to-date 2019

Total revenue of $9.3 billion increased 3% compared with the first nine months of 2019. Asset Servicing revenue of $4.3 billion increased 3%, primarily reflecting higher foreign exchange and other trading

revenue, higher volumes from existing clients and higher market values, partially offset by lower net interest revenue. Pershing revenue of $1.8 billion increased 4%, primarily reflecting higher money market balances and clearing volumes, partially offset by the impact of rate-driven money market fee waivers. Issuer Services revenue of $1.3 billion decreased 2%, primarily reflecting lower Depositary Receipts revenue, partially offset by new business in Corporate Trust. Treasury Services revenue of $1.0 billion increased 6%, primarily reflecting higher money market balances, client deposits and net interest revenue. Clearance and Collateral Management revenue of $872 million increased 2%, primarily reflecting growth in collateral management and clearance volumes and higher net interest revenue, partially offset by lower investment income due to the fourth quarter 2019 sale of an equity investment.

Noninterest expense of $6.0 billion increased 1% compared with the first nine months of 2019 primarily reflecting continued investments in technology, partially offset by lower business development (travel and marketing) expense.

Investment and Wealth Management business

(dollars in millions)	3Q20	2Q20	1Q20	4Q19	3Q19	3Q20 vs. 2Q20	3Q20 vs. 3Q19	YTD20	YTD19	YTD20 vs. YTD19
Revenue:										
Investment management fees *(a)*	**$ 828**	$ 782	$ 812	$ 836	$ 830	**6 %**	**— %**	**$ 2,422**	$ 2,471	**(2) %**
Performance fees	**7**	5	50	48	2	**N/M**	**N/M**	**62**	35	**77**
Investment management and performance fees *(b)*	**835**	787	862	884	832	**6**	**—**	**2,484**	2,506	**(1)**
Distribution and servicing	**31**	34	43	44	45	**(9)**	**(31)**	**108**	134	**(19)**
Other *(a)*	**5**	17	(59)	(4)	(39)	**N/M**	**N/M**	**(37)**	(79)	**N/M**
Total fee and other revenue *(a)*	**871**	838	846	924	838	**4**	**4**	**2,555**	2,561	**—**
Net interest revenue	**47**	48	52	47	49	**(2)**	**(4)**	**147**	175	**(16)**
Total revenue	**918**	886	898	971	887	**4**	**3**	**2,702**	2,736	**(1)**
Provision for credit losses	**12**	7	9	—	—	**N/M**	**N/M**	**28**	(1)	**N/M**
Noninterest expense (excluding amortization of intangible assets)	**653**	650	687	722	582	**—**	**12**	**1,990**	1,888	**5**
Amortization of intangible assets	**8**	8	8	9	10	**—**	**(20)**	**24**	28	**(14)**
Total noninterest expense	**661**	658	695	731	592	**—**	**12**	**2,014**	1,916	**5**
Income before income taxes	**$ 245**	$ 221	$ 194	$ 240	$ 295	**11 %**	**(17)%**	**$ 660**	$ 821	**(20) %**
Pre-tax operating margin	**27 %**	25 %	22 %	25 %	33 %			**24 %**	30 %	
Adjusted pre-tax operating margin – Non-GAAP *(c)*	**29 %**	28 %	24 %	27 %	37 %			**27 %**	33 %	
Total revenue by line of business:										
Investment Management	**$ 641**	$ 621	$ 620	$ 692	$ 608	**3 %**	**5 %**	**$ 1,882**	$ 1,870	**1 %**
Wealth Management	**277**	265	278	279	279	**5**	**(1)**	**820**	866	**(5)**
Total revenue by line of business	**$ 918**	$ 886	$ 898	$ 971	$ 887	**4 %**	**3 %**	**$ 2,702**	$ 2,736	**(1) %**
Average balances:										
Average loans	**$ 11,503**	$ 11,791	$ 12,124	$ 12,022	$ 12,013	**(2) %**	**(4)%**	**$ 11,805**	$ 12,184	**(3) %**
Average deposits	**$ 17,570**	$ 17,491	$ 16,144	$ 15,195	$ 14,083	**— %**	**25 %**	**$ 17,070**	$ 14,831	**15 %**

(a) Total fee and other revenue includes the impact of the consolidated investment management funds, net of noncontrolling interests. Additionally, other revenue includes asset servicing fees, treasury services fees, foreign exchange and other trading revenue and investment and other income.

(b) On a constant currency basis, investment management and performance fees decreased 1% (Non-GAAP) compared with the third quarter of 2019. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 45 for the reconciliation of this Non-GAAP measure.

(c) 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						3Q20 vs.	
(dollars in billions)	**3Q20**	2Q20	1Q20	4Q19	3Q19	**2Q20**	**3Q19**
AUM at period end, by product type: *(a)*							
Equity	**$ 149**	$ 141	$ 120	$ 154	$ 147	**6 %**	**1 %**
Fixed income	**241**	224	211	224	211	**8**	**14**
Index	**350**	333	274	339	321	**5**	**9**
Liability-driven investments	**788**	752	705	728	742	**5**	**6**
Multi-asset and alternative investments	**193**	185	171	192	182	**4**	**6**
Cash	**320**	326	315	273	278	**(2)**	**15**
Total AUM by product type	**$ 2,041**	$ 1,961	$ 1,796	$ 1,910	$ 1,881	**4 %**	**9 %**
Changes in AUM: *(a)*							
Beginning balance of AUM	**$ 1,961**	$ 1,796	$ 1,910	$ 1,881	$ 1,843		
Net inflows (outflows):							
Long-term strategies:							
Equity	**(4)**	(2)	(2)	(6)	(4)		
Fixed income	**1**	4	—	5	2		
Liability-driven investments	**14**	(2)	(5)	(3)	(4)		
Multi-asset and alternative investments	**(3)**	—	(1)	3	(1)		
Total long-term active strategies inflows (outflows)	**8**	—	(8)	(1)	(7)		
Index	**(3)**	9	3	(5)	(3)		
Total long-term strategies inflows (outflows)	**5**	9	(5)	(6)	(10)		
Short-term strategies:							
Cash	**(10)**	11	43	(7)	11		
Total net (outflows) inflows	**(5)**	20	38	(13)	1		
Net market impact	**41**	143	(91)	(20)	66		
Net currency impact	**44**	2	(61)	62	(29)		
Ending balance of AUM	**$ 2,041**	$ 1,961	$ 1,796	$ 1,910	$ 1,881	**4 %**	**9 %**
Wealth Management client assets *(b)*	**$ 265**	$ 254	$ 236	$ 266	$ 259	**4 %**	**2 %**

(a) Excludes securities lending cash management assets and assets managed in the Investment Services business.
(b) Includes AUM and AUC/A in the Wealth Management business.

Business description

Our Investment and Wealth Management business consists of two 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 and private banking services. See pages 16 and 17 of our 2019 Annual Report for additional information on our Investment and Wealth Management business.

Review of financial results

AUM increased 9% compared with Sept. 30, 2019 primarily reflecting higher market values, the favorable impact of a weaker U.S. dollar (principally versus the British pound) and net inflows.

Net long-term strategy inflows were $5 billion in the third quarter of 2020, driven by liability-driven investment funds. Short-term strategy outflows were $10 billion in the third quarter of 2020. Market and regulatory trends have resulted in increased demand for lower fee asset management products and for performance-based fees.

Total revenue of $918 million increased 3% compared with the third quarter of 2019 and 4% compared with the second quarter of 2020.

Investment Management revenue of $641 million increased 5% compared with the third quarter of 2019 and 3% compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects the impact of hedging activities in the third quarter of 2019, higher market values, the favorable impact of a weaker U.S. dollar and higher performance fees, partially offset by the impact of money market fee waivers. The increase compared with the second quarter of 2020 primarily reflects higher market values and the favorable impact of a

weaker U.S. dollar, partially offset by lower seed capital gains, net of hedges.

Wealth Management revenue of $277 million decreased 1% compared with the third quarter of 2019 and increased 5% compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 primarily reflects lower net interest revenue. The comparisons with the third quarter of 2019 and second quarter of 2020 reflect higher market values offset by a shift to lower fee investment products.

Revenue generated in the Investment and Wealth Management business included 41% from non-U.S. sources in the third quarter of 2020, compared with 39% in the third quarter of 2019 and 40% in the second quarter of 2020.

Noninterest expense of $661 million increased 12% compared with the third quarter of 2019 and increased slightly compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects the net reduction of reserves for a tax-related exposure of certain investment management funds in the third quarter of 2019.

Year-to-date 2020 compared with year-to-date 2019

Total revenue of $2.7 billion decreased 1% compared with the first nine months of 2019. Investment Management revenue of $1.9 billion increased 1% primarily reflecting higher market values, the impact of hedging activities and higher performance fees, partially offset by an unfavorable change in the mix of AUM and the impact of fee waivers. Wealth Management revenue of $820 million decreased 5% reflecting lower net interest revenue, partially offset by higher market values.

Noninterest expense of $2.0 billion increased 5% compared with the first nine months of 2019, primarily reflecting the net reduction of reserves for a tax-related exposure of certain investment management funds in the third quarter of 2019.

Other segment

(in millions)	**3Q20**	2Q20	1Q20	4Q19	3Q19	**YTD20**	YTD19
Fee revenue (loss)	**$ 11**	$ 29	$ 21	$ 817 *(a)*	$ (5)	**$ 61**	$ 36
Net securities gains (losses)	**9**	9	9	(23)	(1)	**27**	7
Total fee and other revenue (loss)	**20**	38	30	794	(6)	**88**	43
Net interest (expense)	**(25)**	(36)	(44)	(10)	(80)	**(105)**	(150)
Total (loss) revenue	**(5)**	2	(14)	784	(86)	**(17)**	(107)
Provision for credit losses	**7**	(9)	11	(3)	(1)	**9**	(5)
Noninterest expense	**—**	39	30	54	25	**69**	103
(Loss) income before income taxes	**$ (12)**	$ (28)	$ (55)	$ 733	$ (110)	**$ (95)**	$ (205)
Average loans and leases	**$ 1,805**	$ 1,815	$ 1,961	$ 1,974	$ 1,817	**$ 1,861**	$ 1,789

(a) Includes a gain on sale of an equity investment.

See page 18 of our 2019 Annual Report for additional information on the Other segment.

In the first quarter of 2020, we reclassified the results of certain services provided between the segments from noninterest expense to fee and other revenue. The intersegment activity is eliminated in the Other segment and relates to services that are also provided to third parties and provides consistency with the reporting of the revenues. This adjustment had no impact on income before taxes of the businesses.

Review of financial results

Fee revenue, net securities gains (losses) and net interest expense include corporate treasury and other investment activity, including hedging activity which offsets between fee revenue and net interest expense.

Fee revenue increased $16 million compared with the third quarter of 2019 and decreased $18 million compared with the second quarter of 2020. The increase compared with the third quarter of 2019 primarily reflects higher corporate treasury activity and equity investment income. The decrease compared with the second quarter of 2020 primarily

reflects lower corporate treasury activity and equity investment income.

Net interest expense decreased $55 million compared with the third quarter of 2019 and $11 million compared with the second quarter of 2020. The decrease compared with the third quarter of 2019 primarily reflects the lease-related impairment of $70 million recorded in the third quarter of 2019 and corporate treasury activity. The decrease compared with the second quarter of 2020 primarily reflects corporate treasury activity.

Noninterest expense decreased $25 million compared with the third quarter of 2019 and $39 million compared with the second quarter of 2020. Both decreases primarily reflects lower staff expense.

Year-to-date 2020 compared with year-to-date 2019

Loss before taxes decreased $110 million compared with the first nine months of 2019. Total loss decreased $90 million, primarily reflecting the lease-related impairment of $70 million recorded in the third quarter of 2019 and corporate treasury activity. Noninterest expense decreased $34 million compared with the first nine months of 2019, primarily reflecting lower staff expense and higher intersegment eliminations, partially offset by higher pension expense.

Critical accounting estimates

Our significant accounting policies are described in Note 1 of the Notes to Consolidated Financial Statements in our 2019 Annual Report and in Note 2 of the Notes to Consolidated Financial Statements in this Form 10-Q. Our critical accounting estimates are those related to the allowance for credit losses, fair value of financial instruments and derivatives, goodwill and other intangibles and litigation and regulatory contingencies, as referenced below.

Critical accounting estimates	Reference
Allowance for credit losses	First quarter 2020 Form 10-Q, pages 19-20.
Fair value of financial instruments and derivatives	2019 Annual Report, pages 23-24.
Goodwill and other intangibles	2019 Annual Report, pages 24-25 and second quarter 2020 Form 10-Q, page 21.
Litigation and regulatory contingencies	"Legal proceedings" in Note 18 of the Notes to Consolidated Financial Statements.

Consolidated balance sheet review

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

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

At Sept. 30, 2020, total assets were $428 billion, compared with $382 billion at Dec. 31, 2019. The increase in total assets was primarily driven by higher securities and interest-bearing deposits with the Federal Reserve and other central banks, resulting from significant deposit inflows. Deposits totaled $296 billion at Sept. 30, 2020, compared with $259 billion at Dec. 31, 2019. The increase reflects the current macroeconomic environment. Total interest-bearing deposits as a percentage of total interest-earning assets were 58% at Sept. 30, 2020 and 62% at Dec. 31, 2019.

At Sept. 30, 2020, available funds totaled $159 billion which include 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 $145 billion at Dec. 31, 2019. Total available funds as a percentage of total assets were 37% at Sept. 30, 2020 and 38% at Dec. 31, 2019. For additional information on our available funds, see "Liquidity and dividends."

Securities were $155 billion, or 36% of total assets, at Sept. 30, 2020, compared with $123 billion, or 32% of total assets, at Dec. 31, 2019. The increase primarily reflects investments in U.S. Treasury securities, agency residential mortgage-backed securities ("RMBS"), supranational securities, and

U.S. government agency securities and an increase in the unrealized pre-tax gain. For additional information on our securities portfolio, see "Securities" and Note 4 of the Notes to Consolidated Financial Statements.

Loans were $55.5 billion, or 13% of total assets, at Sept. 30, 2020, compared with $55.0 billion, or 14% of total assets, at Dec. 31, 2019. The increase was primarily driven by higher overdrafts and commercial real estate loans, partially offset by lower loans to financial institutions. For additional information on our loan portfolio, see "Loans" and Note 5 of the Notes to Consolidated Financial Statements.

Long-term debt totaled $26.1 billion at Sept. 30, 2020 and $27.5 billion at Dec. 31, 2019. Maturities and redemptions were partially offset by issuances and an increase 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 increased to $44.9 billion at Sept. 30, 2020 from $41.5 billion at Dec. 31, 2019. For additional information, see "Capital."

Country risk exposure

The following table presents BNY Mellon's top 10 exposures by country (excluding the U.S.) as of Sept. 30, 2020, as well as certain countries with higher-risk profiles, and is presented on an internal risk management basis. We monitor our exposure to these and other countries as part of our internal country risk management process.

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

Country risk exposure at Sept. 30, 2020	Interest-bearing deposits						
(in billions)	Central banks	Banks	Lending *(a)*	Securities *(b)*	Other *(c)*	Total exposure	
Top 10 country exposure:							
United Kingdom ("UK")	$ 15.7	$ 0.7	$ 1.2	$ 4.0	$ 2.1	$ 23.7	
Germany	14.9	0.6	0.7	4.3	0.3	20.8	
Japan	17.4	1.3	—	0.6	0.1	19.4	
Canada	—	2.5	0.1	3.9	1.1	7.6	
Belgium	5.9	0.2	0.1	0.3	—	6.5	
China	—	2.8	1.5	—	0.2	4.5	
Ireland	0.7	0.1	1.3	0.6	1.4	4.1	
France	—	—	0.1	2.7	0.2	3.0	
Luxembourg	0.6	0.2	0.2	0.1	1.8	2.9	
South Korea	0.1	0.7	1.8	—	0.1	2.7	
Total Top 10 country exposure	$ 55.3	$ 9.1	$ 7.0	$ 16.5	$ 7.3	$ 95.2	*(d)*
Select country exposure:							
Italy	$ 0.1	$ 0.4	$ —	$ 2.0	$ —	$ 2.5	
Brazil	—	—	0.9	0.1	0.1	1.1	
Total select country exposure	$ 0.1	$ 0.4	$ 0.9	$ 2.1	$ 0.1	$ 3.6	

(a) Lending includes loans, acceptances, issued letters of credit, net of participations, and lending-related commitments.
(b) Securities include both the available-for-sale and held-to-maturity portfolios.
(c) Other exposures include over-the-counter ("OTC") derivative and securities financing transactions, net of collateral.
(d) The top 10 country exposures comprise approximately 75% of our total non-U.S. exposure.

Based on our internal country risk management process at Sept. 30, 2020, our largest country risk exposure was to the UK, which withdrew from the European Union ("EU") on Jan. 31, 2020. For additional information, see "Other Matters - UK's Withdrawal from the EU ("Brexit")" and "Risk Factors - The UK's withdrawal from the EU may have negative effects on global economic conditions, global financial markets, and our business and results of operations" both included in our 2019 Annual Report.

Events in recent years have resulted in increased focus on Italy and Brazil. The country risk exposure to Italy primarily consists of investment grade sovereign debt. 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.

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 for our securities portfolio could indicate increased credit risk for us and could be accompanied by a reduction in the fair value of our securities portfolio.

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

Securities portfolio	June 30, 2020	3Q20	**Sept. 30, 2020**						Ratings *(c)*					
(dollars in millions)	Fair value	change in unrealized gain (loss)	Amortized cost	Fair value	Fair value as a % of amortized cost *(a)*	Unrealized gain (loss)	% Floating rate *(b)*	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	A1+/A2 & SP-1+	Not rated
Agency RMBS	$ 60,401	$ 47	**$ 61,348**	**$ 62,922**	103 %	$ 1,574	16 %	100 %	— %	— %	— %	— %	— %
U.S. Treasury	28,651	83	**26,454**	**26,964**	102	510	42	100	—	—	—	—	—
Sovereign debt/sovereign guaranteed *(d)*	16,868	8	**14,908**	**15,086**	101	178	10	67	7	25	1	—	—
Agency commercial mortgage-backed securities ("MBS")	11,731	45	**11,340**	**11,777**	104	437	32	100	—	—	—	—	—
Supranational	5,484	5	**7,121**	**7,176**	101	55	46	100	—	—	—	—	—
Foreign covered bonds *(e)*	5,598	14	**5,777**	**5,841**	101	64	35	99	1	—	—	—	—
U.S. government agencies	5,056	8	**5,566**	**5,646**	101	80	21	100	—	—	—	—	—
Collateralized loan obligations ("CLOs")	4,432	44	**4,707**	**4,657**	99	(50)	100	99	—	—	—	—	1
Foreign government agencies *(f)*	3,575	4	**3,924**	**3,967**	101	43	29	94	6	—	—	—	—
Other asset-backed securities ("ABS")	2,743	8	**2,903**	**2,930**	101	27	25	99	—	—	1	—	—
Non-agency commercial MBS	2,602	34	**2,565**	**2,684**	105	119	23	100	—	—	—	—	—
Non-agency RMBS *(g)*	1,672	14	**1,864**	**2,013**	108	149	55	60	5	2	20	—	13
State and political subdivisions	1,196	(1)	**1,676**	**1,705**	102	29	1	83	13	3	—	—	1
Corporate bonds	831	—	**988**	**1,030**	104	42	—	19	64	17	—	—	—
Commercial paper/CDs	3,392	(4)	**650**	**652**	100	2	55	—	—	—	—	100	—
Other	1	—	**1**	**1**	100	—	—	—	—	—	—	—	100
Total securities	$ 154,233 *(h)*	**$ 309**	**$ 151,792**	**$ 155,051** *(h)*	**102 %**	**$ 3,259** *(h)(i)*	27 %	**95 %**	**2 %**	**3 %**	**— %**	**— %**	**— %**

(a) Amortized cost reflects historical impairments, but does not include the impact 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, Italy, Spain and Singapore.
(e) Primarily consists of exposure to Canada, UK, Australia and Norway.
(f) Primarily consists of exposure to Germany, the Netherlands and Canada.
(g) Includes RMBS that were included in the former Grantor Trust of $538 million at June 30, 2020 and $512 million at Sept. 30, 2020.
(h) Includes net unrealized losses on derivatives hedging securities available-for-sale (including terminated hedges) of $1,817 million at June 30, 2020 and $1,650 million at Sept. 30, 2020.
(i) Includes unrealized gains of $1,897 million at Sept. 30, 2020 related to available-for-sale securities, net of hedges, and $1,362 million related to held-to-maturity securities.

The fair value of our securities portfolio, including related hedges, was $155.1 billion at Sept. 30, 2020, compared with $122.7 billion at Dec. 31, 2019. The increase primarily reflects investments in U.S. Treasury, agency RMBS, supranational and U.S. government agency securities and an increase in unrealized pre-tax gain.

Included in the securities portfolio at Sept. 30, 2020 were $159 million of commercial paper and $198 million of CDs purchased from affiliated money market mutual funds in order to provide liquidity support to the funds. Additionally, at Sept. 30, 2020, the securities portfolio included $295 million of commercial paper and CDs purchased from money market mutual funds managed by third parties and funded through the MMLF program.

At Sept. 30, 2020, the securities portfolio had a net unrealized gain, including the impact of related hedges, of $3.3 billion, compared with $796 million at Dec. 31, 2019. The increase in the net unrealized pre-tax gain was primarily driven by lower market rates.

The fair value of the available-for-sale securities totaled $107.6 million at Sept. 30, 2020, net of hedges, or 69% of the securities portfolio, net of hedges. The fair value of the held-to-maturity securities totaled $47.5 million or 31% of the securities portfolio, net of hedges.

The unrealized gain (after-tax) on our available-for-sale securities portfolio, net of hedges, included in accumulated other comprehensive income ("OCI") was $1.4 billion at Sept. 30, 2020, compared with $361 million at Dec. 31, 2019. The increase in the unrealized gain, net of tax, was primarily driven by lower market interest rates.

At Sept. 30, 2020, 95% of the securities in our portfolio were rated AAA/AA-, unchanged when compared with Dec. 31, 2019.

See Note 4 of the Notes to Consolidated Financial Statements for the pre-tax net securities gains (losses) by security type. See Note 15 of the Notes to Consolidated Financial Statements for details of 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)*	**3Q20**	2Q20	1Q20	4Q19	3Q19
Amortizable purchase premium (net of discount) relating to securities:					
Balance at period end	**$ 2,050**	$ 1,693	$ 1,555	$ 1,319	$ 1,308
Estimated average life remaining at period end *(in years)*	**3.8**	3.7	3.8	4.3	4.2
Amortization	**$ 161**	$ 125	$ 101	$ 100	$ 95
Accretable discount related to the prior restructuring of the securities portfolio:					
Balance at period end	**$ 133**	$ 145	$ 159	$ 163	$ 171
Estimated average life remaining at period end *(in years)*	**5.7**	5.8	6.1	6.3	6.3
Accretion	**$ 9**	$ 10	$ 11	$ 12	$ 13

(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	**Sept. 30, 2020**			Dec. 31, 2019		
(in billions)	**Loans**	**Unfunded commitments**	**Total exposure**	Loans	Unfunded commitments	Total exposure
Non-margin loans:						
Financial institutions	**$ 11.0**	**$ 33.5**	**$ 44.5**	$ 12.5	$ 34.4	$ 46.9
Commercial	**1.9**	**12.2**	**14.1**	1.8	12.6	14.4
Subtotal institutional	**12.9**	**45.7**	**58.6**	14.3	47.0	61.3
Wealth management loans and mortgages	**15.9**	**0.9**	**16.8**	16.2	0.8	17.0
Commercial real estate	**6.0**	**3.2**	**9.2**	5.6	3.6	9.2
Lease financings	**1.1**	**—**	**1.1**	1.1	—	1.1
Other residential mortgages	**0.4**	**—**	**0.4**	0.5	—	0.5
Overdrafts	**4.0**	**—**	**4.0**	2.7	—	2.7
Other	**1.7**	**—**	**1.7**	1.2	—	1.2
Subtotal non-margin loans	**42.0**	**49.8**	**91.8**	41.6	51.4	93.0
Margin loans	**13.5**	**0.1**	**13.6**	13.4	0.1	13.5
Total	**$ 55.5**	**$ 49.9**	**$ 105.4**	$ 55.0	$ 51.5	$ 106.5

At Sept. 30, 2020, total exposure of $105.4 billion decreased 1% compared with Dec. 31, 2019, primarily reflecting lower exposure to financial institutions, partially offset by higher overdrafts.

Our financial institutions and commercial portfolios comprise our largest concentrated risk. These portfolios comprised 56% of our total exposure at Sept. 30, 2020 and 58% at Dec. 31, 2019. Additionally, most of our overdrafts relate to financial institutions.

Financial institutions

The financial institutions portfolio is shown below.

Financial institutions portfolio exposure *(dollars in billions)*	**Sept. 30, 2020**					Dec. 31, 2019		
	Loans	**Unfunded commitments**	**Total exposure**	**% Inv. grade**	**% due <1 yr.**	Loans	Unfunded commitments	Total exposure
Securities industry	**$ 2.8**	**$ 22.3**	**$ 25.1**	**97 %**	**99 %**	$ 2.9	$ 23.4	$ 26.3
Asset managers	**1.2**	**6.5**	**7.7**	**98**	**83**	1.3	6.4	7.7
Banks	**6.1**	**1.1**	**7.2**	**85**	**97**	7.4	1.1	8.5
Insurance	**0.1**	**2.7**	**2.8**	**100**	**16**	—	2.7	2.7
Government	**0.1**	**0.2**	**0.3**	**100**	**47**	0.1	0.3	0.4
Other	**0.7**	**0.7**	**1.4**	**96**	**53**	0.8	0.5	1.3
Total	**$ 11.0**	**$ 33.5**	**$ 44.5**	**95 %**	**89 %**	$ 12.5	$ 34.4	$ 46.9

The financial institutions portfolio exposure was $44.5 billion at Sept. 30, 2020, a decrease of 5% compared with Dec. 31, 2019, primarily reflecting a decrease in loans to banks and unfunded commitments to the securities industry.

Financial institution exposures are high quality, with 95% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at Sept. 30, 2020. 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.

In addition, 75% 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 89% of the exposures expiring within one year. At Sept. 30, 2020, 61% of the exposure to financial institutions had an expiration within 90 days, compared with 18% at Dec. 31, 2019.

Secured intraday credit facilities represent approximately 40% of the exposure in the financial institutions portfolio and are reviewed and reapproved annually.

At Sept. 30, 2020, the secured intraday credit provided to dealers in connection with their tri-party repo activity totaled $18.9 billion and was included in the securities industry portfolio. Dealers secure the outstanding intraday credit with high-quality liquid collateral having a market value in excess of the amount of the outstanding credit.

Our banks exposure primarily relates to our global trade finance. These exposures are short-term in nature, with 97% due in less than one year. The investment grade percentage of our banks exposure was 85% at Sept. 30, 2020, compared with 77% at Dec. 31, 2019. Our non-investment grade exposures are primarily trade finance loans in Brazil.

The asset managers portfolio exposure is high-quality, with 98% of the exposures meeting our investment grade equivalent ratings criteria as of Sept. 30, 2020. These exposures are generally short-term liquidity facilities, with the majority to regulated mutual funds.

Commercial

The commercial portfolio is presented below.

Commercial portfolio exposure	**Sept. 30, 2020**					Dec. 31, 2019		
(dollars in billions)	**Loans**	**Unfunded commitments**	**Total exposure**	**% Inv. grade**	**% due <1 yr.**	Loans	Unfunded commitments	Total exposure
Services and other	**$ 1.0**	**$ 3.5**	**$ 4.5**	**94 %**	**37 %**	$ 0.6	$ 3.7	$ 4.3
Manufacturing	**0.7**	**3.8**	**4.5**	**94**	**21**	0.9	4.2	5.1
Energy and utilities	**0.2**	**4.0**	**4.2**	**89**	**5**	0.3	3.7	4.0
Media and telecom	**—**	**0.9**	**0.9**	**93**	**3**	—	1.0	1.0
Total	**$ 1.9**	**$ 12.2**	**$ 14.1**	**93 %**	**20 %**	$ 1.8	$ 12.6	$ 14.4

The commercial portfolio exposure was $14.1 billion at Sept. 30, 2020, a decrease of 2% from Dec. 31, 2019, primarily driven by lower exposure in the manufacturing portfolio, partially offset by increased exposure in the services and other and energy and utilities portfolios.

We have $734 million of total direct exposure to the oil and gas industry, most of which is reflected in the energy and utilities portfolio in the table above. This exposure is to exploration and production, refining and integrated companies and was 65% investment grade at Sept. 30, 2020 and 91% at Dec. 31, 2019.

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

Percentage of the portfolios that are investment grade	Quarter ended				
	Sept. 30, 2020	June 30, 2020	March 31, 2020	Dec. 31, 2019	Sept. 30, 2019
Financial institutions	**95 %**	95 %	96 %	95 %	95 %
Commercial	**93 %**	92 %	94 %	96 %	95 %

Wealth management loans and mortgages

Our wealth management exposure was $16.8 billion at Sept. 30, 2020, compared with $17.0 billion at Dec. 31, 2019. Wealth management loans and mortgages primarily consist of loans to high-net-worth individuals, which are secured by marketable securities and/or residential property. Wealth management mortgages are primarily interest-only, adjustable-rate mortgages with a weighted-average loan-to-value ratio of 62% at origination. Less than 1% of the mortgages were past due at Sept. 30, 2020.

At Sept. 30, 2020, the wealth management mortgage portfolio consisted of the following geographic concentrations: California - 22%; New York - 17%; Massachusetts - 10%; Florida - 8%; and other - 43%.

Commercial real estate

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

Composition of commercial real estate portfolio by asset class	**Sept. 30, 2020**		Dec. 31, 2019	
(in billions)	**Total exposure**	**Percentage secured** *(a)*	Total exposure	Percentage secured *(a)*
Residential	**$ 3.2**	**87 %**	$ 3.1	86 %
Office	**2.8**	**76**	3.1	77
Retail	**1.0**	**52**	1.0	57
Mixed-use	**0.8**	**20**	0.6	24
Hotels	**0.6**	**19**	0.6	17
Healthcare	**0.3**	**10**	0.3	—
Other	**0.5**	**24**	0.5	21
Total commercial real estate	**$ 9.2**	**64 %**	$ 9.2	65 %

(a) Represents the amount of secured exposure in each asset class.

Our commercial real estate exposure totaled $9.2 billion at Sept. 30, 2020 and Dec. 31, 2019. Our income-producing commercial real estate facilities are focused on experienced owners and are structured with moderate leverage based on existing cash flows. Our commercial real estate lending activities also include construction and renovation facilities. Our client base consists of experienced developers and long-term holders of real estate assets. Loans are approved on the basis of existing or projected cash flows and supported by appraisals and knowledge of local market conditions. Development loans are structured with moderate leverage, and in many instances, involve some level of recourse to the developer.

At Sept. 30, 2020, the unsecured portfolio consists of real estate investment trusts ("REITs") and real estate operating companies, which are both primarily investment grade.

At Sept. 30, 2020, our commercial real estate portfolio consisted of the following concentrations: New York metro - 39%; REITs and real estate operating companies - 36%; and other - 25%.

Lease financings

The lease financings portfolio exposure totaled $1.1 billion at Sept. 30, 2020 and Dec. 31, 2019. At Sept. 30, 2020, approximately 98% of leasing exposure was investment grade, or investment grade equivalent and consisted of exposures backed by well-diversified assets, primarily large-ticket transportation equipment and real estate. The largest component of our lease residual value exposure is freight-related rail cars.

Assets are both domestic and foreign-based, with primary concentrations in the U.S. and Germany.

Other residential mortgages

The other residential mortgages portfolio primarily consists of 1-4 family residential mortgage loans and totaled $423 million at Sept. 30, 2020 and $494 million at Dec. 31, 2019. Included in this portfolio at Sept. 30, 2020 were $76 million of mortgage loans purchased in 2005, 2006 and the first quarter of 2007, of which 19% of the serviced loan balance was at least 60 days delinquent.

Overdrafts

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

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 $13.6 billion at Sept. 30, 2020 and $13.5 billion at Dec. 31, 2019 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 $3.6 billion at Sept. 30, 2020 and Dec. 31, 2019 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 ("SBLC") and overdrafts associated with our custody and securities clearance businesses.

On Jan. 1, 2020, we adopted *ASU 2016-13, Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments*, on a prospective basis. See Note 2 of the Notes to Consolidated Financial Statements for the significant accounting policy related to allowance for credit losses on loans and lending-related commitments.

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

Allowance for credit losses activity *(dollars in millions)*	**Sept. 30, 2020**	June 30, 2020	Dec. 31, 2019	Sept. 30, 2019
Beginning balance of allowance for credit losses	**$ 475**	$ 329	$ 224	$ 241
Provision for credit losses	**9**	143	(8)	(16)
Net recoveries (charge-offs):				
Loans:				
Other residential mortgages	**1**	3	—	—
Commercial	**—**	—	—	(1)
Other financial instruments	**1**	—	N/A	N/A
Net recoveries (charge-offs)	**2**	3	—	(1)
Ending balance of allowance for credit losses	**$ 486**	$ 475	$ 216	$ 224
Allowance for loan losses	**$ 325**	$ 302	$ 122	$ 127
Allowance for lending-related commitments	**135**	152	94	97
Allowance for financial instruments	**26** *(a)*	21 *(a)*	N/A	N/A
Total allowance for credit losses	**$ 486**	$ 475	$ 216	$ 224
Non-margin loans	**$ 41,993**	$ 42,488	$ 41,567	$ 44,417
Margin loans	**13,498**	12,909	13,386	10,464
Total loans	**$ 55,491**	$ 55,397	$ 54,953	$ 54,881
Allowance for loan losses as a percentage of total loans	**0.59 %**	0.55 %	0.22 %	0.23 %
Allowance for loan losses as a percentage of non-margin loans	**0.77**	0.71	0.29	0.29
Allowance for loan losses and lending-related commitments as a percentage of total loans	**0.83**	0.82	0.39	0.41
Allowance for loan losses and lending-related commitments as a percentage of non-margin loans	**1.10**	1.07	0.52	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.

N/A - Not applicable.

The provision for credit losses of $9 million in the third quarter of 2020 reflects a fairly consistent macroeconomic outlook compared with the second quarter of 2020.

We had $13.5 billion of secured margin loans on our balance sheet at Sept. 30, 2020 compared with $13.4 billion at Dec. 31, 2019. We have rarely suffered a loss on these types of loans. As a result, we believe that the ratio of allowance for loan losses and lending-related commitments as a percentage of non-margin loans is a more appropriate metric to measure the adequacy of the reserve.

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" and Note 2 of the Notes to Consolidated Financial Statements, we have allocated our allowance for loans and lending-related commitments as presented below.

Allocation of allowance for loan losses and lending-related commitments	Sept. 30, 2020	June 30, 2020	Dec. 31, 2019	Sept. 30, 2019
Commercial real estate	**84 %**	81 %	35 %	35 %
Commercial	**6**	9	28	27
Financial institutions	**2**	4	9	9
Other residential mortgages	**4**	3	6	6
Wealth management *(b)*	**3**	2	9	9
Lease financings	**1**	1	2	1
Foreign	**— *(a)***	— *(a)*	11	13
Total	**100 %**	100 %	100 %	100 %

(a) The allowance related to foreign exposure has been reclassified to the respective classes of financing receivables.
(b) Includes the allowance for credit losses on wealth management mortgages.

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 each credit were rated one grade better, the allowance would have decreased by $119 million, and if each credit were rated one grade worse, the allowance would have increased by $146 million. Our multi-scenario based macroeconomic forecast used in determining the Sept. 30, 2020 allowance for credit losses consisted of three recessionary scenarios, each of varying severity and duration. The baseline scenario reflects moderate recovery across most key variables, whereas the upside scenario is principally a V-shaped recovery, and the downside scenario is reflective of W-shaped recovery in GDP and unemployment and deeper reductions in asset prices compared to the baseline. We placed the most weight on our baseline scenario, with the remaining weighting resulting in slightly more weight placed on the downside scenario than the upside scenario. From a sensitivity perspective, at Sept. 30, 2020, if we had applied 100% weighting to the downside scenario, the allowance for credit losses would have been approximately $245 million higher.

Nonperforming assets

The table below presents our nonperforming assets.

Nonperforming assets *(dollars in millions)*	Sept. 30, 2020	Dec. 31, 2019
Nonperforming loans:		
Other residential mortgages	**$ 56**	$ 62
Wealth management loans and mortgages	**27**	24
Total nonperforming loans	**83**	86
Other assets owned	**1**	3
Total nonperforming assets	**$ 84**	$ 89
Nonperforming assets ratio	**0.15 %**	0.16 %
Nonperforming assets ratio, excluding margin loans	**0.20**	0.21
Allowance for loan losses/nonperforming loans *(a)*	**391.6**	141.9
Allowance for loan losses/nonperforming assets *(a)*	**386.9**	137.1
Allowance for loan losses and lending-related commitments/nonperforming loans *(a)*	**554.2**	251.2
Allowance for loan losses and lending-related commitments/nonperforming assets *(a)*	**547.6**	242.7

(a) In the first quarter of 2020, we adopted new accounting guidance included in ASU 2016-13, Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments, on a prospective basis. See Note 2 of the Notes to Consolidated Financial Statement for additional information.

Lost interest

Interest revenue would have increased by $1 million in the third quarter of 2020, second quarter of 2020 and the third quarter of 2019 and $4 million in the first nine months of 2020 and first nine months of 2019, if nonperforming loans at period-end had been performing for the entire respective periods.

Loan modifications

Due to the coronavirus pandemic, there have been two forms of relief provided for classifying loans as troubled debt restructurings ("TDRs"): The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and the Interagency Guidance. See Note 2 of the Notes to Consolidated Financial Statements for additional details on this guidance. Financial institutions may account for eligible loan modifications either under the CARES Act or the Interagency Guidance and we have elected to apply both, as applicable, in providing borrowers with loan modification relief in response to the coronavirus pandemic. We modified loans of $106 million in the third quarter of 2020 and $282 million in the second quarter of 2020. 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 also modified loans of $56 million in the third quarter of 2020, a majority of which were commercial real estate loans, by providing long-term loan payment modifications and an extension of maturity. We did not identify any of the modifications as TDRs. None of these loans were reported as past due or nonperforming at Sept. 30, 2020. At Sept. 30, 2020, the unpaid principal balance of the loans modified under the CARES Act or Interagency Guidance was $174 million. We modified residential mortgage loans of $4 million in the third quarter of 2019.

Deposits

Increased volatility coupled with the interest rate environment has led to an increase in deposit levels as our clients increased the levels of cash placed with us. Total deposits were $296.3 billion at Sept. 30, 2020, an increase of 14%, compared with $259.5 billion at Dec. 31, 2019.

Noninterest-bearing deposits were $79.5 billion at Sept. 30, 2020, compared with $57.6 billion at Dec. 31, 2019. Interest-bearing deposits were $216.8 billion at Sept. 30, 2020, compared with $201.9 billion at Dec. 31, 2019. See "Impact of coronavirus pandemic on our business" for additional information.

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.

Information related to federal funds purchased and securities sold under repurchase agreements is presented below.

Federal funds purchased and securities sold under repurchase agreements

	Quarter ended		
(dollars in millions)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019
Maximum month-end balance during the quarter	**$ 17,248**	$ 14,512	$ 16,967
Average daily balance *(a)*	**$ 16,850**	$ 14,209	$ 13,432
Weighted-average rate during the quarter *(a)*	**0.13 %**	0.03 %	13.08 %
Ending balance *(b)*	**$ 15,907**	$ 14,512	$ 11,796
Weighted-average rate at period end *(b)*	**0.16 %**	0.00 %	11.70 %

(a) Includes the average impact of offsetting under enforceable netting agreements of $42,862 million in the third quarter of 2020, $66,606 million in the second quarter of 2020 and $67,519 million in the third quarter of 2019. On a Non-GAAP basis, excluding the impact of offsetting, the weighted-average rates would have been 0.04% for the third quarter of 2020, 0.00% for the second quarter of 2020 and 2.17% for the third quarter of 2019. We believe providing the rates excluding the impact of netting is useful to investors as it is more reflective of the actual rates paid.

(b) Includes the impact of offsetting under enforceable netting agreements of $54,629 million at Sept. 30, 2020, $48,615 million at June 30, 2020 and $60,094 million at Sept. 30, 2019.

Fluctuations of federal funds purchased and securities sold under repurchase agreements reflect changes in overnight borrowing opportunities. The fluctuations of the weighted-average rates compared with Sept. 30, 2019 and June 30, 2020 primarily reflect lower interest rates and repurchase agreement activity with the Fixed Income Clearing Corporation (the "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.

Information related to payables to customers and broker-dealers is presented below.

Payables to customers and broker-dealers

	Quarter ended		
(dollars in millions)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019
Maximum month-end balance during the quarter	**$ 24,188**	$ 25,012	$ 19,103
Average daily balance *(a)*	**$ 23,847**	$ 23,944	$ 18,619
Weighted-average rate during the quarter *(a)*	**(0.01)%**	(0.01)%	1.52 %
Ending balance	**$ 23,514**	$ 25,012	$ 18,364
Weighted-average rate at period end	**(0.01)%**	(0.01)%	1.34 %

(a) The weighted-average rate is calculated based on, and is applied to, the average interest-bearing payables to customers and broker-dealers, which were $18,501 million in the third quarter of 2020, $18,742 million in the second quarter of 2020 and $15,440 million in the third quarter of 2019.

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.

Information related to commercial paper is presented below.

Commercial paper

	Quarter ended		
(dollars in millions)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019
Maximum month-end balance during the quarter	**$ 5,000**	$ 665	$ 5,692
Average daily balance	**$ 2,274**	$ 191	$ 3,796
Weighted-average rate during the quarter	**0.09 %**	1.02 %	2.26 %
Ending balance	**$ 671**	$ 665	$ 3,538
Weighted-average rate at period end	**0.09 %**	0.02 %	1.88 %

The Bank of New York Mellon 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. The fluctuations in the commercial paper balances primarily reflect funding of investments in short-term assets.

Information related to other borrowed funds is presented below.

Other borrowed funds

	Quarter ended		
(dollars in millions)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019
Maximum month-end balance during the quarter	**$ 948**	$ 2,451	$ 1,358
Average daily balance	**$ 873**	$ 2,272	$ 1,148
Weighted-average rate during the quarter	**1.40 %**	1.30 %	3.24 %
Ending balance	**$ 420**	$ 1,628	$ 820
Weighted-average rate at period end	**1.66 %**	1.37 %	3.16 %

Other borrowed funds primarily include borrowings from the Federal Home Loan Bank, the Federal Reserve Bank of Boston under the MMLF program, overdrafts of sub-custodian account balances in our Investment Services businesses, finance lease liabilities and borrowings under lines of credit by our Pershing subsidiaries. Overdrafts typically relate to timing differences for settlements. The decrease in other borrowed funds compared with Sept. 30, 2019 primarily reflects a decrease in borrowings from the Federal Home Loan Bank, partially offset by borrowings from the Federal Reserve Bank of Boston under the MMLF program. The decrease in other borrowed funds compared with June 30, 2020 primarily reflects lower borrowings from the Federal Reserve Bank of Boston under the MMLF program.

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. See "Impact of coronavirus pandemic on our business" for additional information.

The Parent's policy is to have access to sufficient unencumbered cash and cash equivalents at each quarter-end to cover maturities and other forecasted debt redemptions, net interest payments and net tax payments for the following 18-month period, and to provide sufficient collateral to satisfy transactions subject to Section 23A of the Federal Reserve Act. As of Sept. 30, 2020, the Parent was in compliance with this policy.

For additional information on our liquidity policy, see "Risk Management - Liquidity Risk" in our 2019 Annual Report.

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

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

We define available funds for internal liquidity management purposes as cash and due from banks, interest-bearing deposits with the Federal Reserve and other central banks, interest-bearing deposits with banks and federal funds sold and securities purchased under resale agreements. The following table presents our total available funds at period end and on an average basis.

Available funds			Average				
(dollars in millions)	**Sept. 30, 2020**	Dec. 31, 2019	**3Q20**	2Q20	3Q19	**YTD20**	YTD19
Cash and due from banks	**$ 4,104**	$ 4,830	**$ 4,332**	$ 4,102	$ 5,250	**$ 4,343**	$ 5,063
Interest-bearing deposits with the Federal Reserve and other central banks	**106,185**	95,042	**90,670**	94,229	60,030	**88,442**	61,777
Interest-bearing deposits with banks	**19,027**	14,811	**19,202**	21,093	15,324	**19,126**	14,288
Federal funds sold and securities purchased under resale agreements	**29,647**	30,182	**30,342**	30,265	40,816	**31,567**	35,984
Total available funds	**$ 158,963**	$ 144,865	**$ 144,546**	$ 149,689	$ 121,420	**$ 143,478**	$ 117,112
Total available funds as a percentage of total assets	**37 %**	38 %	**35 %**	36 %	35 %	**35 %**	34 %

Total available funds were $159.0 billion at Sept. 30, 2020, compared with $144.9 billion at Dec. 31, 2019. The increase was primarily due to higher interest-bearing deposits with the Federal Reserve and other central banks.

Average non-core sources of funds, such as federal funds purchased and securities sold under repurchase agreements, trading liabilities, commercial paper and other borrowed funds, were $19.7 billion for the nine months ended Sept. 30, 2020 and $18.9 billion for the nine months ended Sept. 30, 2019. The increase primarily reflects an increase in federal funds purchased and securities sold under repurchase agreements, partially offset by decreases in commercial paper and other borrowed funds.

Average foreign deposits, primarily from our European-based Investment Services businesses, were $105.0 billion for the nine months ended Sept. 30, 2020, compared with $92.5 billion for the nine months ended Sept. 30, 2019. Average interest-bearing domestic deposits were $101.6 billion for the nine months ended Sept. 30, 2020 and $75.8 billion for the nine months ended Sept. 30, 2019. The increase primarily reflects increased client activity.

Average payables to customers and broker-dealers were $17.9 billion for the nine months ended Sept. 30, 2020 and $15.7 billion for the nine months ended Sept. 30, 2019. Payables to customers and broker-dealers are driven by customer trading activity and market volatility.

Average long-term debt was $27.3 billion for the nine months ended Sept. 30, 2020 and $28.1 billion for the nine months ended Sept. 30, 2019.

Average noninterest-bearing deposits increased to $66.9 billion for the nine months ended Sept. 30, 2020 from $52.2 billion for the nine months ended Sept. 30, 2019, primarily reflecting client activity.

A significant reduction in our Investment Services business 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 three major sources of liquidity are access to the debt and equity markets, dividends from its subsidiaries, and cash on hand and cash otherwise made available in business-as-usual circumstances to the Parent through a committed credit facility with our intermediate holding company ("IHC").

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

Credit ratings at Sept. 30, 2020				
	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 $26.1 billion at Sept. 30, 2020 and $27.5 billion at Dec. 31, 2019. Maturities of $2.05 billion and redemptions of $2.35 billion were partially offset by issuances of $2.25 billion and an increase in the fair value of hedged long-term debt. The Parent had $800 million of 2.45% senior notes scheduled to mature in the remainder of 2020. These notes were redeemed in October 2020 at par plus accrued and unpaid interest.

In November 2020, the Parent issued 582,500 depositary shares, each representing a 1/100th interest in a share of the Parent's Series H Noncumulative Perpetual Preferred Stock (the "Series H Preferred Stock"). The Series H Preferred Stock has a liquidation preference of $100,000 per share. The Parent will pay dividends on the Series H Preferred Stock, if declared by its board of directors, on each March 20, June 20, September 20 and December 20, commencing on March 20, 2021, at an annual rate equal to 3.70% from the original issue date to but excluding, March 20, 2026; and at a floating rate equal to the five-year treasury rate (as defined in the certificate of designations) on the date that is three business days prior to the reset date plus 3.352% for each reset period, from and including March 20, 2026. The floating rate will initially reset on March 20, 2026 and subsequently on each date falling on the fifth anniversary of the preceding reset date.

The Parent will use the net proceeds, after deducting the underwriting discount and estimated offering

expenses, of approximately $575 million from the sale of the depositary shares to redeem all outstanding shares of the Series C Noncumulative Perpetual Preferred Stock, $100,000 liquidation preference per share (the "Series C Preferred Stock"). On Nov. 4, 2020, the Parent issued a notice of redemption to the holders of the Series C Preferred Stock to redeem in full the Series C Preferred Stock on Dec. 20, 2020. Deferred fees of approximately $15 million will be realized as preferred stock dividends upon redemption.

The Bank of New York Mellon may issue notes and CDs. At Sept. 30, 2020 and Dec. 31, 2019 there were $137 million and $1.1 billion, respectively, of CDs outstanding. At Sept. 30, 2020 and Dec. 31, 2019, $30 million and $1.3 billion, respectively, of notes were outstanding.

The Bank of New York Mellon also issues commercial paper that matures within 397 days from the date of issue and is not redeemable prior to maturity or subject to voluntary prepayment. The average commercial paper outstanding was $1.4 billion for the nine months ended Sept. 30, 2020 and $2.7 billion for the nine months ended Sept. 30, 2019. Commercial paper outstanding was $671 million at Sept. 30, 2020 and $4.0 billion at Dec. 31, 2019.

Subsequent to Sept. 30, 2020, our U.S. bank subsidiaries could declare dividends to the Parent of approximately $973 million, without the need for a regulatory waiver. In addition, at Sept. 30, 2020, non-bank subsidiaries of the Parent had liquid assets of approximately $1.6 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 in our 2019 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. Average borrowings under these lines were $4 million, in aggregate, in the third quarter of 2020. Pershing Limited, an indirect UK-based subsidiary of BNY Mellon, has three separate uncommitted lines of credit amounting to $350 million in aggregate. Average borrowings under these lines were $4 million, in aggregate, in the third quarter of 2020.

BNY Mellon Capital Markets, LLC also has an uncommitted line of credit in place for $100 million for liquidity purposes. There were no borrowings under this line in the third quarter of 2020.

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 81% of total revenue in the third quarter of 2020, and the dividend capacity of our banking subsidiaries. Our double leverage ratio was 115.4% at Sept. 30, 2020 and 116.9% at Dec. 31, 2019, and within the range targeted by management.

Uses of funds

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

In August 2020, a quarterly cash dividend of $0.31 per common share was paid to common shareholders. Our common stock dividend payout ratio was 32% for the third quarter of 2020.

In the third quarter of 2020, we repurchased 15.1 thousand common shares from employees, primarily in connection with the employees' payment of taxes upon the vesting of restricted stock, at an average price of $36.65 per common share for a total cost of less than $1 million.

In June 2020, the Federal Reserve announced that it would require participating CCAR firms, including us, to update and resubmit their capital plans and that, as a result, unless otherwise approved by the Federal

Reserve, participating firms were not permitted, during the third quarter of 2020, to conduct open market common stock repurchases, to increase their common stock dividends or to pay common stock dividends that exceed average net income for the preceding four quarters. On Sept. 30, 2020, the Federal Reserve extended these limitations through the fourth quarter of 2020.

BNY Mellon intends to resume the common stock repurchase program as early as possible, depending on factors such as prevailing market conditions, our outlook for the economic environment and the additional capital analysis required by the Federal Reserve. See "Recent regulatory developments" for additional information related to the 2020 CCAR.

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 Sept. 30, 2020, and the average HQLA and average LCR for the third quarter of 2020.

Consolidated HQLA and LCR *(dollars in billions)*		**Sept. 30, 2020**
Securities *(a)*	**$**	**120**
Cash *(b)*		**103**
Total consolidated HQLA *(c)*	**$**	**223**
Total consolidated HQLA – average *(c)*	**$**	**213**
Average LCR		**111 %**

(a) Primarily includes securities of U.S. government-sponsored enterprises, sovereign securities, U.S. Treasury, U.S. agency and investment-grade corporate debt.
(b) Primarily includes cash on deposit with central banks.
(c) Consolidated HQLA presented before adjustments. After haircuts and the impact of trapped liquidity, consolidated HQLA totaled $163 billion at Sept. 30, 2020 and averaged $154 billion for the third quarter of 2020.

BNY Mellon and each of our affected domestic bank subsidiaries were compliant with the U.S. LCR requirements of at least 100% throughout the third quarter of 2020.

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 $5.9 billion in the nine months ended Sept. 30, 2020, compared with $2.6 billion in the nine months ended Sept. 30, 2019. In the nine months ended Sept. 30, 2020, cash flows provided by operations primarily resulted from earnings and changes in trading assets and liabilities. In the nine months ended Sept. 30, 2019, cash flows provided by operations primarily resulted from earnings, partially offset by changes in trading assets and liabilities.

Net cash used for investing activities was $44.3 billion in the nine months ended Sept. 30, 2020, compared with $5.2 billion in the nine months ended Sept. 30, 2019. In the nine months ended Sept. 30, 2020, net cash used for investing activities primarily reflects net changes in securities and changes in interest-bearing deposits with the Federal Reserve and other central banks. In the nine months ended Sept. 30, 2019, 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.

Net cash provided by financing activities was $38.1 billion in the nine months ended Sept. 30, 2020, compared with $3.5 billion in the nine months ended Sept. 30, 2019. In the nine months ended Sept. 30, 2020, net cash provided by financing activity reflects changes in deposits, payables to customers and broker-dealers and federal funds purchased and securities sold under repurchase agreements, partially offset by changes in commercial paper. In the nine months ended Sept. 30, 2019, 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, changes in federal funds purchased and

securities sold under repurchase agreements, changes in other borrowed funds and common stock repurchases.

Capital

Capital data *(dollars in millions, except per share amounts; common shares in thousands)*	**Sept. 30, 2020**	June 30, 2020	Dec. 31, 2019
Average common equity to average assets	**9.6 %**	9.3 %	10.7 %
At period end:			
BNY Mellon shareholders' equity to total assets ratio	**10.5 %**	9.9 %	10.9 %
BNY Mellon common shareholders' equity to total assets ratio	**9.4 %**	8.9 %	9.9 %
Total BNY Mellon shareholders' equity	**$ 44,917**	$ 43,697	$ 41,483
Total BNY Mellon common shareholders' equity	**$ 40,385**	$ 39,165	$ 37,941
BNY Mellon tangible common shareholders' equity – Non-GAAP *(a)*	**$ 21,800**	$ 20,650	$ 19,216
Book value per common share	**$ 45.58**	$ 44.21	$ 42.12
Tangible book value per common share – Non-GAAP *(a)*	**$ 24.60**	$ 23.31	$ 21.33
Closing stock price per common share	**$ 34.34**	$ 38.65	$ 50.33
Market capitalization	**$ 30,430**	$ 34,239	$ 45,331
Common shares outstanding	**886,136**	885,862	900,683
Cash dividends per common share	**$ 0.31**	$ 0.31	$ 0.31
Common dividend payout ratio	**32 %**	31 %	20 %
Common dividend yield	**3.6 %**	3.2 %	2.4 %

(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 increased to $44.9 billion at Sept. 30, 2020 from $41.5 billion at Dec. 31, 2019. The increase primarily reflects earnings, unrealized gains on assets available-for-sale and the issuance of preferred stock in May 2020, partially offset by common stock repurchases and dividend payments.

In May 2020, the Parent issued 1,000,000 depositary shares, each representing a 1/100th interest in a share of the Parent's Series G Noncumulative Perpetual Preferred Stock (the "Series G Preferred Stock"). The Series G Preferred Stock has a liquidation preference of $100,000 per share. The Parent will pay dividends on the Series G Preferred Stock, if declared by its board of directors, on each March 20 and September 20, at an annual rate equal to 4.70% from the original issue date to but excluding, Sept. 20, 2025; and at a floating rate equal to the five-year treasury rate (as defined in the certificate of designations) on the date that is three business days prior to the reset date plus 4.358% for each reset period, from and including Sept. 20, 2025. The floating rate will initially reset on Sept. 20, 2025 and subsequently on each date falling on the fifth anniversary of the preceding reset date.

In November 2020, the Parent issued 582,500 depositary shares, each representing a 1/100th interest in a share of the Parent's Series H Noncumulative Perpetual Preferred Stock (the "Series H Preferred Stock"). The Series H Preferred Stock has a liquidation preference of $100,000 per share. The Parent will pay dividends on the Series H Preferred Stock, if declared by its board of directors, on each March 20, June 20, September 20 and December 20, commencing on March 20, 2021, at an annual rate equal to 3.70% from the original issue date to but excluding, March 20, 2026; and at a floating rate equal to the five-year treasury rate (as defined in the certificate of designations) on the date that is three business days prior to the reset date plus 3.352% for each reset period, from and including March 20, 2026. The floating rate will initially reset on March 20, 2026 and subsequently on each date falling on the fifth anniversary of the preceding reset date.

The Parent will use the net proceeds, after deducting the underwriting discount and estimated offering expenses, of approximately $575 million from the sale of the depositary shares to redeem all outstanding shares of the Series C Preferred Stock. On Nov. 4, 2020, the Parent issued a notice of redemption to the holders of the Series C Preferred Stock to redeem in full the Series C Preferred Stock on Dec. 20, 2020.

Deferred fees of approximately $15 million will be realized as preferred stock dividends upon redemption.

The unrealized gain (after-tax) on our available-for-sale securities portfolio, net of hedges, included in accumulated OCI was $1.4 billion at Sept. 30, 2020, compared with $361 million at Dec. 31, 2019. The increase in the unrealized gain, net of tax, was primarily driven by lower market interest rates.

In the nine months ended Sept. 30, 2020, we repurchased 21.8 million common shares at an average price of $45.43 per common share for a total of $988 million, nearly all of which were repurchased prior to the temporary suspension of share repurchases in March 2020.

In June 2020, the Federal Reserve announced that it would require participating CCAR firms, including us, to update and resubmit their capital plans and that, as a result, unless otherwise approved by the Federal Reserve, participating firms were not permitted, during the third quarter of 2020, to conduct open market common stock repurchases, to increase their common stock dividends or to pay common stock dividends that exceed average net income for the preceding four quarters. On Sept. 30, 2020, the Federal Reserve extended these limitations through the fourth quarter of 2020.

BNY Mellon intends to resume the common stock repurchase program as early as possible, depending on factors such as prevailing market conditions, our outlook for the economic environment and the additional capital analysis required by the Federal Reserve. For additional information, see "Recent regulatory developments."

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 Sept. 30, 2020 and Dec. 31, 2019, 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 - Operational 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 2019 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 2019 Annual Report and "Recent regulatory developments" in this Form 10-Q.

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

Consolidated and largest bank subsidiary regulatory capital ratios	Sept. 30, 2020			June 30, 2020	Dec. 31, 2019
	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 %	**13.0 %**	12.6 %	11.5 %
Tier 1 capital ratio	6 %	10	**15.7**	15.4	13.7
Total capital ratio	10	12	**16.6**	16.3	14.4
Standardized Approach:					
CET1 ratio	N/A *(c)*	8.5 %	**13.5 %**	12.7 %	12.5 %
Tier 1 capital ratio	6 %	10	**16.3**	15.6	14.8
Total capital ratio	10	12	**17.4**	16.6	15.8
Tier 1 leverage ratio	N/A *(c)*	4	**6.5**	6.2	6.6
SLR *(d)(e)*	N/A *(c)*	5	**8.5**	8.2	6.1
The Bank of New York Mellon regulatory capital ratios: *(b)*					
Advanced Approaches:					
CET1 ratio	6.5 %	7 %	**17.2 %**	17.1 %	15.1 %
Tier 1 capital ratio	8	8.5	**17.2**	17.1	15.1
Total capital ratio	10	10.5	**17.4**	17.2	15.2
Tier 1 leverage ratio	5	4	**6.9**	6.7	6.9
SLR *(d)*	6	3	**8.5**	8.4	6.4

(a) Minimum requirements for Sept. 30, 2020 include minimum thresholds plus currently applicable buffers. The U.S. global systemically important banks ("G-SIB") surcharge of 1.5% is subject to change. The countercyclical capital buffer is currently set to 0%. Effective Oct. 1, 2020, the stress capital buffer ("SCB") requirement is 2.5%, equal to the regulatory minimum, and replaces the current 2.5% capital conservation buffer 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. The SLR at Sept. 30, 2020 and June 30, 2020 reflects the exclusion of certain central bank placements from leverage exposure.

(e) The SLR at Sept. 30, 2020 and June 30, 2020 reflects the temporary exclusion of U.S. Treasury securities from the leverage exposure which increased our consolidated SLR by 78 basis points and 40 basis points, respectively.

Our CET1 ratio determined under the Advanced Approaches was 13.0% at Sept. 30, 2020 and 11.5% at Dec. 31, 2019. The increase primarily reflects capital generated through earnings and unrealized gains on assets available-for-sale, partially offset by capital deployed through common stock repurchased, prior to the temporary suspension of share repurchases that began in March 2020, and dividend payments.

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.

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.

The following table presents our capital components and RWAs.

Capital components and risk-weighted assets *(in millions)*	Sept. 30, 2020	June 30, 2020	Dec. 31, 2019
CET1:			
Common shareholders' equity	**$ 40,385**	$ 39,165	$ 37,941
Adjustments for:			
Goodwill and intangible assets *(a)*	**(18,585)**	(18,515)	(18,725)
Net pension fund assets	**(275)**	(270)	(272)
Equity method investments	**(298)**	(297)	(311)
Deferred tax assets	**(51)**	(48)	(46)
Other	**(5)**	—	(47)
Total CET1	**21,171**	20,035	18,540
Other Tier 1 capital:			
Preferred stock	**4,532**	4,532	3,542
Other	**(92)**	(89)	(86)
Total Tier 1 capital	**$ 25,611**	$ 24,478	$ 21,996
Tier 2 capital:			
Subordinated debt	**$ 1,248**	$ 1,248	$ 1,248
Allowance for credit losses	**474**	463	216
Other	**(6)**	(6)	(11)
Total Tier 2 capital – Standardized Approach	**1,716**	1,705	1,453
Excess of expected credit losses	**228**	217	—
Less: Allowance for credit losses	**474**	463	216
Total Tier 2 capital – Advanced Approaches	**$ 1,470**	$ 1,459	$ 1,237
Total capital:			
Standardized Approach	**$ 27,327**	$ 26,183	$ 23,449
Advanced Approaches	**$ 27,081**	$ 25,937	$ 23,233
Risk-weighted assets:			
Standardized Approach	**$ 156,698**	$ 157,290	$ 148,695
Advanced Approaches:			
Credit Risk	**$ 95,881**	$ 95,647	$ 95,490
Market Risk	**3,077**	2,793	4,020
Operational Risk	**64,150**	60,900	61,388
Total Advanced Approaches	**$ 163,108**	$ 159,340	$ 160,898
Average assets for Tier 1 leverage ratio	**$ 394,945**	$ 394,394	$ 334,869
Total leverage exposure for SLR	**$ 300,265**	$ 297,300	$ 362,452

(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)*	**3Q20**
CET1 – Beginning of period	**$ 20,035**
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	**876**
Goodwill and intangible assets, net of related deferred tax liabilities	**(70)**
Gross CET1 generated	**806**
Capital deployed:	
Common stock dividend payments	**(279)**
Total capital deployed	**(279)**
Other comprehensive income:	
Foreign currency translation	**329**
Unrealized gain on assets available-for-sale	**227**
Defined benefit plans	**20**
Unrealized gain on cash flow hedges	**8**
Total other comprehensive income	**584**
Additional paid-in capital *(a)*	**39**
Other (deductions):	
Embedded goodwill	**(1)**
Net pension fund assets	**(5)**
Deferred tax assets	**(3)**
Other	**(5)**
Total other deductions	**(14)**
Net CET1 generated	**1,136**
CET1 – End of period	**$ 21,171**

(a) 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 Sept. 30, 2020 of a $100 million increase or decrease in common equity, or a $1 billion increase or decrease in RWAs, quarterly average assets or total leverage exposure.

Sensitivity of consolidated capital ratios at Sept. 30, 2020	**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	9 bps
Advanced Approaches	6	8

Tier 1 capital:		
Standardized Approach	6	10
Advanced Approaches	6	10
Total capital:		
Standardized Approach	6	11
Advanced Approaches	6	10
Tier 1 leverage	5	5
SLR	3	3

Capital ratios vary depending on the size of the balance sheet at period end and the levels and types of investments in assets. 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.

Effective April 1, 2020, custody banks, including BNY Mellon and The Bank of New York Mellon, are permitted to exclude certain central bank placements from leverage exposure used in the SLR calculation. Also, effective April 1, 2020 and lasting through March 31, 2021, BHCs are permitted to temporarily exclude U.S. Treasury securities from the leverage exposure used in the SLR calculation. This temporary exclusion increased our consolidated SLR by 78 basis points at Sept. 30, 2020 and 40 basis points at June 30, 2020. See "Supervision and Regulation" in our 2019 Annual Report and "Recent regulatory developments" in our First Quarter 2020 Form 10-Q for additional information.

Stress capital buffer

In August 2020, the Federal Reserve announced that BNY Mellon's SCB requirement would be 2.5%, equal to the regulatory minimum, effective as of Oct. 1, 2020. The SCB replaces the current 2.5% capital conservation buffer for Standardized Approach capital ratios.

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, including the SCB. In conjunction with the release of the 2020 CCAR results, the Federal Reserve has imposed restrictions on capital distributions for the third quarter of 2020, which have been extended through the fourth quarter of 2020. For more detail regarding these restrictions, see "Recent regulatory developments – CCAR 2020 results" in this Quarterly Report on Form 10-Q.

Total Loss-Absorbing Capacity ("TLAC")

The final TLAC rule establishing external TLAC, external long-term debt ("LTD") and related requirements for U.S. G-SIBs, including BNY Mellon, at the top-tier holding company level became effective on Jan. 1, 2019. The following summarizes the minimum requirements for BNY Mellon's external TLAC and external 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	Sept. 30, 2020		
	Minimum required	Minimum ratios with buffers	Ratios
Eligible external TLAC:			
As a percentage of RWA	18.0 %	21.5 %	27.8 %
As a percentage of total leverage exposure	7.5 %	9.5 %	15.1 %
Eligible external LTD:			
As a percentage of RWA	7.5 %	N/A	11.4 %
As a percentage of total leverage exposure	4.5 %	N/A	6.2 %

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

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

VaR *(a)* *(in millions)*	3Q20			Sept. 30, 2020
	Average	**Minimum**	**Maximum**	
Interest rate	**$ 2.1**	**$ 1.7**	**$ 2.6**	**$ 2.2**
Foreign exchange	**2.6**	**2.0**	**3.7**	**2.5**
Equity	**0.3**	**0.1**	**0.6**	**0.1**
Credit	**2.2**	**1.5**	**3.5**	**2.3**
Diversification	**(3.8)**	**N/M**	**N/M**	**(3.7)**
Overall portfolio	**3.4**	**2.4**	**4.6**	**3.4**

VaR *(a)* *(in millions)*	2Q20			June 30, 2020
	Average	Minimum	Maximum	
Interest rate	$ 3.0	$ 2.1	$ 4.9	$ 2.2
Foreign exchange	3.4	2.2	5.9	2.4
Equity	0.5	0.4	1.4	0.4
Credit	3.5	1.8	10.2	2.8
Diversification	(5.7)	N/M	N/M	(4.0)
Overall portfolio	4.7	3.1	11.4	3.8

VaR *(a)* *(in millions)*	3Q19			Sept. 30, 2019
	Average	Minimum	Maximum	
Interest rate	$ 4.7	$ 3.7	$ 7.3	$ 4.3
Foreign exchange	3.0	1.8	5.1	3.3
Equity	0.9	0.6	1.2	1.1
Credit	1.0	0.5	2.0	1.6
Diversification	(3.5)	N/M	N/M	(3.6)
Overall portfolio	6.1	4.0	8.2	6.7

VaR *(a)* *(in millions)*	YTD20		
	Average	**Minimum**	**Maximum**
Interest rate	**$ 3.4**	**$ 1.7**	**$ 11.3**
Foreign exchange	**3.0**	**1.7**	**6.3**
Equity	**0.7**	**0.1**	**2.3**
Credit	**3.0**	**1.2**	**12.1**
Diversification	**(5.3)**	**N/M**	**N/M**
Overall portfolio	**4.8**	**2.4**	**14.3**

VaR *(a)*	YTD19		
(in millions)	Average	Minimum	Maximum
Interest rate	$ 4.3	$ 3.2	$ 7.3
Foreign exchange	3.2	1.8	6.4
Equity	0.8	0.6	1.2
Credit	0.8	0.4	2.0
Diversification	(3.3)	N/M	N/M
Overall portfolio	5.8	4.0	9.5

(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, securities with exposures from corporate and municipal credit spreads.

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

During the third quarter of 2020, interest rate risk generated 29% of average gross VaR, foreign exchange risk generated 36% of average gross VaR, equity risk generated 4% of average gross VaR and credit risk generated 31% of average gross VaR. During the third quarter of 2020, our daily trading loss did not exceed our calculated VaR amount of the overall portfolio.

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

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

	Quarter ended				
(dollars in millions)	**Sept. 30, 2020**	June 30, 2020	March 31, 2020	Dec. 31, 2019	Sept. 30, 2019
Revenue range:	Number of days				
Less than $(2.5)	**4**	6	—	3	2
$(2.5) – $0	**10**	12	3	5	7
$0 – $2.5	**23**	17	19	23	26
$2.5 – $5.0	**16**	15	19	24	22
More than $5.0	**12**	14	21	7	7

(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 $13.1 billion at Sept. 30, 2020 and $13.6 billion at Dec. 31, 2019.

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 $6.1 billion at Sept. 30, 2020 and $4.8 billion at Dec. 31, 2019.

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

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

At Sept. 30, 2020, our OTC derivative assets, including those in hedging relationships, of $4.2 billion included a credit valuation adjustment ("CVA") deduction of $39 million. Our OTC derivative liabilities, including those in hedging relationships, of $3.6 billion included a debit valuation adjustment ("DVA") of $1 million related to our own credit spread. Net of hedges, the CVA decreased by $3 million and the DVA was unchanged in the third quarter of 2020, which increased foreign exchange and other trading revenue by $3 million. The net impact decreased foreign exchange and other trading revenue by $2 million in the second quarter of 2020 and increased foreign exchange and other trading revenue by $1 million in the third quarter of 2019.

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.

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

	Quarter ended				
	Sept. 30, 2020	June 30, 2020	March 31, 2020	Dec. 31, 2019	Sept. 30, 2019
Rating:					
AAA to AA-	**54 %**	56 %	56 %	54 %	55 %
A+ to A-	**20**	18	24	24	24
BBB+ to BBB-	**17**	18	14	17	16
BB+ and lower *(b)*	**9**	8	6	5	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. The model incorporates management's assumptions regarding interest rates, market spreads, changes in the prepayment behavior of loans and securities and the impact of derivative financial instruments used for interest rate risk management purposes. 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.

In the table below, we use the earnings simulation model to run various interest rate ramp scenarios from a baseline scenario. The interest rate ramp scenarios examine the impact of large interest rate movements. In each scenario, all currencies' interest rates are shifted higher or lower. The 100 basis point ramp scenario assumes rates change 25 basis points above or below the yield curve in each of the next four quarters and the 200 basis point ramp scenario assumes a 50 basis point per quarter change. 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 net interest revenue sensitivity methodology assumes static deposit levels and also assumes that no management actions will be taken to mitigate the effects of interest rate changes.

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

Estimated changes in net interest revenue *(in millions)*	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019
Up 200 bps parallel rate ramp vs. baseline *(a)*	**$ 608**	**$ 591**	$ 187
Up 100 bps parallel rate ramp vs. baseline *(a)*	**343**	**349**	74
Down 100 bps parallel rate ramp vs. baseline *(a)*	**418**	**315**	(45)
Long-term up 50 bps, short-term unchanged *(b)*	**144**	**153**	115
Long-term down 50 bps, short-term unchanged *(b)*	**(164)**	**(173)**	(119)

(a) In the parallel rate ramp, both short-term and long-term rates move in four equal quarterly increments.
(b) Long-term is equal to or greater than one year.

The down 100 basis point scenario was impacted by a change in our deposit assumptions. Specifically, we increased the amount of deposit balances to which we would pass through negative central bank rates in the scenario.

To illustrate the net interest revenue sensitivity to deposit runoff, we note that a $5 billion instantaneous reduction of U.S. dollar denominated noninterest-bearing deposits would reduce the net interest revenue sensitivity results in the ramp up 100 basis point and 200 basis point scenarios in the table above by approximately $30 million and approximately $65 million, respectively. The impact would be smaller if the runoff 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 2019 Annual Report.

Off-balance sheet arrangements

Off-balance sheet arrangements discussed in this section are limited to certain guarantees, retained or contingent interests and obligations arising out of unconsolidated variable interest entities (“VIEs”). Guarantees include SBLCs issued as part of our corporate banking business and securities lending indemnifications issued as part of our Investment Services business. See Note 18 of the Notes to Consolidated Financial Statements for a further discussion of our off-balance sheet arrangements.

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 generally accepted accounting principles ("GAAP") information, which exclude goodwill and intangible assets, net of deferred tax liabilities. We believe that the return on tangible common equity 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 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 also included the adjusted pre-tax operating margin – Non-GAAP, which is the pre-tax operating margin for the Investment and Wealth Management business 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 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)*	**3Q20**	2Q20	3Q19	**YTD20**	YTD19
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	**$ 876**	$ 901	$ 1,002	**$ 2,721**	$ 2,881
Add: Amortization of intangible assets	**26**	26	30	**78**	89
Less: Tax impact of amortization of intangible assets	**7**	6	7	**19**	21
Adjusted net income applicable to common shareholders of The Bank of New York Mellon Corporation, excluding amortization of intangible assets – Non-GAAP	**$ 895**	$ 921	$ 1,025	**$ 2,780**	$ 2,949
Average common shareholders' equity	**$ 39,924**	$ 38,476	$ 37,597	**$ 38,693**	$ 37,392
Less: Average goodwill	**17,357**	17,243	17,267	**17,304**	17,328
Average intangible assets	**3,039**	3,058	3,141	**3,062**	3,176
Add: Deferred tax liability – tax deductible goodwill	**1,132**	1,119	1,103	**1,132**	1,103
Deferred tax liability – intangible assets	**666**	664	679	**666**	679
Average tangible common shareholders' equity – Non-GAAP	**$ 21,326**	$ 19,958	$ 18,971	**$ 20,125**	$ 18,670
Return on common shareholders' equity – GAAP	**8.7 %**	9.4 %	10.6 %	**9.4 %**	10.3 %
Return on tangible common shareholders' equity – Non-GAAP	**16.7 %**	18.5 %	21.4 %	**18.5 %**	21.1 %

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

Book value and tangible book value per common share reconciliation *(dollars in millions, except per share amounts and unless otherwise noted)*	**Sept. 30, 2020**	June 30, 2020	Dec. 31, 2019	Sept. 30, 2019
BNY Mellon shareholders' equity at period end – GAAP	**$ 44,917**	$ 43,697	$ 41,483	$ 41,120
Less: Preferred stock	**4,532**	4,532	3,542	3,542
BNY Mellon common shareholders' equity at period end – GAAP	**40,385**	39,165	37,941	37,578
Less: Goodwill	**17,357**	17,253	17,386	17,248
Intangible assets	**3,026**	3,045	3,107	3,124
Add: Deferred tax liability – tax deductible goodwill	**1,132**	1,119	1,098	1,103
Deferred tax liability – intangible assets	**666**	664	670	679
BNY Mellon tangible common shareholders' equity at period end – Non-GAAP	**$ 21,800**	$ 20,650	$ 19,216	$ 18,988
Period-end common shares outstanding *(in thousands)*	**886,136**	885,862	900,683	922,199
Book value per common share – GAAP	**$ 45.58**	$ 44.21	$ 42.12	$ 40.75
Tangible book value per common share – Non-GAAP	**$ 24.60**	$ 23.31	$ 21.33	$ 20.59

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)*	**3Q20**	3Q19	**3Q20 vs. 3Q19**
Investment management and performance fees – GAAP	**$ 835**	$ 832	**— %**
Impact of changes in foreign currency exchange rates	**—**	11	
Adjusted investment management and performance fees – Non-GAAP	**$ 835**	$ 843	**(1)%**

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.

Constant currency reconciliation – Investment and Wealth Management business *(dollars in millions)*	**3Q20**	3Q19	**3Q20 vs. 3Q19**
Investment management and performance fees – GAAP	**$ 835**	$ 832	**— %**
Impact of changes in foreign currency exchange rates	**—**	11	
Adjusted investment management and performance fees – Non-GAAP	**$ 835**	$ 843	**(1)%**

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

Pre-tax operating margin reconciliation – Investment and Wealth Management business *(dollars in millions)*	**3Q20**	2Q20	1Q20	4Q19	3Q19	**YTD20**	YTD19
Income before income taxes – GAAP	**$ 245**	$ 221	$ 194	$ 240	$ 295	**$ 660**	$ 821
Total revenue – GAAP	**$ 918**	$ 886	$ 898	$ 971	$ 887	**$ 2,702**	$ 2,736
Less: Distribution and servicing expense	**85**	86	91	93	98	**262**	283
Adjusted total revenue, net of distribution and servicing expense – Non-GAAP	**$ 833**	$ 800	$ 807	$ 878	$ 789	**$ 2,440**	$ 2,453
Pre-tax operating margin – GAAP *(a)*	**27 %**	25 %	22 %	25 %	33 %	**24 %**	30 %
Adjusted pre-tax operating margin, net of distribution and servicing expense – Non-GAAP *(a)*	**29 %**	28 %	24 %	27 %	37 %	**27 %**	33 %

(a) Income before taxes divided by total revenue.

Recent accounting and regulatory developments

Recent accounting developments

The following ASU issued by the FASB had not yet been adopted as of Sept. 30, 2020.

ASU 2020-04, Reference Rate Reform: Facilitation of the Effects of Reference Rate Reform on Financial Reporting

In March 2020, the FASB issued an ASU*, Reference Rate Reform: Facilitation of the Effects of Reference Rate Reform on Financial Reporting.* This ASU provides temporary optional expedients and exceptions for applying U.S. GAAP to financial contracts, hedging relationships and other transactions affected by reference rate reform. This ASU also permits an entity to make a one-time election to sell and/or transfer held-to-maturity securities that are affected by reference rate reform and were classified as held-to-maturity on or before Jan. 1, 2020. The guidance in this ASU can be adopted as of March 12, 2020 through Dec. 31, 2022. We are assessing the impacts of the new standard, but would not expect this ASU to have a material impact on BNY Mellon.

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 quarters ended March 31, 2020 and June 30, 2020 and "Supervision and Regulation" in our 2019 Annual Report. The following discussions summarize certain regulatory, legislative and other developments that may affect BNY Mellon, the impact of many of which we are still evaluating.

CCAR Refiling, Limitations and SCB

In light of the changes in the financial markets and the economy, in June 2020, the Federal Reserve announced that all banking institutions subject to CCAR, including BNY Mellon, are required to resubmit their capital plans. On Sept. 17, 2020, the Federal Reserve released the supervisory scenarios for the resubmission, which was submitted on Nov. 2, 2020.

Also in September 2020, the Federal Reserve extended through the fourth quarter of 2020 the limitations on capital distributions and share repurchases that the Federal Reserve imposed on CCAR firms, including BNY Mellon, earlier in the year. For additional information regarding these limitations, see "Recent regulatory developments - CCAR 2020 results" in our Second Quarter 2020 Form 10-Q. Consistent with these limitations, for the fourth quarter, BNY Mellon maintained its quarterly common stock dividend of $0.31 per share and plans to maintain the suspension of its open market common stock repurchases.

On Aug. 10, 2020, the Federal Reserve announced the individual CCAR firms' SCBs. The BNY Mellon SCB requirement is 2.5%, which equals the regulatory minimum, and is unchanged compared to the capital conservation buffer that previously applied. The SCB became effective on Oct. 1, 2020. For additional information regarding the SCB, see "Recent regulatory developments - Changes to CCAR and Stress Capital Buffer" in our First Quarter 2020 Form 10-Q and "Supervision and Regulation - Capital Planning and Stress Testing" in our 2019 Annual Report.

Capital, Liquidity and TLAC Relief

On Sept. 29, 2020, the Federal Reserve, the FDIC and the OCC (the "Agencies") finalized without changes an interim final rule issued in March 2020 that neutralizes the regulatory capital and liquidity coverage ratio effects for institutions that participate in the Federal Reserve's MMLF.

Similarly, in August 2020, the Agencies finalized without change an interim final rule issued in March 2020 that revised the definition of "eligible retained income" to make more gradual the automatic restrictions on capital distributions, such as share repurchases, dividend payments, and bonus payments. In the same final rulemaking, the Federal Reserve also finalized the March 2020 interim final rule that made corresponding changes to the TLAC buffer requirements. The final rule is effective as of Jan. 1, 2021.

Also in August 2020, the Agencies finalized a current expected credit loss ("CECL") final rule that is substantially similar to the interim final rule issued in March 2020. The final rule permits banking organizations to temporarily delay the estimated

effects of CECL on regulatory capital until Jan. 1, 2022 and then to phase in those effects through Jan. 1, 2025. Under the final rule, during 2020 and 2021, the adjustment to CET1 capital reflects the change in retained earnings upon adoption of CECL at Jan. 1, 2020 plus 25% of the increase in the allowance for credit losses since Jan. 1, 2020. BNY Mellon has not yet elected to apply this final rule. See Note 2 of the Notes to Consolidated Financial Statements for additional information on the impact of the adoption of CECL and Note 5 of the Notes to Consolidated Financial Statements for the change in the allowance for credit losses during the third quarter of 2020.

For additional information regarding the interim final rulemakings noted above, see "Recent regulatory developments – Capital, Liquidity and TLAC Relief" in our First Quarter 2020 Form 10-Q.

Net Stable Funding Ratio

On Oct. 20, 2020, the Agencies issued a final net stable funding ratio ("NSFR") rule that implements a quantitative measure of funding stability over a one-year horizon, and is applicable to certain large banking organizations, including BNY Mellon. Under the rule, BNY Mellon's NSFR would be expressed as a ratio of its available stable funding to its required stable funding amount, calculated on an ongoing basis, and BNY Mellon would be required to maintain an NSFR of 100%. The effective date of the final NSFR rule is July 1, 2021, with the exception of certain disclosure requirements, which will begin to apply in 2023. BNY Mellon expects to be in compliance with the NSFR rule by the effective date.

Capital Treatment of Investments in Certain Debt Instruments of G-SIBs

On Oct. 20, 2020, the Agencies finalized a rule that generally requires certain advanced approaches banking organizations (including BNY Mellon) to deduct from Tier 2 capital, subject to certain exceptions, direct, indirect and synthetic exposures to covered debt instruments. Covered debt instruments under the rule include, for example, unsecured debt instruments issued by U.S. or foreign G-SIBs, among other entities, to meet TLAC requirements or similar foreign requirements as well as any other unsecured debt instruments *pari passu* or subordinated to such debt instruments. The rule is effective on April 1, 2021. The impact of the final rule is not expected to be material to BNY Mellon.

ECB Declaration of Exceptional Circumstances

In September 2020, the European Central Bank ("ECB") issued a declaration of exceptional circumstances, which is in effect from Sept. 26, 2020 to June 27, 2021, and which, as a result of the so-called "quick-fix" to the Capital Requirements Regulation ("CRR") earlier in the year, has the effect of allowing credit institutions subject to direct ECB supervision, such as The Bank of New York Mellon SA/NV, to disclose their leverage ratios excluding central bank deposits (as well as the leverage ratios absent this exclusion). The leverage ratio requirement is currently not binding on EU credit institutions but will become a binding requirement as part of the CRR 2, on June 28, 2021. The ECB declaration also has the effect of providing relief for subsidiaries of G-SIBs, such as The Bank of New York Mellon SA/NV, under the binding internal TLAC requirement.

For additional information regarding the so-called CRR "quick-fix", see "Recent regulatory developments – 'CRR Quick-Fix'" in our Second Quarter 2020 Form 10-Q.

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;
- Financial statements and footnotes prepared using eXtensible Business Reporting Language ("XBRL");
- 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)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019	**Sept. 30, 2020**	Sept. 30, 2019
Fee and other revenue					
Investment services fees:					
Asset servicing fees	**$ 1,168**	$ 1,173	$ 1,152	**$ 3,500**	$ 3,415
Clearing services fees	**397**	431	419	**1,298**	1,227
Issuer services fees	**295**	277	324	**835**	866
Treasury services fees	**152**	144	140	**445**	412
Total investment services fees	**2,012**	2,025	2,035	**6,078**	5,920
Investment management and performance fees	**835**	786	832	**2,483**	2,506
Foreign exchange and other trading revenue	**137**	166	150	**622**	486
Financing-related fees	**49**	58	49	**166**	150
Distribution and servicing	**29**	27	33	**87**	95
Investment and other income	**46**	105	30	**162**	108
Total fee revenue	**3,108**	3,167	3,129	**9,598**	9,265
Net securities gains (losses)	**9**	9	(1)	**27**	7
Total fee and other revenue	**3,117**	3,176	3,128	**9,625**	9,272
Operations of consolidated investment management funds					
Investment income	**27**	54	4	**43**	40
Interest of investment management fund note holders	**—**	—	1	**—**	1
Income from consolidated investment management funds	**27**	54	3	**43**	39
Net interest revenue					
Interest revenue	**820**	943	1,942	**3,333**	5,827
Interest expense	**117**	163	1,212	**1,036**	3,454
Net interest revenue	**703**	780	730	**2,297**	2,373
Total revenue	**3,847**	4,010	3,861	**11,965**	11,684
Provision for credit losses	**9**	143	(16)	**321**	(17)
Noninterest expense					
Staff	**1,466**	1,464	1,479	**4,412**	4,424
Professional, legal and other purchased services	**355**	337	316	**1,022**	978
Software and equipment	**340**	345	309	**1,011**	896
Net occupancy	**136**	137	138	**408**	413
Sub-custodian and clearing	**119**	120	111	**344**	331
Distribution and servicing	**85**	85	97	**261**	282
Bank assessment charges	**30**	35	31	**100**	93
Business development	**17**	20	47	**79**	148
Amortization of intangible assets	**26**	26	30	**78**	89
Other	**107**	117	32	**364**	282
Total noninterest expense	**2,681**	2,686	2,590	**8,079**	7,936
Income					
Income before income taxes	**1,157**	1,181	1,287	**3,565**	3,765
Provision for income taxes	**213**	216	246	**694**	747
Net income	**944**	965	1,041	**2,871**	3,018
Net (income) attributable to noncontrolling interests related to consolidated investment management funds	**(7)**	(15)	(3)	**(4)**	(17)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	**937**	950	1,038	**2,867**	3,001
Preferred stock dividends	**(61)**	(49)	(36)	**(146)**	(120)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	**$ 876**	$ 901	$ 1,002	**$ 2,721**	$ 2,881

Consolidated Income Statement (unaudited) (continued)

Net income applicable to common shareholders of The Bank of New York Mellon Corporation used for the earnings per share calculation	Quarter ended			Year-to-date	
(in millions)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019	**Sept. 30, 2020**	Sept. 30, 2019
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	**$ 876**	$ 901	$ 1,002	**$ 2,721**	$ 2,881
Less: Earnings allocated to participating securities	**1**	1	3	**5**	12
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	**$ 875**	$ 900	$ 999	**$ 2,716**	$ 2,869

Average common shares and equivalents outstanding of The Bank of New York Mellon Corporation	Quarter ended			Year-to-date	
(in thousands)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019	**Sept. 30, 2020**	Sept. 30, 2019
Basic	**889,499**	889,020	933,264	**891,050**	949,035
Common stock equivalents	**2,173**	2,044	3,811	**2,522**	4,484
Less: Participating securities	**(603)**	(503)	(1,398)	**(779)**	(1,643)
Diluted	**891,069**	890,561	935,677	**892,793**	951,876
Anti-dilutive securities *(a)*	**1,485**	1,578	3,701	**1,828**	4,269

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

Earnings per share applicable to common shareholders of The Bank of New York Mellon Corporation	Quarter ended			Year-to-date	
(in dollars)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019	**Sept. 30, 2020**	Sept. 30, 2019
Basic	**$ 0.98**	$ 1.01	$ 1.07	**$ 3.05**	$ 3.02
Diluted	**$ 0.98**	$ 1.01	$ 1.07	**$ 3.04**	$ 3.01

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Comprehensive Income Statement (unaudited)

	Quarter ended			Year-to-date	
(in millions)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019	**Sept. 30, 2020**	Sept. 30, 2019
Net income	**$ 944**	$ 965	$ 1,041	**$ 2,871**	$ 3,018
Other comprehensive income (loss), net of tax:					
Foreign currency translation adjustments	**331**	115	(276)	**77**	(237)
Unrealized gain on assets available-for-sale:					
Unrealized gain arising during the period	**233**	753	63	**1,169**	589
Reclassification adjustment	**(6)**	(7)	1	**(20)**	(5)
Total unrealized gain on assets available-for-sale	**227**	746	64	**1,149**	584
Defined benefit plans:					
Net (loss) arising during the period	**—**	—	—	**—**	(9)
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost	**20**	19	10	**57**	30
Total defined benefit plans	**20**	19	10	**57**	21
Net unrealized gain (loss) on cash flow hedges	**8**	4	(6)	**1**	(1)
Total other comprehensive income (loss), net of tax *(a)*	**586**	884	(208)	**1,284**	367
Total comprehensive income	**1,530**	1,849	833	**4,155**	3,385
Net (income) attributable to noncontrolling interests	**(7)**	(15)	(3)	**(4)**	(17)
Other comprehensive (income) loss attributable to noncontrolling interests	**(2)**	—	3	**—**	1
Comprehensive income applicable to shareholders of The Bank of New York Mellon Corporation	**$ 1,521**	$ 1,834	$ 833	**$ 4,151**	$ 3,369

(a) Other comprehensive income (loss) attributable to The Bank of New York Mellon Corporation shareholders was $584 million for the quarter ended Sept. 30, 2020, $884 million for the quarter ended June 30, 2020, $(205) million for the quarter ended Sept. 30, 2019, $1,284 million for the nine months ended Sept. 30, 2020 and $368 million for the nine months ended Sept. 30, 2019.

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Balance Sheet (unaudited)

(dollars in millions, except per share amounts)	Sept. 30, 2020	Dec. 31, 2019
Assets		
Cash and due from banks, net of allowance for credit losses of $5 at Sept. 30, 2020 *(a)*	**$ 4,104**	$ 4,830
Interest-bearing deposits with the Federal Reserve and other central banks	**106,185**	95,042
Interest-bearing deposits with banks, net of allowance for credit losses of $4 at Sept. 30, 2020 (includes restricted of $2,891 and $2,437) *(a)*	**19,027**	14,811
Federal funds sold and securities purchased under resale agreements	**29,647**	30,182
Securities:		
Held-to-maturity, at amortized cost, net of allowance for credit losses of less than $1 at Sept. 30, 2020 (fair value of $47,458 and $34,805) *(a)*	**46,096**	34,483
Available-for-sale, at fair value (amortized cost of $105,684 and $87,435, net of allowance for credit losses of $12 at Sept 30, 2020) *(a)*	**109,243**	88,550
Total securities	**155,339**	123,033
Trading assets	**13,074**	13,571
Loans	**55,491**	54,953
Allowance for credit losses *(a)*	**(325)**	(122)
Net loans	**55,166**	54,831
Premises and equipment	**3,617**	3,625
Accrued interest receivable	**489**	624
Goodwill	**17,357**	17,386
Intangible assets	**3,026**	3,107
Other assets, net of allowance for credit losses on accounts receivable of $5 at Sept. 30, 2020 (includes $527 and $419, at fair value) *(a)*	**20,779**	20,221
Subtotal assets of operations	**427,810**	381,263
Assets of consolidated investment management funds, at fair value	**588**	245
Total assets	**$ 428,398**	$ 381,508
Liabilities		
Deposits:		
Noninterest-bearing (principally U.S. offices)	**$ 79,470**	$ 57,630
Interest-bearing deposits in U.S. offices	**111,703**	101,542
Interest-bearing deposits in non-U.S. offices	**105,139**	100,294
Total deposits	**296,312**	259,466
Federal funds purchased and securities sold under repurchase agreements	**15,907**	11,401
Trading liabilities	**6,084**	4,841
Payables to customers and broker-dealers	**23,514**	18,758
Commercial paper	**671**	3,959
Other borrowed funds	**420**	599
Accrued taxes and other expenses	**5,347**	5,642
Other liabilities (including allowance for credit losses on lending-related commitments of $135 and $94, also includes $997 and $607, at fair value) *(a)*	**8,671**	7,612
Long-term debt (includes $400 and $387, at fair value)	**26,121**	27,501
Subtotal liabilities of operations	**383,047**	339,779
Liabilities of consolidated investment management funds, at fair value	**4**	1
Total liabilities	**383,051**	339,780
Temporary equity		
Redeemable noncontrolling interests	**179**	143
Permanent equity		
Preferred stock – par value $0.01 per share; authorized 100,000,000 shares; issued 45,826 and 35,826 shares	**4,532**	3,542
Common stock – par value $0.01 per share; authorized 3,500,000,000 shares; issued 1,381,650,891 and 1,374,443,376 shares	**14**	14
Additional paid-in capital	**27,741**	27,515
Retained earnings	**33,821**	31,894
Accumulated other comprehensive loss, net of tax	**(1,359)**	(2,638)
Less: Treasury stock of 495,515,086 and 473,760,338 common shares, at cost	**(19,832)**	(18,844)
Total The Bank of New York Mellon Corporation shareholders' equity	**44,917**	41,483
Nonredeemable noncontrolling interests of consolidated investment management funds	**251**	102
Total permanent equity	**45,168**	41,585
Total liabilities, temporary equity and permanent equity	**$ 428,398**	$ 381,508

(a) In the first quarter of 2020, we adopted new accounting guidance included in ASU 2016-13, Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments, on a prospective basis. See Note 2 of the Notes to Consolidated Financial Statements for additional information.

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Statement of Cash Flows (unaudited)

	Nine months ended Sept. 30,	
(in millions)	**2020**	2019
Operating activities		
Net income	**$ 2,871**	$ 3,018
Net (income) attributable to noncontrolling interests	**(4)**	(17)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	**2,867**	3,001
Adjustments to reconcile net income to net cash provided by (used for) operating activities:		
Provision for credit losses *(a)*	**321**	(17)
Pension plan contributions	**(18)**	(30)
Depreciation and amortization	**1,175**	971
Deferred tax (benefit)	**(351)**	(185)
Net securities (gains)	**(27)**	(7)
Change in trading assets and liabilities	**1,736**	(1,880)
Change in accruals and other, net	**200**	714
Net cash provided by operating activities	**5,903**	2,567
Investing activities		
Change in interest-bearing deposits with banks	**(3,808)**	(1,503)
Change in interest-bearing deposits with the Federal Reserve and other central banks	**(9,775)**	(7,171)
Purchases of securities held-to-maturity	**(23,507)**	(5,390)
Paydowns of securities held-to-maturity	**6,291**	3,501
Maturities of securities held-to-maturity	**5,477**	2,274
Purchases of securities available-for-sale	**(56,860)**	(33,929)
Sales of securities available-for-sale	**10,824**	7,482
Paydowns of securities available-for-sale	**7,300**	5,260
Maturities of securities available-for-sale	**21,113**	20,006
Net change in loans	**(537)**	1,478
Sales of loans and other real estate	**10**	147
Change in federal funds sold and securities purchased under resale agreements	**525**	3,071
Net change in seed capital investments	**20**	68
Purchases of premises and equipment/capitalized software	**(956)**	(1,112)
Other, net	**(417)**	588
Net cash (used for) investing activities	**(44,300)**	(5,230)
Financing activities		
Change in deposits	**35,736**	13,207
Change in federal funds purchased and securities sold under repurchase agreements	**4,299**	(2,447)
Change in payables to customers and broker-dealers	**4,627**	(1,332)
Change in other borrowed funds	**(183)**	(2,422)
Change in commercial paper	**(3,288)**	1,599
Net proceeds from the issuance of long-term debt	**2,245**	2,246
Repayments of long-term debt	**(4,400)**	(4,250)
Proceeds from the exercise of stock options	**36**	51
Issuance of common stock	**9**	19
Issuance of preferred stock	**990**	—
Treasury stock acquired	**(988)**	(2,286)
Common cash dividends paid	**(838)**	(834)
Preferred cash dividends paid	**(146)**	(120)
Other, net	**36**	23
Net cash provided by financing activities	**38,135**	3,454
Effect of exchange rate changes on cash	**(10)**	(57)
Change in cash and due from banks and restricted cash		
Change in cash and due from banks and restricted cash	**(272)**	734
Cash and due from banks and restricted cash at beginning of period	**7,267**	8,258
Cash and due from banks and restricted cash at end of period	**$ 6,995**	$ 8,992
Cash and due from banks and restricted cash		
Cash and due from banks at end of period (unrestricted cash)	**$ 4,104**	$ 6,718
Restricted cash at end of period	**2,891**	2,274
Cash and due from banks and restricted cash at end of period	**$ 6,995**	$ 8,992
Supplemental disclosures		
Interest paid	**$ 1,166**	$ 3,528
Income taxes paid	**1,112**	697
Income taxes refunded	**23**	445

(a) In the first quarter of 2020, we adopted new accounting guidance included in ASU 2016-13, Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments, on a prospective basis. See Note 2 of the Notes to Consolidated Financial Statements for additional information.

See accompanying unaudited Notes to Consolidated Financial Statements.

Consolidated Statement of Changes in Equity (unaudited)

(in millions, except per share amount)	The Bank of New York Mellon Corporation shareholders						Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity	Redeemable non-controlling interests/ temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss), net of tax	Treasury stock			
Balance at June 30, 2020	$ 4,532	$ 14	$ 27,702	$ 33,224	$ (1,943)	$ (19,832)	$ 112	$ 43,809 *(a)*	$ 157
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	**21**
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—	**(1)**
Other net changes in noncontrolling interests	—	—	—	—	—	—	**132**	**132**	—
Net income	—	—	—	**937**	—	—	**7**	**944**	—
Other comprehensive income	—	—	—	—	**584**	—	—	**584**	**2**
Dividends:									
Common stock at $0.31 per share	—	—	—	**(279)**	—	—	—	**(279)**	—
Preferred stock	—	—	—	**(61)**	—	—	—	**(61)**	—
Common stock issued under employee benefit plans	—	—	**6**	—	—	—	—	**6**	—
Stock awards and options exercised	—	—	**33**	—	—	—	—	**33**	—
Balance at Sept. 30, 2020	**$ 4,532**	**$ 14**	**$ 27,741**	**$ 33,821**	**$ (1,359)**	**$ (19,832)**	**$ 251**	**$ 45,168** ***(a)***	**$ 179**

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $39,165 million at June 30, 2020 and $40,385 million at Sept. 30, 2020.

(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, 2020	$ 3,542	$ 14	$ 27,644	$ 32,601	$ (2,827)	$ (19,829)	$ 94	$ 41,239 *(a)*	$ 140
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	17
Other net changes in noncontrolling interests	—	—	—	—	—	—	3	3	—
Net income	—	—	—	950	—	—	15	965	—
Other comprehensive income	—	—	—	—	884	—	—	884	—
Dividends:									
Common stock at $0.31 per share	—	—	—	(278)	—	—	—	(278)	—
Preferred stock	—	—	—	(49)	—	—	—	(49)	—
Repurchase of common stock	—	—	—	—	—	(3)	—	(3)	—
Common stock issued under employee benefit plans	—	—	6	—	—	—	—	6	—
Preferred stock issued	990	—	—	—	—	—	—	990	—
Stock awards and options exercised	—	—	52	—	—	—	—	52	—
Balance at June 30, 2020	$ 4,532	$ 14	$ 27,702	$ 33,224	$ (1,943)	$ (19,832)	$ 112	$ 43,809 *(a)*	$ 157

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $37,603 million at March 31, 2020 and $39,165 million at June 30, 2020.

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

(in millions, except per share amount)	The Bank of New York Mellon Corporation shareholders						Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity	Redeemable non-controlling interests/ temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss), net of tax	Treasury stock			
Balance at June 30, 2019	$ 3,542	$ 14	$ 27,406	$ 30,081	$ (2,688)	$ (16,822)	$ 166	$ 41,699 (a)	$ 136
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	16
Other net changes in noncontrolling interests	—	—	2	—	—	—	34	36	(2)
Net income	—	—	—	1,038	—	—	3	1,041	—
Other comprehensive income	—	—	—	—	(205)	—	—	(205)	(3)
Dividends:									
Common stock at $0.31 per share	—	—	—	(294)	—	—	—	(294)	—
Preferred stock	—	—	—	(36)	—	—	—	(36)	—
Repurchase of common stock	—	—	—	—	—	(981)	—	(981)	—
Common stock issued under employee benefit plans	—	—	6	—	—	—	—	6	—
Stock awards and options exercised	—	—	57	—	—	—	—	57	—
Balance at Sept. 30, 2019	$ 3,542	$ 14	$ 27,471	$ 30,789	$ (2,893)	$ (17,803)	$ 203	$ 41,323 (a)	$ 147

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $37,991 million at June 30, 2019 and $37,578 million at Sept. 30, 2019.

(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, 2019	$ 3,542	$ 14	$ 27,515	$ 31,894	$ (2,638)	$ (18,844)	$ 102	$ 41,585 (a)	$ 143
Impact of adopting ASU 2016-13, *Financial Instruments – Credit Losses*	—	—	—	45	(5)	—	—	40	—
Adjusted balance at Jan. 1, 2020	3,542	14	27,515	31,939	(2,643)	(18,844)	102	41,625	143
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	**55**
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—	**(17)**
Other net changes in noncontrolling interests	—	—	**(5)**	—	—	—	**145**	**140**	**(2)**
Net income (loss)	—	—	—	**2,867**	—	—	**4**	**2,871**	—
Other comprehensive income (loss)	—	—	—	—	**1,284**	—	—	**1,284**	—
Dividends:									
Common stock at $0.93 per share	—	—	—	**(839)**	—	—	—	**(839)**	—
Preferred stock	—	—	—	**(146)**	—	—	—	**(146)**	—
Repurchase of common stock	—	—	—	—	—	**(988)**	—	**(988)**	—
Common stock issued under employee benefit plans	—	—	**21**	—	—	—	—	**21**	—
Preferred stock issued	**990**	—	—	—	—	—	—	**990**	—
Stock awards and options exercised	—	—	**210**	—	—	—	—	**210**	—
Balance at Sept. 30, 2020	**$ 4,532**	**$ 14**	**$ 27,741**	**$ 33,821**	**$ (1,359)**	**$ (19,832)**	**$ 251**	**$ 45,168 (a)**	**$ 179**

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $37,941 million at Dec. 31, 2019 and $40,385 million at Sept. 30, 2020.

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

(in millions, except per share amount)	The Bank of New York Mellon Corporation shareholders						Nonredeemable noncontrolling interests of consolidated investment management funds	Total permanent equity		Redeemable non-controlling interests/ temporary equity
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss), net of tax	Treasury stock				
Balance at Dec. 31, 2018	$ 3,542	$ 14	$ 27,118	$ 28,652	$ (3,171)	$ (15,517)	$ 101	$ 40,739	*(a)*	$ 129
Reclassification of certain tax effects related to adopting ASU 2018-02	—	—	—	90	(90)	—	—	—		—
Adjusted balance at Jan. 1, 2019	3,542	14	27,118	28,742	(3,261)	(15,517)	101	40,739		129
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—		52
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—		(7)
Other net changes in noncontrolling interests	—	—	23	—	—	—	85	108		(26)
Net income	—	—	—	3,001	—	—	17	3,018		—
Other comprehensive income	—	—	—	—	368	—	—	368		(1)
Dividends:										
Common stock at $0.87 per share	—	—	—	(834)	—	—	—	(834)		—
Preferred stock	—	—	—	(120)	—	—	—	(120)		—
Repurchase of common stock	—	—	—	—	—	(2,286)	—	(2,286)		—
Common stock issued under:										
Employee benefit plans	—	—	22	—	—	—	—	22		—
Direct stock purchase and dividend reinvestment plan	—	—	11	—	—	—	—	11		—
Stock awards and options exercised	—	—	297	—	—	—	—	297		—
Balance at Sept. 30, 2019	$ 3,542	$ 14	$ 27,471	$ 30,789	$ (2,893)	$ (17,803)	$ 203	$ 41,323	*(a)*	$ 147

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $37,096 million at Dec. 31, 2018 and $37,578 million at Sept. 30, 2019.

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 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 in our 2019 Annual Report.

The accompanying consolidated financial statements are unaudited. In the opinion of management, all adjustments necessary 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 2019 Annual Report. Certain 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–Accounting changes and new accounting guidance

The following accounting guidance was adopted in the first quarter of 2020.

Accounting Standards Update ("ASU") 2016-13, Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments

In June 2016, the Financial Accounting Standards Board ("FASB") issued an ASU, *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments*. This ASU introduces a new current expected credit losses model, which applies to financial assets subject to credit losses and measured at amortized cost, including held-to-maturity securities and certain off-balance sheet credit exposures. The guidance also changes current practice for the impairment model for available-for-sale debt securities by requiring the use of an allowance to record estimated credit losses and subsequent recoveries. The standard requires a cumulative effect of initial application to be recognized in retained earnings at the date of initial application.

In conjunction with adopting the new standard, we developed expected credit loss models and approaches that include consideration of multiple forecast scenarios and other methodologies. On Jan. 1, 2020, we adopted this new accounting guidance on a prospective basis and recognized a $45 million after-tax increase in retained earnings primarily attributable to a reduction to the allowance for credit losses for our commercial lending portfolios. The comparative financial information for prior periods has not been restated. See the Consolidated Balance Sheet and Notes 4 and 5 for the disclosures required by this ASU.

The table below presents the reconciliation of the allowance for credit losses (pre-tax).

Allowance for credit losses *(in millions)*		
Allowance for credit losses – Dec. 31, 2019	$	216
Impact of adopting ASU 2016-13:		
Securities		7
Loans *(a)*		(69)
Other		3
Total impact of adoption of ASU 2016-13		(59)
Reclassification of credit-related reserves on accounts receivable		4
Allowance for credit losses – Jan. 1, 2020	$	161

(a) Includes $48 million related to loans and $21 million for lending-related commitments.

Significant accounting policies

Loans

Loans are reported at amortized cost, net of any unearned income and deferred fees and costs. Certain loan origination and upfront commitment fees, as well as certain direct loan origination and commitment costs, are deferred and amortized as a yield adjustment over the lives of the related loans. Loans held for sale are carried at the lower of cost or fair value.

Troubled debt restructuring/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. Credit losses related to TDRs are accounted for under an individual evaluation methodology (see "Allowance for credit losses" below). Credit losses for anticipated TDRs are accounted for similarly to TDRs and are identified when there is a reasonable expectation that a TDR will be executed with the borrower and when we expect the modification to affect the timing or amount of payments and/or the payment term.

Due to the coronavirus pandemic, there have been two forms of relief provided for classifying loans as TDRs: The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and the Interagency Guidance (as defined below). Financial institutions may account for eligible loan modifications either under the CARES Act or the Interagency Guidance. The Company has elected to apply both the CARES Act and the Interagency Guidance, as applicable, in providing borrowers with loan modification relief in response to the coronavirus pandemic.

The CARES Act, which became law on March 27, 2020, provides that financial institutions may, subject to certain conditions, elect to temporarily suspend the U.S. GAAP requirements with respect to loan modifications related to the coronavirus pandemic that were current as of Dec. 31, 2019 and that would otherwise be identified and treated as TDRs.

This TDR relief is applicable to modifications that were made from March 1, 2020 until the earlier of Dec. 31, 2020 or 60 days from the date the national emergency related to the coronavirus pandemic officially ends.

Various banking regulators issued guidance in the April 7, 2020 "Interagency Statement on Loan Modifications and Reporting for Financial Institutions Working with Customers Affected by the Coronavirus (revised)" ("Interagency Guidance") on loan modification treatment pursuant to which financial institutions can apply the U.S. GAAP requirements for loan modifications. In accordance with this guidance, a loan modification is not considered a TDR if the modification is related to the coronavirus pandemic, the borrower had been current when the modification program was implemented, and the modification includes payment deferrals for not more than six months.

Nonperforming assets

Commercial loans are placed on nonaccrual status when principal or interest is past due 90 days or more, or when there is reasonable doubt that interest or principal will be collected.

When a first or second lien residential mortgage loan reaches 90 days delinquent, it is subject to an individual evaluation of credit loss and placed on nonaccrual status.

When a loan is placed on nonaccrual status, previously accrued and uncollected interest is reversed against current period interest revenue. Interest receipts on nonaccrual loans are recognized

as interest revenue or are applied to principal when we believe the ultimate collectability of principal is in doubt. Nonaccrual loans generally are restored to an accrual basis when principal and interest become current and remain current for a specified period.

"Allowance for credit losses" below provides additional information regarding the individual evaluation of credit losses for nonperforming loans.

Allowance for credit losses

The accounting policy for estimating credit losses related to financial assets measured at amortized cost, including loans and lending-related commitments changed beginning in the first quarter of 2020 as a result of the adoption of ASU 2016-13, *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments*. This ASU also included targeted amendments with respect to credit losses for available-for-sale debt securities. The accounting policy for determining the allowances has been identified as a "critical accounting estimate" as it requires us to make numerous complex and subjective estimates and assumptions relating to amounts which are judgmental and inherently uncertain.

Credit quality is monitored by management and is reflected within the allowance for credit losses. The allowance represents management's estimate of expected credit losses over the expected contractual life of the financial instruments as of the balance sheet date. The allowance methodology is designed to provide procedural discipline in assessing the appropriateness of the allowance.

A quantitative methodology and qualitative framework is used to estimate the allowance for credit losses. The qualitative framework is described in further detail within "Allowance for credit losses - Other" below. The quantitative component of our estimate uses models and methodologies that categorize financial assets based on product type, collateral type, and other credit trends and risk characteristics, including relevant information about past events, current conditions and reasonable and supportable forecasts of future economic conditions that affect the collectability of the recorded amounts. The allowance may be determined using various methods, including discounted cash flow methods, loss-rate methods, probability of default methods or other methods that we determine to be appropriate.

We estimate our expected credit losses using the probability of default method for the majority of our financial assets. We measure expected credit losses of financial assets on a collective (pool) basis when similar risk characteristics exist. For a financial asset that does not share risk characteristics with other assets, expected credit losses are measured based on an individual evaluation method.

In our estimate, with the exception of our small home equity line of credit portfolio, available-for-sale debt securities, and individually evaluated financial assets, we utilize a multi-scenario macroeconomic forecast which includes a weighting of baseline, stronger near-term growth and moderate recession scenarios. This approach allows us to develop our estimate using a wide span of economic input variables. Our baseline scenario reflects a view on likely performance of each global region and the other two scenarios are designed relative to the baseline scenario. The scenarios include both a reasonable and supportable forecast period as well as a reversion period. The reasonable and supportable forecast is typically over a two- to three-year horizon, followed by a reversion period in which the economic data reverts to long-term historical experience. In general, the forecasts across the alternative economic scenarios tend to revert toward the long-term trends after the forecast period, which is the period in which the confidence interval is considered reasonable and supportable. The speed at which the scenario specific forecasts revert is based on observed historical patterns of mean reversion that are reflected in our model parameter estimates. Certain macroeconomic variables such as unemployment or home prices take longer to revert after a contraction, though specific recovery times are scenario-specific. Reversion will usually take longer the further away the scenario specific forecast is from the historical mean. On a quarterly basis, within a developed governance structure, we update these scenarios for current economic conditions and may adjust the scenario weighting based on our economic outlook.

Allowance for credit losses - Loans and lending-related commitments

The allowance for credit losses on loans is presented as a valuation allowance to loans, and the allowance for credit losses on lending-related commitments is recorded in other liabilities. The components of the allowance for credit losses on loans and lending-

related commitments consist of the following three elements:

- a pooled allowance component for higher risk-rated and pass-rated commercial and institutional credits;
- a pooled allowance component for residential mortgage loans; and
- an asset-specific allowance component involving individually evaluated credits of $1 million or greater.

The first element, a pooled allowance component for higher risk-rated and pass-rated commercial and institutional credits, is based on our expected credit loss model. Individual credit analyses are performed on such loans before being assigned a credit rating. All borrowers are collectively evaluated based on their credit rating. The loss expected in each loan incorporates the borrower's credit rating, facility rating and maturity. The loss given default, derived from the facility rating, incorporates a recovery expectation, and for unfunded lending exposures, an estimate of the use of the facility at default (usage given default). The borrower's probability of default is derived from the associated credit rating. For each of the different parameters, specific credit models are developed for each segment of our portfolio, including commercial loans and lease financing, commercial real estate, financial institutions, and other. Segmentation is established based on risk characteristics of the loans and how risk is monitored. We use both internal and external data in the development of these parameters. In estimating the term of the exposures and resulting effect on the measurement of expected credit loss, we consider the impact of potential prepayments as well as the effect of borrower extension options. Borrower ratings are reviewed at least annually and are periodically mapped to third-party databases, including rating agency and default and recovery databases, to ensure ongoing consistency and validity. Higher risk-rated loans and lending-related commitments are reviewed quarterly.

The second element, a pooled allowance component for residential mortgage loans, is determined by first segregating our mortgage pools into two categories: (i) our wealth management mortgages and (ii) our legacy mortgage portfolio disclosed as other residential mortgages. We then apply models to each portfolio to predict prepayments, default rates and loss severity. We consider historical loss experience and use a loan-level, multi-period default model which further segments each portfolio by product type including first lien fixed rate mortgages, first lien adjustable rate mortgages, second lien mortgages, and interest-only mortgages. We calculate the mortgage loss up to loan contractual maturity and embed a reasonable and supportable forecast and macroeconomic variable inputs which are described above. For home equity lines of credit, probability of default and loss given default are based on external data from third-party databases due to the small size of the portfolio and limited internal data. Our legacy mortgage portfolio and home equity line of credit portfolios represent small sub-segments of our mortgage loans.

The third element, individually evaluated credits, is based on individual analysis of loans of $1 million and greater which no longer share the risk characteristics with other loans. Factors we consider in measuring the extent of expected credit loss include the payment status, collateral value, the borrower's financial condition, guarantor support, the probability of collecting scheduled principal and interest payments when due, anticipated modifications of payment structure or term for troubled borrowers, and recoveries if they can be reasonably estimated. We measure the expected credit loss as the difference between the amortized cost basis in the loan and the present value of the expected future cash flows from the borrower which is generally discounted at the loan's effective interest rate, or the fair value of the collateral, if the loan is collateral dependent. We generally consider nonperforming loans as well as loans that have been or are anticipated to be modified under a troubled debt restructuring for individual evaluation given the risk characteristics of such loans.

Allowance for credit losses - Securities - Debt

When estimating expected credit losses, we segment our available-for-sale and held-to-maturity debt securities portfolios by major asset class. This is influenced by whether the security is structured or non-structured (i.e., direct obligation), as well as the issuer type.

Debt securities are classified as available-for-sale securities when we intend to hold the securities for an indefinite period of time or when the securities may be used for tactical asset/liability management

purposes and may be sold from time to time to effectively manage interest rate exposure, prepayment risk and liquidity needs. Available-for-sale securities are measured at fair value. The difference between fair value and amortized cost represents the unrealized gains or losses on assets classified as available-for-sale, and is recorded net of tax as an addition to, or deduction from, other comprehensive income, unless we determine that this difference or a portion thereof represents an expected credit loss. If we determine that a credit loss exists, the amount is recognized as an allowance for credit losses in securities - available-for sale, with a corresponding adjustment to the provision for credit losses. We evaluate credit losses at the individual security level and do not recognize credit losses if the fair value exceeds amortized cost, and if we determine that a credit loss exists, we limit the recognition of the loss to the difference between fair value and amortized cost. In our determination of whether an expected credit loss exists, we routinely conduct periodic reviews and examine various quantitative and qualitative factors that are unique to each portfolio, including the severity of the unrealized loss position, agency rating, credit enhancement, cash flow deterioration and other factors. The measurement of an expected credit loss is then based on the best estimate of the present value of cash flows to be collected from the debt security. Generally, cash flows are discounted at the effective interest rate implicit in the debt security. Changes to the present value of cash flows due to the passage of time are recognized within the allowance for credit losses.

We estimate expected credit losses for held-to-maturity debt securities using a similar methodology as described in the first allowance element within “Allowance for credit losses - Loans and lending-related commitments” above. The allowance for credit losses on held-to-maturity debt securities are recorded in securities - held-to-maturity. The components of the credit loss calculation for each major portfolio or asset class include a probability of default and loss given default and their values depend on the forecast behavior of variables in the macroeconomic environment. For structured debt securities, we estimated expected credit losses at the individual security level and use a cash flow model to project principal losses. Generally, cash flows are discounted at the effective interest rate implicit in the debt security. The difference is reflected in the allowance for credit losses, and changes to the present value of cash flows due to the passage of time are recognized within the allowance for credit losses.

We currently do not require an estimate of expected credit losses to be measured and recorded for U.S. Treasury securities, agency debt securities, as well as other debt securities that meet certain conditions that are based on a combination of factors such as guarantees, credit ratings, and other credit quality factors. These assets are monitored within our established governance structure on a recurring basis to determine if any changes are warranted.

Allowance for credit losses – Other financial instruments

We also estimate expected credit losses associated with margin loans, reverse repurchase agreements, security lending indemnifications, and deposits with third-party financial institutions using a similar methodology as described in the first allowance element within “Allowance for credit losses - Loans and lending-related commitments” above. The allowance for credit losses on reverse repurchase agreements are recorded in federal funds sold and securities purchased under resale agreements; the allowance for credit losses on securities lending indemnifications is recorded in other liabilities and the allowance for credit losses on deposits with third-party financial institutions is recorded in cash and due from banks or interest-bearing deposits with banks. Our reverse repurchase agreements are short term and subject to continuous overcollateralization by our counterparties and timely collateral replenishment, when necessary. As a result, we estimate the expected credit loss related to the uncollateralized portion of the asset at the balance sheet date, if any, and when there is a reasonable expectation that the counterparty will not replenish the collateral in compliance with the terms of the repurchase agreement. This method is also applied to margin lending arrangements and securities lending indemnifications.

Allowance for credit losses - Other

We do not apply our credit loss measurement methodologies to accrued interest receivable balances related to our loan, debt securities and deposits with third party financial institutions assets given our nonaccrual policy that requires charge-off of interest receivable when deemed uncollectible. Accrued interest receivable related to these instruments is

presented in total with other interest-bearing instruments in the consolidated balance sheet. Accrued interest receivable related to each major loan class is disclosed within our credit quality disclosure in Note 5.

Our policy for credit losses related to purchased financial assets requires an evaluation to be performed prior to the effective purchase date to determine if more than an insignificant decline in credit quality has occurred during the period between the origination and purchase date, or, in the case of debt securities, the period between the issuance and purchase date. If we purchase a financial asset with more than insignificant deterioration in credit quality, the measurement of expected credit loss is performed using the methodologies described above, and the credit loss is recorded as an allowance for credit losses on the purchase date. Subsequent to purchase, changes (favorable and unfavorable) in expected cash flows are recognized immediately in net income by adjusting the allowance. We evaluate various factors in the determination of whether a more than an insignificant decline in credit quality has occurred and these factors vary depending upon the type of asset purchased. Such factors include changes in risk rating and/or agency rating, collateral deterioration, payment status, purchase price, credit spreads, and other factors. We did not purchase any such assets during the first nine months of 2020 and did not own such assets as of Sept. 30, 2020.

We apply a separate credit loss methodology to accounts receivables to estimate the expected credit losses associated with these short-term receivables which historically have not resulted in significant credit losses. The allowance for credit losses on accounts receivable is reflected in other assets.

The qualitative component of our estimate for the allowance for credit losses is intended to capture expected losses that may not have been fully captured in the quantitative component. Through an established governance structure, management determines the qualitative allowance each period based on an evaluation of various internal and environmental factors which include: scenario weighting and sensitivity risk, credit concentration risk, economic conditions and other considerations. We may also make adjustments for idiosyncratic risks. Once determined in the aggregate, our qualitative allowance is then allocated to each of our financial instrument portfolios except for debt securities and those instruments carried in other assets based on the respective instruments' quantitative allowance balances. The allocation of this additional 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 loss.

Note 3–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 third quarter of 2020. Contingent payment totaled $3 million in the first nine months of 2020.

At Sept. 30, 2020, we are potentially obligated to pay additional consideration which, using reasonable assumptions, could range from $5 million to $10 million over the next two years, but could be higher as certain of the arrangements do not contain a contractual maximum.

Transaction in 2019

On Nov. 8, 2019, BNY Mellon, along with the other holders of Promontory Interfinancial Network, LLC ("PIN"), completed the sale of their interests in PIN. BNY Mellon recorded an after-tax gain of $622 million on the sale of this equity investment.

Note 4–Securities

On Jan. 1, 2020, we adopted *ASU 2016-13, Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments* on a prospective basis. See Note 2 for the significant accounting policy related to securities.

The following tables present the amortized cost, the gross unrealized gains and losses and the fair value of securities at Sept. 30, 2020 and Dec. 31, 2019.

Securities at Sept. 30, 2020 *(in millions)*	Amortized cost	Gross unrealized Gains	Gross unrealized Losses	Fair value
Available-for-sale:				
Agency RMBS	**$ 24,262**	**$ 526**	**$ 55**	**$ 24,733**
U.S. Treasury	**23,166**	**1,568**	**1**	**24,733**
Sovereign debt/sovereign guaranteed	**13,925**	**169**	**1**	**14,093**
Agency commercial mortgage-backed securities ("MBS")	**9,299**	**646**	**3**	**9,942**
Supranational	**7,069**	**68**	**1**	**7,136**
Foreign covered bonds	**5,777**	**64**	**—**	**5,841**
Collateralized loan obligations ("CLOs")	**4,696**	**5**	**44**	**4,657**
Foreign government agencies	**3,924**	**46**	**—**	**3,970**
U.S. government agencies	**3,300**	**180**	**2**	**3,478**
Other asset-backed securities ("ABS")	**2,903**	**31**	**4**	**2,930**
Non-agency commercial MBS	**2,565**	**156**	**10**	**2,711**
Non-agency RMBS *(a)*	**1,793**	**157**	**9**	**1,941**
State and political subdivisions	**1,661**	**33**	**4**	**1,690**
Corporate bonds	**988**	**43**	**1**	**1,030**
Commercial paper/certificates of deposit ("CDs")	**355**	**2**	**—**	**357**
Other debt securities	**1**	**—**	**—**	**1**
Total securities available-for-sale *(b)(c)*	**$ 105,684**	**$ 3,694**	**$ 135**	**$ 109,243**
Held-to-maturity:				
Agency RMBS	**$ 37,086**	**$ 1,117**	**$ 10**	**$ 38,193**
U.S. Treasury	**3,288**	**103**	**—**	**3,391**
U.S. government agencies	**2,266**	**5**	**4**	**2,267**
Agency commercial MBS	**2,041**	**107**	**—**	**2,148**
Sovereign debt/sovereign guaranteed	**983**	**41**	**—**	**1,024**
Commercial paper/CDs	**295**	**—**	**—**	**295**
Non-agency RMBS	**70**	**3**	**1**	**72**
Supranational	**52**	**1**	**—**	**53**
State and political subdivisions	**15**	**—**	**—**	**15**
Total securities held-to-maturity	**$ 46,096**	**$ 1,377**	**$ 15**	**$ 47,458**
Total securities	**$ 151,780**	**$ 5,071**	**$ 150**	**$ 156,701**

(a) Includes $512 million that was included in the former Grantor Trust.

(b) In the first quarter of 2020, we adopted new accounting guidance included in ASU 2016-13, Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments, on a prospective basis. The amortized cost of available-for-sale securities is net of the allowance for credit loss of $12 million. The allowance for credit loss primarily relates to CLOs. See Note 2 for additional information.

(c) Includes gross unrealized gains of $25 million and gross unrealized losses of $49 million recorded in accumulated other comprehensive income related to securities that were transferred from available-for-sale to held-to-maturity. The unrealized gains and losses are primarily related to Agency RMBS and will be amortized into net interest revenue over the contractual lives of the securities.

Securities at Dec. 31, 2019 *(in millions)*	Amortized cost	Gross unrealized Gains	Gross unrealized Losses	Fair value
Available-for-sale:				
Agency RMBS	$ 27,022	$ 164	$ 143	$ 27,043
U.S. Treasury	14,979	472	20	15,431
Sovereign debt/sovereign guaranteed	12,548	109	11	12,646
Agency commercial MBS	9,231	203	17	9,417
Foreign covered bonds	4,189	15	7	4,197
CLOs	4,078	1	16	4,063
Supranational	3,697	18	6	3,709
Foreign government agencies	2,638	7	2	2,643
Non-agency commercial MBS	2,134	46	2	2,178
Other ABS	2,141	7	5	2,143
U.S. government agencies	1,890	61	2	1,949
Non-agency RMBS *(a)*	1,038	202	7	1,233
State and political subdivisions	1,017	27	—	1,044
Corporate bonds	832	21	—	853
Other debt securities	1	—	—	1
Total securities available-for-sale *(b)*	$ 87,435	$ 1,353	$ 238	$ 88,550
Held-to-maturity:				
Agency RMBS	$ 27,357	$ 292	$ 46	$ 27,603
U.S. Treasury	3,818	28	3	3,843
Agency commercial MBS	1,326	21	3	1,344
U.S. government agencies	1,023	1	2	1,022
Sovereign debt/sovereign guaranteed	756	31	—	787
Non-agency RMBS	80	4	1	83
Foreign covered bonds	79	—	—	79
Supranational	27	—	—	27
State and political subdivisions	17	—	—	17
Total securities held-to-maturity	$ 34,483	$ 377	$ 55	$ 34,805
Total securities	$ 121,918	$ 1,730	$ 293	$ 123,355

(a) Includes $640 million that was included in the former Grantor Trust.

(b) Includes gross unrealized gains of $32 million and gross unrealized losses of $65 million recorded in accumulated other comprehensive income related to securities that were transferred from available-for-sale to held-to-maturity. The unrealized gains and losses are primarily related to Agency RMBS and will be amortized into net interest revenue over the contractual lives of the securities.

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

Net securities gains (losses) *(in millions)*	**3Q20**	2Q20	3Q19	**YTD20**	YTD19
Realized gross gains	**$ 10**	$ 16	$ 1	**$ 38**	$ 18
Realized gross losses	**(1)**	(7)	(1)	**(11)**	(10)
Recognized gross impairments	**—**	—	(1)	**—**	(1)
Total net securities gains (losses)	**$ 9**	$ 9	$ (1)	**$ 27**	$ 7

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

Net securities gains (losses) *(in millions)*	**3Q20**	2Q20	3Q19	**YTD20**	YTD19
Foreign government agencies	**$ 5**	$ 2	$ —	**$ 7**	$ —
U.S. Treasury	**1**	1	—	**7**	4
Supranational	**—**	6	—	**6**	—
Sovereign debt/sovereign guaranteed	**1**	2	—	**3**	3
State and political subdivisions	**—**	—	—	**—**	2
Other	**2**	(2)	(1)	**4**	(2)
Total net securities gains (losses)	**$ 9**	$ 9	$ (1)	**$ 27**	$ 7

Allowance for credit losses - Securities

In the first quarter of 2020, we adopted new accounting guidance included in ASU 2016-13, *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments*, on a prospective basis. The allowance for credit losses related to securities was $7 million on Jan. 1, 2020 and $12 million at Sept. 30, 2020. The increase reflects additional credit deterioration in the available-for-sale CLO portfolio. For additional information about the review of securities under previous other-than-temporary impairment guidance, refer to Notes 1 and 4, both Notes to Consolidated Financial Statements, in our 2019 Annual Report.

Credit quality indicators - Securities

At Sept. 30, 2020, the gross unrealized losses on the securities portfolio were primarily attributable to an increase in credit spreads 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, $49 million of the unrealized losses at Sept. 30, 2020 and $65 million at Dec. 31, 2019 reflected in the available-for-sale sections of the tables below relate to certain securities (primarily Agency RMBS) that were transferred in prior periods 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 sections of 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 table shows the aggregate fair value of available-for-sale securities with a continuous unrealized loss position for less than 12 months and those that have been in a continuous unrealized loss position for 12 months or more without an allowance for credit losses.

Available-for-sale securities in an unrealized loss position without an allowance for credit losses at Sept. 30, 2020 *(a)*	Less than 12 months		12 months or more		Total	
(in millions)	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
Agency RMBS	**$ 1,126**	**$ 3**	**$ 2,102**	**$ 52**	**$ 3,228**	**$ 55**
U.S. Treasury	**1,041**	**1**	**—**	**—**	**1,041**	**1**
Sovereign debt/sovereign guaranteed	**1,069**	**1**	**119**	**—**	**1,188**	**1**
Agency commercial MBS	**566**	**1**	**306**	**2**	**872**	**3**
Supranational	**1,583**	**1**	**127**	**—**	**1,710**	**1**
CLOs	**3,449**	**31**	**579**	**13**	**4,028**	**44**
U.S. government agencies	**99**	**2**	**—**	**—**	**99**	**2**
Other ABS	**675**	**2**	**229**	**2**	**904**	**4**
Non-agency commercial MBS	**358**	**6**	**194**	**4**	**552**	**10**
Non-agency RMBS *(b)*	**636**	**3**	**97**	**6**	**733**	**9**
State and political subdivisions	**262**	**4**	**2**	**—**	**264**	**4**
Corporate bonds	**173**	**1**	**—**	**—**	**173**	**1**
Total securities available-for-sale *(c)*	**$ 11,037**	**$ 56**	**$ 3,755**	**$ 79**	**$ 14,792**	**$ 135**

(a) Includes $370 million of securities with an unrealized loss of greater than $1 million.

(b) Includes $22 million of securities with an unrealized loss of $1 million for less than 12 months and $1 million of securities with an unrealized loss of less than $1 million for 12 months or more that were included in the former Grantor Trust.

(c) Includes gross unrealized losses of $49 million 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 will be amortized into net interest revenue over the contractual lives of the securities. There were no gross unrealized losses for less than 12 months.

The following table presents the temporarily impaired securities under the disclosure guidance that existed prior to the adoption of ASU 2016-13 and shows 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.

Temporarily impaired securities at Dec. 31, 2019	Less than 12 months		12 months or more		Total	
(in millions)	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
Available-for-sale:						
Agency RMBS	$ 8,373	$ 33	$ 5,912	$ 110	$ 14,285	$ 143
U.S. Treasury	1,976	16	766	4	2,742	20
Sovereign debt/sovereign guaranteed	4,045	10	225	1	4,270	11
Agency commercial MBS	1,960	12	775	5	2,735	17
Foreign covered bonds	1,009	4	690	3	1,699	7
CLOs	1,066	2	1,499	14	2,565	16
Supranational	1,336	6	360	—	1,696	6
Foreign government agencies	1,706	2	47	—	1,753	2
Non-agency commercial MBS	525	2	45	—	570	2
Other ABS	456	3	305	2	761	5
U.S. government agencies	377	2	—	—	377	2
Non-agency RMBS *(a)*	101	—	113	7	214	7
State and political subdivisions	—	—	16	—	16	—
Corporate bonds	82	—	21	—	103	—
Total securities available-for-sale *(b)*	$ 23,012	$ 92	$ 10,774	$ 146	$ 33,786	$ 238

(a) Includes $2 million of securities with an unrealized loss of less than $1 million for less than 12 months and $2 million of securities with an unrealized loss of less than $1 million for 12 months or more that were included in the former Grantor Trust.

(b) Includes gross unrealized losses of $65 million 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 will be amortized into net interest revenue over the contractual lives of the securities. There were no gross unrealized losses for less than 12 months.

The following table shows 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 a reduction in the fair value of our securities portfolio.

Held-to-maturity securities portfolio at Sept. 30, 2020 *(a)*			Ratings *(b)*					
(dollars in millions)	Amortized cost	Net unrealized gain	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	A1+/A2/SP-1+	Not rated
Agency RMBS	$ 37,086	$ 1,107	100 %	— %	— %	— %	— %	— %
U.S. Treasury	3,288	103	100	—	—	—	—	—
U.S. government agencies	2,266	1	100	—	—	—	—	—
Agency commercial MBS	2,041	107	100	—	—	—	—	—
Sovereign debt/sovereign guaranteed *(c)*	983	41	100	—	—	—	—	—
Commercial paper/CDs	295	—	—	—	—	—	100	—
Non-agency RMBS	70	2	39	46	2	12	—	1
Supranational	52	1	100	—	—	—	—	—
State and political subdivisions	15	—	6	2	6	—	—	86
Total held-to-maturity securities	**$ 46,096**	**$ 1,362**	**99 %**	**— %**	**— %**	**— %**	**1 %**	**— %**

(a) In the first quarter of 2020, we adopted new accounting guidance included in ASU 2016-13, Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments, on a prospective basis. See Note 2 for additional information.
(b) Represents ratings by Standard & Poor's ("S&P") or the equivalent.
(c) 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 Sept. 30, 2020	U.S. Treasury		U.S. government agencies		State and political subdivisions		Other bonds, notes and debentures		Mortgage/ asset-backed		
(dollars in millions)	Amount	Yield *(a)*	Amount	Yield *(a)*	Amount	Yield *(a)*	Amount	Yield *(a)*	Amount	Yield *(a)*	Total
Securities available-for-sale:											
One year or less	$ 4,405	1.11 %	$ 25	2.55 %	$ 549	1.49 %	$ 11,186	0.44 %	$ —	— %	**$ 16,165**
Over 1 through 5 years	10,546	1.28	1,866	0.85	570	3.16	17,769	0.61	—	—	**30,751**
Over 5 through 10 years	6,517	1.57	1,468	2.51	223	1.88	3,240	0.56	—	—	**11,448**
Over 10 years	3,265	3.11	119	2.06	348	2.22	233	0.62	—	—	**3,965**
Mortgage-backed securities	—	—	—	—	—	—	—	—	39,327	2.18	**39,327**
Asset-backed securities	—	—	—	—	—	—	—	—	7,587	1.72	**7,587**
Total	$ 24,733	1.57 %	$ 3,478	1.60 %	$ 1,690	2.26 %	$ 32,428	0.55 %	$ 46,914	2.10 %	**$ 109,243**
Securities held-to-maturity:											
One year or less	$ 785	1.43 %	$ —	— %	$ —	— %	$ 307	1.99 %	$ —	— %	**$ 1,092**
Over 1 through 5 years	2,503	1.90	1,253	0.82	2	5.66	946	0.67	—	—	**4,704**
Over 5 through 10 years	—	—	564	1.13	—	—	32	0.92	—	—	**596**
Over 10 years	—	—	449	2.28	13	4.76	45	0.35	—	—	**507**
Mortgage-backed securities	—	—	—	—	—	—	—	—	39,197	2.57	**39,197**
Total	$ 3,288	1.79 %	$ 2,266	1.19 %	$ 15	4.91 %	$ 1,330	0.96 %	$ 39,197	2.57 %	**$ 46,096**

(a) Yields are based upon the amortized cost of securities.

Pledged assets

At Sept. 30, 2020, BNY Mellon had pledged assets of $141 billion, including $108 billion pledged as collateral for potential borrowings at the Federal Reserve Discount Window and $5 billion pledged as collateral for borrowing at the Federal Home Loan Bank. The components of the assets pledged at Sept. 30, 2020 included $123 billion of securities, $11 billion of loans, $6 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, 2019, BNY Mellon had pledged assets of $118 billion, including $80 billion pledged as collateral for potential borrowing at the Federal Reserve Discount Window and $6 billion pledged as collateral for borrowing at the Federal Home Loan Bank. The components of the assets pledged at Dec. 31, 2019 included $98 billion of securities, $13 billion of loans, $7 billion of trading assets and less than $1 billion of interest-bearing deposits with banks.

At Sept. 30, 2020 and Dec. 31, 2019, pledged assets included $23 billion and $29 billion, respectively, for which the recipients were permitted to sell or repledge the assets delivered.

At Sept. 30, 2020, we pledged commercial paper and CDs totaling $295 million as collateral to the Federal Reserve Bank of Boston to secure non-recourse borrowings under the Federal Reserve's Money Market Mutual Fund Liquidity Facility ("MMLF") program.

We also obtain securities as collateral, including receipts under resale agreements, securities borrowed, derivative contracts and custody agreements, on terms which permit us to sell or repledge the securities to others. At Sept. 30, 2020 and Dec. 31, 2019, the market value of the securities received that can be sold or repledged was $112 billion and $153 billion, respectively. We routinely sell or repledge these securities through delivery to third parties. As of Sept. 30, 2020 and Dec. 31, 2019, the market value of securities collateral sold or repledged was $80 billion and $107 billion, respectively.

Restricted cash and securities

Cash and securities may be segregated under federal and other regulations or requirements. At Sept. 30, 2020 and Dec. 31, 2019, cash segregated under federal and other regulations or requirements was $3 billion and $2 billion, respectively. Restricted cash is included in interest-bearing deposits with banks on the consolidated balance sheet. Securities segregated under federal and other regulations or requirements were $4 billion at Sept. 30, 2020 and $1 billion at Dec. 31, 2019. Restricted securities were sourced from securities purchased under resale agreements and are included in federal funds sold and securities purchased under resale agreements on the consolidated balance sheet.

Note 5–Loans and asset quality

Loans

The table below provides the details of our loan portfolio.

Loans *(in millions)*	**Sept. 30, 2020**	Dec. 31, 2019
Domestic:		
Commercial	**$ 1,839**	$ 1,442
Commercial real estate	**5,987**	5,575
Financial institutions	**4,915**	4,852
Lease financings	**482**	537
Wealth management loans and mortgages	**15,805**	16,050
Other residential mortgages	**423**	494
Overdrafts	**899**	524
Other	**1,616**	1,167
Margin loans	**11,220**	11,907
Total domestic	**43,186**	42,548
Foreign:		
Commercial	**102**	347
Commercial real estate	**5**	7
Financial institutions	**6,097**	7,626
Lease financings	**596**	576
Wealth management loans and mortgages	**121**	140
Other (primarily overdrafts)	**3,106**	2,230
Margin loans	**2,278**	1,479
Total foreign	**12,305**	12,405
Total loans *(a)*	**$ 55,491**	$ 54,953

(a) Net of unearned income of $285 million at Sept. 30, 2020 and $313 million at Dec. 31, 2019 primarily related to domestic and foreign lease financings.

Our loan portfolio consists of three portfolio segments: commercial, lease financings and mortgages. We manage our portfolio at the class level, which consists of six classes of financing receivables: commercial, commercial real estate, financial institutions, lease financings, wealth management loans and mortgages, and other residential mortgages.

The following tables are presented for each class of financing receivables and provide additional information about our credit risks.

Allowance for credit losses

On Jan. 1, 2020, we adopted *ASU 2016-13, Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments,* on a prospective basis. See Note 2 for the significant accounting policy related to allowance for credit losses on loans and lending-related commitments.

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 Sept. 30, 2020

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	Total
Beginning balance	$ 40	$ 372	$ 16	$ 3	$ 11	$ 12	$ 454
Charge-offs	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	1	1
Net recoveries	—	—	—	—	—	1	1
Provision *(a)*	(13)	14	(5)	—	4	5	5
Ending balance *(b)*	**$ 27**	**$ 386**	**$ 11**	**$ 3**	**$ 15**	**$ 18**	**$ 460**
Allowance for:							
Loan losses	$ 14	$ 270	$ 7	$ 3	$ 13	$ 18	$ 325
Lending-related commitments	13	116	4	—	2	—	135
Individually evaluated for impairment:							
Loan balance	$ —	$ —	$ —	$ —	$ 17 *(c)*	$ —	$ 17
Allowance for loan losses	—	—	—	—	—	—	—

(a) Does not include provision for credit losses related to other financial instruments of $4 million for the third quarter 2020.
(b) Includes $8 million of allowance for credit losses related to foreign loans, primarily financial institutions.
(c) Includes collateral dependent loans of $17 million with $25 million of collateral at fair value.

Allowance for credit losses activity for the quarter ended June 30, 2020

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	Total
Beginning balance	$ 26	$ 208	$ 18	$ 13	$ 9	$ 14	$ 288
Charge-offs	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	3	3
Net recoveries	—	—	—	—	—	3	3
Provision *(a)*	14	164	(2)	(10)	2	(5)	163
Ending balance *(b)*	$ 40	$ 372	$ 16	$ 3	$ 11	$ 12	$ 454
Allowance for:							
Loan losses	$ 23	$ 244	$ 11	$ 3	$ 9	$ 12	$ 302
Lending-related commitments	17	128	5	—	2	—	152
Individually evaluated for impairment:							
Loan balance	$ —	$ —	$ —	$ —	$ 18 *(c)*	$ —	$ 18
Allowance for loan losses	—	—	—	—	—	—	—

(a) Does not include provision for credit losses related to other financial instruments of $(20) million for the second quarter 2020.
(b) Includes $11 million of allowance for credit losses related to foreign loans, primarily financial institutions.
(c) Includes collateral dependent loans of $18 million with $26 million of collateral at fair value.

Allowance for credit losses activity for the quarter ended Sept. 30, 2019

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All other	Foreign	Total
Beginning balance	$ 77	$ 72	$ 21	$ 4	$ 20	$ 14	$ —	$ 33	$ 241
Charge-offs	(1)	—	—	—	—	—	—	—	(1)
Recoveries	—	—	—	—	—	—	—	—	—
Net (charge-offs)	(1)	—	—	—	—	—	—	—	(1)
Provision	(15)	5	—	(1)	—	—	—	(5)	(16)
Ending balance	$ 61	$ 77	$ 21	$ 3	$ 20	$ 14	$ —	$ 28	$ 224
Allowance for:									
Loan losses	$ 10	$ 57	$ 7	$ 3	$ 17	$ 14	$ —	$ 19	$ 127
Lending-related commitments	51	20	14	—	3	—	—	9	97
Individually evaluated for impairment:									
Loan balance	$ —	$ —	$ —	$ —	$ 16	$ —	$ —	$ —	$ 16
Allowance for loan losses	—	—	—	—	—	—	—	—	—
Collectively evaluated for impairment:									
Loan balance	$ 1,335	$ 5,292	$ 4,973	$ 559	$ 15,748	$ 520	$ 12,567 *(a)*	$ 13,871	$ 54,865
Allowance for loan losses	10	57	7	3	17	14	—	19	127

(a) Includes $1,247 million of domestic overdrafts, $10,177 million of margin loans and $1,143 million of other loans at Sept. 30, 2019.

Allowance for credit losses activity for the nine months ended Sept. 30, 2020

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	Foreign *(a)*	Total
Balance at Dec. 31, 2019	$ 60	$ 76	$ 20	$ 3	$ 20	$ 13	$ 24	$ 216
Impact of adopting ASU 2016-13	(43)	14	(6)	—	(12)	2	(24)	(69)
Balance at Jan. 1, 2020	17	90	14	3	8	15	—	147
Charge-offs	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	4	—	4
Net recoveries	—	—	—	—	—	4	—	4
Provision *(b)*	10	296	(3)	—	7	(1)	—	309
Ending balance	**$ 27**	**$ 386**	**$ 11**	**$ 3**	**$ 15**	**$ 18**	**$ —**	**$ 460**

(a) The allowance related to foreign exposure has been reclassified to financial institutions ($10 million), commercial ($10 million) and lease financings ($4 million).
(b) Does not include provision for credit losses related to other financial instruments of $12 million for the nine months ended Sept. 30, 2020.

Allowance for credit losses activity for the nine months ended Sept. 30, 2019

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All other	Foreign	Total
Beginning balance	$ 81	$ 75	$ 22	$ 5	$ 21	$ 16	$ —	$ 32	$ 252
Charge-offs	(12)	—	—	—	(1)	—	—	—	(13)
Recoveries	—	—	—	—	—	2	—	—	2
Net (charge-offs) recoveries	(12)	—	—	—	(1)	2	—	—	(11)
Provision	(8)	2	(1)	(2)	—	(4)	—	(4)	(17)
Ending balance	$ 61	$ 77	$ 21	$ 3	$ 20	$ 14	$ —	$ 28	$ 224

Nonperforming assets

The table below presents our nonperforming assets.

Nonperforming assets	**Sept. 30, 2020**			
	Recorded investment			
(in millions)	With an allowance	Without an allowance	Total	Dec. 31, 2019
Nonperforming loans:				
Other residential mortgages	**$ 56**	**$ —**	**$ 56**	$ 62
Wealth management loans and mortgages	**10**	**17**	**27**	24
Total nonperforming loans	**66**	**17**	**83**	86
Other assets owned	**—**	**1**	**1**	3
Total nonperforming assets	**$ 66**	**$ 18**	**$ 84**	$ 89

At Sept. 30, 2020, undrawn commitments to borrowers whose loans were classified as nonaccrual or reduced rate were not material.

Past due loans

The table below presents our past due loans.

Past due loans and still accruing interest	**Sept. 30, 2020**				Dec. 31, 2019			
	Days past due			Total	Days past due			Total
(in millions)	30-59	60-89	≥90	past due	30-59	60-89	≥90	past due
Wealth management loans and mortgages	**$ 20**	**$ 1**	**$ —**	**$ 21**	$ 22	$ 5	$ —	$ 27
Other residential mortgages	**7**	**—**	**—**	**7**	8	3	—	11
Financial institutions	**—**	**—**	**—**	**—**	1	30	—	31
Commercial real estate	**9**	**—**	**—**	**9**	6	12	—	18
Total past due loans	**$ 36**	**$ 1**	**$ —**	**$ 37**	$ 37	$ 50	$ —	$ 87

Loan modifications

Due to the coronavirus pandemic, there have been two forms of relief provided for classifying loans as TDRs: The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and the Interagency Guidance. See Note 2 for additional details on the CARES Act and Interagency Guidance. Financial institutions may account for eligible loan modifications either under the CARES Act or the Interagency Guidance. The Company has elected to apply both the CARES Act and the Interagency Guidance, as applicable, in providing borrowers with loan modification relief in response to the coronavirus pandemic. We modified loans of $106 million in the third quarter of 2020 and $282 million in the second quarter of 2020. 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 also modified loans of $56 million in the third quarter of 2020, a majority of which were commercial real estate loans, by providing long-term loan payment modifications and an extension of maturity. We did not identify any of the modifications as troubled debt restructurings ("TDRs"). None of these loans were reported as past due or nonperforming at Sept. 30, 2020. At Sept. 30, 2020, the unpaid principal balance of the loans modified under the CARES Act or Interagency Guidance was $174 million. We modified other residential mortgage loans of $4 million in the third quarter of 2019.

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 table below provides information about the credit profile of the loan portfolio by the period of origination.

Credit profile of the loan portfolio							Sept. 30, 2020			
							Revolving loans			
	Originated, at amortized cost									
(in millions)	**YTD20**	2019	2018	2017	2016	Prior to 2016	Amortized cost	Converted to term loans - Amortized cost	Total *(a)*	Accrued interest receivable
Commercial:										
Investment grade	**$ 153**	$ 73	$ 96	$ 450	$ 57	$ —	**$ 893**	**$ —**	**$ 1,722**	
Non-investment grade	**85**	61	7	—	—	—	**66**	**—**	**219**	
Total commercial	**238**	134	103	450	57	—	**959**	**—**	**1,941**	**$ 1**
Commercial real estate:										
Investment grade	**611**	1,065	542	543	385	430	**175**	**—**	**3,751**	
Non-investment grade	**160**	526	604	159	367	152	**244**	**29**	**2,241**	
Total commercial real estate	**771**	1,591	1,146	702	752	582	**419**	**29**	**5,992**	**8**
Financial institutions:										
Investment grade	**60**	238	47	125	14	165	**8,471**	**—**	**9,120**	
Non-investment grade	**98**	36	—	—	—	—	**1,758**	**—**	**1,892**	
Total financial institutions	**158**	274	47	125	14	165	**10,229**	**—**	**11,012**	**13**
Wealth management loans and mortgages:										
Investment grade	**31**	80	11	149	56	85	**7,235**	**—**	**7,647**	
Non-investment grade	**—**	—	—	—	—	—	**63**	**—**	**63**	
Wealth management mortgages	**781**	1,082	682	1,267	1,622	2,748	**34**	**—**	**8,216**	
Total wealth management loans and mortgages	**812**	1,162	693	1,416	1,678	2,833	**7,332**	**—**	**15,926**	**29**
Lease financings	**126**	19	17	10	25	881	**—**	**—**	**1,078**	**—**
Other residential mortgages	**—**	—	—	—	—	423	**—**	**—**	**423**	**2**
Other loans	**—**	—	—	—	—	—	**1,658**	**—**	**1,658**	**1**
Margin loans	**3,553**	—	—	—	—	—	**9,945**	**—**	**13,498**	**7**
Total loans	**$ 5,658**	$ 3,180	$ 2,006	$ 2,703	$ 2,526	$ 4,884	**$ 30,542**	**$ 29**	**$ 51,528**	**$ 61**

(a) Excludes overdrafts of $3,963 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 95% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at Sept. 30, 2020. In addition, 75% 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 89% expiring within one year.

Wealth management loans and mortgages

Wealth management non-mortgage 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 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, including business assets, fixed assets or a modest amount of commercial real estate. For the loans collateralized by other assets, the credit quality of the obligor is carefully analyzed, but we do not consider this portfolio of loans to be investment grade.

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 62% at origination. Delinquency rate is a key indicator of credit quality in the wealth management portfolio. At Sept. 30, 2020, less than 1% of the mortgages were past due.

At Sept. 30, 2020, the wealth management mortgage portfolio consisted of the following geographic concentrations: California - 22%; New York - 17%; Massachusetts - 10%; Florida - 8%; and other - 43%.

Lease financing

At Sept. 30, 2020, the lease financings portfolio consisted of exposures backed by well-diversified assets, primarily large-ticket transportation equipment and real estate. The largest component of our lease residual value exposure is freight-related rail. Assets are both domestic and foreign-based, with primary concentrations in the U.S. and Germany.

Other residential mortgages

The other residential mortgage portfolio primarily consists of 1-4 family residential mortgage loans and totaled $423 million at Sept. 30, 2020 and $494 million at Dec. 31, 2019. These loans are not typically correlated to external ratings. Included in this portfolio at Sept. 30, 2020 were $76 million of mortgage loans purchased in 2005, 2006 and the first quarter of 2007, of which 19% of the serviced loan balance was at least 60 days delinquent.

Overdrafts

Overdrafts primarily relate to custody and securities clearance clients and totaled $4.0 billion at Sept. 30, 2020 and $2.7 billion at Dec. 31, 2019. Overdrafts occur on a daily basis and are generally repaid within two business days.

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 $13.5 billion of secured margin loans at Sept. 30, 2020, compared with $13.4 billion at Dec. 31, 2019. 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.

Reverse repurchase agreements

Reverse repurchase agreements at Sept. 30, 2020 were fully secured with high quality collateral. As a result, there was no allowance for credit losses related to these assets at Sept. 30, 2020.

Note 6–Goodwill and intangible assets

Goodwill

The tables below provide a breakdown of goodwill by business.

Goodwill by business *(in millions)*	Investment Services	Investment and Wealth Management	Other	Consolidated
Balance at Dec. 31, 2019	$ 8,332	$ 9,007	$ 47	$ 17,386
Foreign currency translation	21	(50)	—	(29)
Other *(a)*	47	—	(47)	—
Balance at Sept. 30, 2020	**$ 8,400**	**$ 8,957**	**$ —**	**$ 17,357**

(a) Reflects the transfer of goodwill associated with the Capital Markets business.

Goodwill by business *(in millions)*	Investment Services	Investment and Wealth Management	Other	Consolidated
Balance at Dec. 31, 2018	$ 8,333	$ 8,970	$ 47	$ 17,350
Foreign currency translation	(45)	(57)	—	(102)
Balance at Sept. 30, 2019	$ 8,288	$ 8,913	$ 47	$ 17,248

Intangible assets

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

Intangible assets – net carrying amount by business *(in millions)*	Investment Services	Investment and Wealth Management	Other	Consolidated
Balance at Dec. 31, 2019	$ 678	$ 1,580	$ 849	$ 3,107
Amortization	(54)	(24)	—	(78)
Foreign currency translation	1	(4)	—	(3)
Balance at Sept. 30, 2020	**$ 625**	**$ 1,552**	**$ 849**	**$ 3,026**

Intangible assets – net carrying amount by business *(in millions)*	Investment Services	Investment and Wealth Management	Other	Consolidated
Balance at Dec. 31, 2018	$ 758	$ 1,613	$ 849	$ 3,220
Amortization	(61)	(28)	—	(89)
Foreign currency translation	(1)	(6)	—	(7)
Balance at Sept. 30, 2019	$ 696	$ 1,579	$ 849	$ 3,124

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

Intangible assets	**Sept. 30, 2020**				Dec. 31, 2019		
(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—Investment Services	**$ 1,482**	**$ (1,228)**	**$ 254**	**10 years**	$ 1,520	$ (1,214)	$ 306
Customer relationships—Investment and Wealth Management	**711**	**(563)**	**148**	**10 years**	712	(544)	168
Other	**64**	**(21)**	**43**	**14 years**	64	(16)	48
Total subject to amortization	**2,257**	**(1,812)**	**445**	**10 years**	2,296	(1,774)	522
Not subject to amortization: *(b)*							
Tradenames	**1,292**	**N/A**	**1,292**	**N/A**	1,293	N/A	1,293
Customer relationships	**1,289**	**N/A**	**1,289**	**N/A**	1,292	N/A	1,292
Total not subject to amortization	**2,581**	**N/A**	**2,581**	**N/A**	2,585	N/A	2,585
Total intangible assets	**$ 4,838**	**$ (1,812)**	**$ 3,026**	**N/A**	$ 4,881	$ (1,774)	$ 3,107

(a) Excludes fully amortized intangible assets.
(b) Intangible assets not subject to amortization have an indefinite life.

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)*
2020	**$ 104**
2021	**81**
2022	**63**
2023	**52**
2024	**45**

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 three business segments include six reporting units for which goodwill impairment testing is performed on an annual basis. The Investment Services segment is comprised of four reporting units and the Investment and Wealth Management segment is comprised of two reporting units. As a result of the annual goodwill impairment test of the six reporting units conducted in the second quarter of 2020, no goodwill impairment was recognized.

Note 7–Other assets

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

Other assets *(in millions)*	**Sept. 30, 2020**	Dec. 31, 2019
Corporate/bank-owned life insurance	**$ 5,276**	$ 5,219
Accounts receivable	**3,549**	3,802
Fails to deliver	**2,192**	1,671
Software	**1,832**	1,590
Prepaid pension assets	**1,599**	1,464
Equity in a joint venture and other investments	**1,190**	1,102
Renewable energy investments	**1,057**	1,144
Qualified affordable housing project investments	**997**	1,024
Prepaid expense	**522**	491
Federal Reserve Bank stock	**478**	466
Income taxes receivable	**332**	388
Seed capital	**200**	184
Fair value of hedging derivatives	**56**	21
Other *(a)*	**1,499**	1,655
Total other assets	**$ 20,779**	$ 20,221

(a) At Sept. 30, 2020 and Dec. 31, 2019, other assets include $8 million and $22 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 income on the consolidated income statement. Our non-readily marketable equity securities totaled $112 million at Sept. 30, 2020 and $61 million at Dec. 31, 2019 and are included in equity in a joint venture and other 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)*	**3Q20**	2Q20	3Q19	**YTD20**	YTD19	Life-to-date
Upward adjustments	**$ 4**	$ 2	$ 1	**$ 10**	$ 3	$ 42
Downward adjustments	**—**	—	—	**—**	(1)	(4)
Net adjustments	**$ 4**	$ 2	$ 1	**$ 10**	$ 2	$ 38

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 $1.0 billion at both Sept. 30, 2020 and Dec. 31, 2019. Commitments to fund future investments in qualified affordable housing projects totaled $388 million at Sept. 30, 2020 and $422 million at Dec. 31, 2019 and are recorded in other liabilities. A summary of the commitments to fund future investments is as follows: 2020 – $40 million; 2021 – $187 million; 2022 – $99 million; 2023 – $36 million; 2024 – $1 million; and 2025 and thereafter – $25 million.

Tax credits and other tax benefits recognized were $35 million in the third quarter of 2020, $38 million in the second quarter of 2020, $39 million in the third quarter of 2019, $111 million in the first nine months of 2020 and $117 million in the first nine months of 2019.

Amortization expense included in the provision for income taxes was $30 million in the third quarter of 2020, $31 million in the second quarter of 2020, $33 million in the third quarter of 2019, $92 million in the first nine months of 2020 and $97 million in the first nine months of 2019.

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

In our Investment and Wealth Management business, we make seed capital investments in certain funds we manage. We also hold private equity investments, specifically small business investment companies ("SBICs"), which are compliant with the Volcker Rule, and certain other corporate investments. Seed capital, private equity and other corporate investments are included in other assets on the consolidated balance sheet. The fair value of certain of these investments was estimated using the NAV per share for our ownership interest in the funds.

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

Investments valued using NAV	**Sept. 30, 2020**		Dec. 31, 2019	
(in millions)	Fair value	Unfunded commitments	Fair value	Unfunded commitments
Seed capital *(a)*	**$ 44**	**$ 11**	$ 59	$ —
Private equity investments (SBICs) *(b)*	**97**	**55**	89	55
Other *(c)*	**43**	**—**	33	—
Total	**$ 184**	**$ 66**	$ 181	$ 55

(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 six to 11 years at Sept. 30, 2020 and lives of six years at Dec. 31, 2019, are liquidated.

(b) Private equity investments 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.

(c) Primarily includes investments in funds that relate to deferred compensation arrangements with employees. Investments in funds can be redeemed on a monthly to quarterly basis with redemption notice periods of up to 95 days.

Note 8–Contract revenue

Fee revenue in Investment Services and Investment and Wealth Management 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 2019 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 2019 Annual Report for additional information on our principal businesses, Investment Services and Investment and Wealth Management, and the primary services provided.

Disaggregation of contract revenue

Contract revenue is included in fee revenue on the consolidated income statement. The following table presents fee 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 the generally accepted accounting principles used for consolidated financial reporting.

Disaggregation of contract revenue by business segment

	Quarter ended											
	Sept. 30, 2020				June 30, 2020				Sept. 30, 2019 *(a)*			
(in millions)	IS	IWM	Other	Total	IS	IWM	Other	Total	IS	IWM	Other	Total
Fee revenue - contract revenue:												
Investment services fees:												
Asset servicing fees	**$ 1,143**	**$ 25**	**$ (13)**	**$ 1,155**	$ 1,147	$ 25	$ (15)	$ 1,157	$ 1,106	$ 20	$ (5)	$ 1,121
Clearing services fees	**397**	**—**	**—**	**397**	431	—	—	431	419	—	—	419
Issuer services fees	**296**	**—**	**—**	**296**	277	—	—	277	324	—	—	324
Treasury services fees	**153**	**1**	**(2)**	**152**	144	—	1	145	140	—	—	140
Total investment services fees	**1,989**	**26**	**(15)**	**2,000**	1,999	25	(14)	2,010	1,989	20	(5)	2,004
Investment management and performance fees	**4**	**838**	**(3)**	**839**	4	792	(5)	791	4	829	(4)	829
Financing-related fees	**13**	**1**	**1**	**15**	23	1	—	24	14	—	—	14
Distribution and servicing	**(2)**	**31**	**—**	**29**	(7)	34	—	27	(12)	45	—	33
Investment and other income	**57**	**(33)**	**(2)**	**22**	62	(41)	3	24	72	(50)	—	22
Total fee revenue - contract revenue	**2,061**	**863**	**(19)**	**2,905**	2,081	811	(16)	2,876	2,067	844	(9)	2,902
Fee and other revenue - not in scope of Accounting Standards Codification ("ASC") 606 *(b)(c)*	**185**	**8**	**39**	**232**	258	27	54	339	229	(6)	3	226
Total fee and other revenue (loss)	**$ 2,246**	**$ 871**	**$ 20**	**$ 3,137**	$ 2,339	$ 838	$ 38	$ 3,215	$ 2,296	$ 838	$ (6)	$ 3,128

(a) Restated to reflect the first quarter 2020 business segment reclassifications. There was no impact on total revenue, by type or in aggregate. See Note 19 for additional information related to the reclassifications.

(b) Primarily includes foreign exchange and other trading revenue, financing-related fees, investment and other income (loss), asset servicing fees and net securities gains (losses), all of which are accounted for using other accounting guidance.

(c) The Investment and Wealth Management business segment includes income from consolidated investment management funds, net of noncontrolling interests, of $20 million in the third quarter of 2020, $39 million in the second quarter of 2020 and $— million in the third quarter of 2019.

IS - Investment Services business segment.

IWM - Investment and Wealth Management business segment.

Disaggregation of contract revenue by business segment	Year-to-date							
	Sept. 30, 2020				Sept. 30, 2019 *(a)*			
(in millions)	IS	IWM	Other	Total	IS	IWM	Other	Total
Fee revenue - contract revenue:								
Investment services fees:								
Asset servicing fees	**$ 3,417**	**$ 73**	**$ (39)**	**$ 3,451**	$ 3,282	$ 60	$ (19)	$ 3,323
Clearing services fees	**1,298**	**—**	**—**	**1,298**	1,228	—	(1)	1,227
Issuer services fees	**836**	**—**	**—**	**836**	866	—	—	866
Treasury services fees	**446**	**1**	**(1)**	**446**	412	1	—	413
Total investment services fees	**5,997**	**74**	**(40)**	**6,031**	5,788	61	(20)	5,829
Investment management and performance fees	**13**	**2,492**	**(12)**	**2,493**	12	2,503	(12)	2,503
Financing-related fees	**64**	**2**	**1**	**67**	47	—	1	48
Distribution and servicing	**(21)**	**108**	**—**	**87**	(39)	134	—	95
Investment and other income	**191**	**(124)**	**1**	**68**	210	(147)	—	63
Total fee revenue - contract revenue	**6,244**	**2,552**	**(50)**	**8,746**	6,018	2,551	(31)	8,538
Fee and other revenue - not in scope of ASC 606 *(b)(c)*	**777**	**3**	**138**	**918**	672	10	74	756
Total fee and other revenue	**$ 7,021**	**$ 2,555**	**$ 88**	**$ 9,664**	$ 6,690	$ 2,561	$ 43	$ 9,294

(a) Restated to reflect the first quarter 2020 business segment reclassifications. There was no impact on total revenue, by type or in aggregate. See Note 19 for additional information related to the reclassifications.

(b) Primarily includes foreign exchange and other trading revenue, financing-related fees, investment and other income (loss), asset servicing fees and net securities gains (losses), all of which are accounted for using other accounting guidance.

(c) The Investment and Wealth Management business segment includes income from consolidated investment management funds, net of noncontrolling interests, of $39 million in the first nine months of 2020 and $22 million in the first nine months of 2019.

IS - Investment Services business segment.

IWM - Investment and Wealth Management business segment.

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 Sept. 30, 2020 and $2.4 billion at Dec. 31, 2019.

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 $57 million at Sept. 30, 2020 and $32 million at Dec. 31, 2019. 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 $187 million at Sept. 30, 2020 and $168 million at Dec. 31, 2019. Contract liabilities are included in other liabilities on the consolidated balance sheet. Revenue recognized in the third quarter of 2020 relating to contract liabilities as of June 30, 2020 was $65 million. Revenue recognized in the first nine months of 2020 relating to contract liabilities as of Dec. 31, 2019 was $95 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 $77 million at Sept. 30, 2020 and $86 million at Dec. 31, 2019. 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 $6 million in the third quarter of 2020, $7 million in the third quarter of 2019, $5 million in the second quarter of 2020, $16 million in the first nine months of 2020 and $17 million in the first nine months of 2019.

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 $12 million at Sept. 30, 2020 and $16 million at Dec. 31, 2019. 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 $1 million in the third quarter of 2020 and third quarter of 2019, $2 million in the second quarter of 2020 and $4 million in the first nine months of 2020 and first nine months of 2019. There were no impairments recorded on capitalized contract costs in the first nine months of 2020.

Unsatisfied performance obligations

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

Note 9–Net interest revenue

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

Net interest revenue	Quarter ended			Year-to-date	
(in millions)	**Sept. 30, 2020**	June 30, 2020	Sept. 30, 2019	**Sept. 30, 2020**	Sept. 30, 2019
Interest revenue					
Deposits with the Federal Reserve and other central banks	**$ (10)**	$ (7)	$ 102	**$ 63**	$ 354
Deposits with banks	**20**	40	73	**118**	200
Federal funds sold and securities purchased under resale agreements	**48**	61	660	**505**	1,702
Margin loans	**41**	40	104	**168**	358
Non-margin loans	**199**	230	287 *(a)*	**738**	1,007 *(a)*
Securities:					
Taxable	**499**	556	669	**1,649**	2,062
Exempt from federal income taxes	**7**	6	7	**19**	29
Total securities	**506**	562	676	**1,668**	2,091
Trading securities	**16**	17	40	**73**	115
Total interest revenue	**820**	943	1,942	**3,333**	5,827
Interest expense					
Deposits	**(29)**	(17)	437	**194**	1,260
Federal funds purchased and securities sold under repurchase agreements	**6**	1	443	**282**	1,146
Trading liabilities	**2**	2	8	**11**	26
Other borrowed funds	**3**	7	10	**14**	54
Commercial paper	**—**	1	22	**7**	48
Customer payables	**—**	(1)	59	**29**	198
Long-term debt	**135**	170	233	**499**	722
Total interest expense	**117**	163	1,212	**1,036**	3,454
Net interest revenue	**703**	780	730	**2,297**	2,373
Provision for credit losses	**9**	143	(16)	**321**	(17)
Net interest revenue after provision for credit losses	**$ 694**	$ 637	$ 746	**$ 1,976**	$ 2,390

(a) Includes the impact of a lease-related impairment of $70 million.

Note 10–Employee benefit plans

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

Net periodic benefit (credit) cost	Quarter ended								
	Sept. 30, 2020			June 30, 2020			Sept. 30, 2019		
(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	**39**	**7**	**2**	39	6	1	44	8	2
Expected return on assets	**(80)**	**(10)**	**(2)**	(79)	(9)	(2)	(84)	(11)	(1)
Other	**22**	**2**	**(1)**	21	3	—	13	—	(1)
Net periodic benefit (credit) cost	**$ (19)**	**$ 2**	**$ (1)**	$ (19)	$ 3	$ (1)	$ (27)	$ —	$ —

Net periodic benefit (credit) cost	Year-to-date					
	Sept. 30, 2020			Sept. 30, 2019		
(in millions)	Domestic pension benefits	Foreign pension benefits	Health care benefits	Domestic pension benefits	Foreign pension benefits	Health care benefits
Service cost	**$ —**	**$ 9**	**$ —**	$ —	$ 9	$ —
Interest cost	**117**	**20**	**4**	133	24	5
Expected return on assets	**(239)**	**(29)**	**(5)**	(252)	(34)	(5)
Other	**65**	**8**	**(2)**	39	1	(2)
Net periodic benefit (credit) cost	**$ (57)**	**$ 8**	**$ (3)**	$ (80)	$ —	$ (2)

Note 11–Income taxes

BNY Mellon recorded an income tax provision of $213 million (18.4% effective tax rate) in the third quarter of 2020, $246 million (19.1% effective tax rate) in the third quarter of 2019 and $216 million (18.3% effective tax rate) in the second quarter of 2020.

Our total tax reserves as of Sept. 30, 2020 were $85 million compared with $173 million at Dec. 31, 2019. If these tax reserves were unnecessary, $85 million would affect the effective tax rate in future periods. We recognize accrued interest and penalties, if applicable, related to income taxes in income tax expense. Included in the balance sheet at Sept. 30, 2020 is accrued interest, where applicable, of $23 million. The additional tax expense related to interest for the nine months ended Sept. 30, 2020 was $5 million, compared with $9 million for the nine months ended Sept. 30, 2019.

It is reasonably possible the total reserve for uncertain tax positions could decrease within the next 12 months by approximately $15 million as a result of adjustments related to tax years that are still subject to examination.

Our federal income tax returns are closed to examination through 2016. Our New York State and New York City income tax returns are closed to examination through 2012. Our UK income tax returns are closed to examination through 2015.

Note 12–Variable interest entities and securitization

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 Sept. 30, 2020 and Dec. 31, 2019. 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 investments	**Sept. 30, 2020**			Dec. 31, 2019		
(in millions)	Investment Management funds	Securitization	Total consolidated investments	Investment Management funds	Securitization	Total consolidated investments
Trading assets	**$ 579**	**$ 400**	**$ 979**	$ 229	$ 400	$ 629
Other assets	**9**	**—**	**9**	16	—	16
Total assets	**$ 588** *(a)*	**$ 400**	**$ 988**	$ 245 *(b)*	$ 400	$ 645
Other liabilities	**$ 4**	**$ 400**	**$ 404**	$ 1	$ 387	$ 388
Total liabilities	**$ 4** *(a)*	**$ 400**	**$ 404**	$ 1 *(b)*	$ 387	$ 388
Nonredeemable noncontrolling interests	**$ 251** *(a)*	**$ —**	**$ 251**	$ 102 *(b)*	$ —	$ 102

(a) Includes voting model entities ("VMEs") with assets of $226 million, liabilities of $1 million and nonredeemable noncontrolling interests of $31 million.
(b) Includes VMEs with assets of $50 million, liabilities of $1 million and nonredeemable noncontrolling interests of $1 million.

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

Non-consolidated VIEs

As of Sept. 30, 2020 and Dec. 31, 2019, 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 table below relates solely to our investments in, and unfunded commitments to, the VIEs.

Non-consolidated VIEs	**Sept. 30, 2020**			Dec. 31, 2019		
(in millions)	Assets	Liabilities	Maximum loss exposure	Assets	Liabilities	Maximum loss exposure
Securities - Available-for-sale *(a)*	**$ 206**	**$ —**	**206**	$ 208	$ —	$ 208
Other	**2,278**	**388**	**2,675**	2,400	422	2,822

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

Note 13–Preferred stock

The Parent has 100 million authorized shares of preferred stock with a par value of $0.01 per share. The following table summarizes the Parent's preferred stock issued and outstanding at Sept. 30, 2020 and Dec. 31, 2019.

Preferred stock summary *(a)*		Total shares issued and outstanding		Carrying value *(b)* *(in millions)*	
	Per annum dividend rate	**Sept. 30, 2020**	Dec. 31, 2019	**Sept. 30, 2020**	Dec. 31, 2019
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 C	5.2%	**5,825**	5,825	**568**	568
Series D	4.50% 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 E	4.95% to but excluding June 20, 2020, then a floating rate equal to the three-month LIBOR plus 3.42%	**10,000**	10,000	**990**	990
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	4.70% to but excluding Sept. 20, 2025, then a floating rate equal to the five-year treasury rate plus 4.358%	**10,000**	—	**990**	—
Total		**45,826**	35,826	**$ 4,532**	$ 3,542

(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 C, Series D, Series E, Series F and Series G preferred stock is recorded net of issuance costs.

In May 2020, the Parent issued 1,000,000 depositary shares, each representing a 1/100th interest in a share of the Parent's Series G Noncumulative Perpetual Preferred Stock (the "Series G Preferred Stock"). The Parent will pay dividends on the Series G Preferred Stock, if declared by its board of directors, on each March 20 and September 20, at an annual rate of 4.70%, from the original issue date to but excluding Sept. 20, 2025; and at a floating rate equal to the five-year treasury rate on the date that is three business days prior to the reset date plus 4.358% for each reset period, from and including Sept. 20, 2025. The floating rate will initially reset on Sept. 20, 2025 and subsequently on each date falling on the fifth anniversary of the preceding reset date.

The table below presents the dividends paid on the Parent's preferred stock.

Preferred dividends paid		**3Q20**		2Q20		3Q19		**YTD20**		YTD19	
(dollars in millions, except per share amounts)	Depositary shares per share	Per share	Total dividend	Per share	Total dividend	Per share	Total dividend	Per share	Total dividend	Per share	Total dividend
Series A	100 *(a)*	**$ 1,011.11**	**$ 5**	$ 1,022.22	$ 5	$ 1,022.22	$ 5	**$ 3,044.44**	**$ 15**	$ 3,044.44	$ 15
Series C	4,000	**1,300.00**	**7**	1,300.00	8	1,300.00	8	**3,900.00**	**23**	3,900.00	23
Series D	100	**N/A**	**—**	2,250.00	11	N/A	—	**2,250.00**	**11**	2,250.00	11
Series E	100	**962.65**	**10**	2,475.00	25	N/A	—	**3,437.65**	**35**	2,475.00	25
Series F	100	**2,312.50**	**23**	N/A	—	2,312.50	23	**4,625.00**	**46**	4,625.00	46
Series G	100	**1,579.72**	**16**	N/A	—	N/A	—	**1,579.72**	**16**	N/A	—
Total			**$ 61**		$ 49		$ 36		**$ 146**		$ 120

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

For additional information on the preferred stock, see Note 15 of the Notes to Consolidated Financial Statements in our 2019 Annual Report.

Note 14–Other comprehensive income (loss)

Components of other comprehensive income (loss)	Quarter ended								
	Sept. 30, 2020			June 30, 2020			Sept. 30, 2019		
(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)*	**$ 262**	**$ 69**	**$ 331**	$ 104	$ 11	$ 115	$ (213)	$ (63)	$ (276)
Total foreign currency translation	**262**	**69**	**331**	104	11	115	(213)	(63)	(276)
Unrealized gain on assets available-for-sale:									
Unrealized gain arising during period	**297**	**(64)**	**233**	989	(236)	753	88	(25)	63
Reclassification adjustment *(b)*	**(9)**	**3**	**(6)**	(9)	2	(7)	1	—	1
Net unrealized gain on assets available-for-sale	**288**	**(61)**	**227**	980	(234)	746	89	(25)	64
Defined benefit plans:									
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost *(b)*	**24**	**(4)**	**20**	24	(5)	19	13	(3)	10
Total defined benefit plans	**24**	**(4)**	**20**	24	(5)	19	13	(3)	10
Unrealized gain (loss) on cash flow hedges:									
Unrealized hedge gain (loss) arising during period	**9**	**(1)**	**8**	3	(1)	2	(9)	4	(5)
Reclassification of net (gain) loss to net income:									
Interest rate contracts - interest expense	**—**	**—**	**—**	—	—	—	1	—	1
Foreign exchange ("FX") contracts - staff expense	**—**	**—**	**—**	3	(1)	2	(2)	—	(2)
Total reclassifications to net income	**—**	**—**	**—**	3	(1)	2	(1)	—	(1)
Net unrealized gain (loss) on cash flow hedges	**9**	**(1)**	**8**	6	(2)	4	(10)	4	(6)
Total other comprehensive income (loss)	**$ 583**	**$ 3**	**$ 586**	$ 1,114	$ (230)	$ 884	$ (121)	$ (87)	$ (208)

(a) Includes the impact of hedges of net investments in foreign subsidiaries. See Note 17 for additional information.
(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains 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 staff expense on the consolidated income statement.

Components of other comprehensive income (loss)	Year-to-date					
	Sept. 30, 2020			Sept. 30, 2019		
(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)*	**$ 101**	**$ (24)**	**$ 77**	$ (157)	$ (80)	$ (237)
Total foreign currency translation	**101**	**(24)**	**77**	(157)	(80)	(237)
Unrealized gain on assets available-for-sale:						
Unrealized gain (loss) arising during period	**1,529**	**(360)**	**1,169**	794	(205)	589
Reclassification adjustment *(b)*	**(27)**	**7**	**(20)**	(7)	2	(5)
Net unrealized gain on assets available-for-sale	**1,502**	**(353)**	**1,149**	787	(203)	584
Defined benefit plans:						
Net (loss) arising during the period	**—**	**—**	**—**	(11)	2	(9)
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost *(b)*	**72**	**(15)**	**57**	38	(8)	30
Total defined benefit plans	**72**	**(15)**	**57**	27	(6)	21
Unrealized (loss) gain on cash flow hedges:						
Unrealized hedge (loss) arising during period	**(1)**	**1**	**—**	(1)	(2)	(3)
Reclassification of net loss (gain) to net income:						
Interest rate contracts - interest expense	**—**	**—**	**—**	1	—	1
FX contracts - staff expense	**2**	**(1)**	**1**	(1)	2	1
Total reclassifications to net income	**2**	**(1)**	**1**	—	2	2
Net unrealized (loss) on cash flow hedges	**1**	**—**	**1**	(1)	—	(1)
Total other comprehensive income	**$ 1,676**	**$ (392)**	**$ 1,284**	$ 656	$ (289)	$ 367

(a) Includes the impact of hedges of net investments in foreign subsidiaries. See Note 17 for additional information.
(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains 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 staff expense on the consolidated income statement.

Note 15–Fair value measurement

Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. A three-level hierarchy for fair value measurements is utilized based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. BNY Mellon's own creditworthiness is considered when valuing liabilities. See Note 20 of the Notes to Consolidated Financial Statements in our 2019 Annual Report for information on how we determine fair value and the fair value hierarchy.

The following tables present the financial instruments carried at fair value at Sept. 30, 2020 and Dec. 31, 2019, 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 Sept. 30, 2020 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Available-for-sale securities:					
Agency RMBS	$ —	$ 24,733	$ —	$ —	$ 24,733
U.S. Treasury	24,733	—	—	—	24,733
Sovereign debt/sovereign guaranteed	7,179	6,914	—	—	14,093
Agency commercial MBS	—	9,942	—	—	9,942
Supranational	—	7,136	—	—	7,136
Foreign covered bonds	—	5,841	—	—	5,841
CLOs	—	4,657	—	—	4,657
Foreign government agencies	—	3,970	—	—	3,970
U.S. government agencies	—	3,478	—	—	3,478
Other ABS	—	2,930	—	—	2,930
Non-agency commercial MBS	—	2,711	—	—	2,711
Non-agency RMBS *(b)*	—	1,941	—	—	1,941
State and political subdivisions	—	1,690	—	—	1,690
Corporate bonds	—	1,030	—	—	1,030
Commercial paper/CDs	—	357	—	—	357
Other debt securities	—	1	—	—	1
Total available-for-sale securities	31,912	77,331	—	—	109,243
Trading assets:					
Debt instruments	3,181	3,050	—	—	6,231
Equity instruments *(c)*	2,694	—	—	—	2,694
Derivative assets not designated as hedging:					
Interest rate	4	4,958	—	(2,133)	2,829
Foreign exchange	—	4,410	—	(3,102)	1,308
Equity and other contracts	4	11	—	(3)	12
Total derivative assets not designated as hedging	8	9,379	—	(5,238)	4,149
Total trading assets	5,883	12,429	—	(5,238)	13,074
Other assets:					
Derivative assets designated as hedging:					
Foreign exchange	—	56	—	—	56
Total derivative assets designated as hedging	—	56	—	—	56
Other assets *(d)*	113	174	—	—	287
Assets measured at NAV *(d)*					184
Subtotal assets of operations at fair value	**37,908**	**89,990**	**—**	**(5,238)**	**122,844**
Percentage of assets of operations prior to netting	30 %	70 %	— %		
Assets of consolidated investment management funds	360	228	—	—	588
Total assets	**$ 38,268**	**$ 90,218**	**$ —**	**$ (5,238)**	**$ 123,432**
Percentage of total assets prior to netting	30 %	70 %	— %		

Liabilities measured at fair value on a recurring basis at Sept. 30, 2020 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Trading liabilities:					
Debt instruments	$ 3,396	$ 66	$ —	$ —	$ 3,462
Equity instruments	26	—	—	—	26
Derivative liabilities not designated as hedging:					
Interest rate	3	4,243	—	(2,551)	1,695
Foreign exchange	—	4,522	—	(3,631)	891
Equity and other contracts	—	11	—	(1)	10
Total derivative liabilities not designated as hedging	3	8,776	—	(6,183)	2,596
Total trading liabilities	3,425	8,842	—	(6,183)	6,084
Long-term debt *(c)*	—	400	—	—	400
Other liabilities – derivative liabilities designated as hedging:					
Interest rate	—	803	—	—	803
Foreign exchange	—	194	—	—	194
Total other liabilities – derivative liabilities designated as hedging	—	997	—	—	997
Subtotal liabilities of operations at fair value	**3,425**	**10,239**	**—**	**(6,183)**	**7,481**
Percentage of liabilities of operations prior to netting	25 %	75 %	— %		
Liabilities of consolidated investment management funds	—	4	—	—	4
Total liabilities	**$ 3,425**	**$ 10,243**	**$ —**	**$ (6,183)**	**$ 7,485**
Percentage of total liabilities prior to netting	25 %	75 %	— %		

(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 $512 million in Level 2 that was included in the former Grantor Trust.

(c) Includes certain interests in securitizations.

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

Assets measured at fair value on a recurring basis at Dec. 31, 2019 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Available-for-sale securities:					
Agency RMBS	$ —	$ 27,043	$ —	$ —	$ 27,043
U.S. Treasury	15,431	—	—	—	15,431
Sovereign debt/sovereign guaranteed	7,784	4,862	—	—	12,646
Agency commercial MBS	—	9,417	—	—	9,417
Foreign covered bonds	—	4,197	—	—	4,197
CLOs	—	4,063	—	—	4,063
Supranational	—	3,709	—	—	3,709
Foreign government agencies	—	2,643	—	—	2,643
Non-agency commercial MBS	—	2,178	—	—	2,178
Other ABS	—	2,143	—	—	2,143
U.S. government agencies	—	1,949	—	—	1,949
Non-agency RMBS *(b)*	—	1,233	—	—	1,233
State and political subdivisions	—	1,044	—	—	1,044
Corporate bonds	—	853	—	—	853
Other debt securities	—	1	—	—	1
Total available-for-sale securities	23,215	65,335	—	—	88,550
Trading assets:					
Debt instruments	1,568	4,243	—	—	5,811
Equity instruments *(c)*	4,539	—	—	—	4,539
Derivative assets not designated as hedging:					
Interest rate	4	3,686	—	(1,792)	1,898
Foreign exchange	—	5,331	—	(4,021)	1,310
Equity and other contracts	—	19	—	(6)	13
Total derivative assets not designated as hedging	4	9,036	—	(5,819)	3,221
Total trading assets	6,111	13,279	—	(5,819)	13,571
Other assets:					
Derivative assets designated as hedging:					
Foreign exchange	—	21	—	—	21
Total derivative assets designated as hedging	—	21	—	—	21
Other assets *(d)*	38	179	—	—	217
Assets measured at NAV *(d)*					181
Subtotal assets of operations at fair value	29,364	78,814	—	(5,819)	102,540
Percentage of assets of operations prior to netting	27 %	73 %	— %		
Assets of consolidated investment management funds	212	33	—	—	245
Total assets	$ 29,576	$ 78,847	$ —	$ (5,819)	$ 102,785
Percentage of total assets prior to netting	27 %	73 %	— %		

Liabilities measured at fair value on a recurring basis at Dec. 31, 2019 *(dollars in millions)*	Level 1	Level 2	Level 3	Netting *(a)*	Total carrying value
Trading liabilities:					
Debt instruments	$ 1,477	$ 107	$ —	$ —	$ 1,584
Equity instruments	73	—	—	—	73
Derivative liabilities not designated as hedging:					
Interest rate	6	3,244	—	(1,986)	1,264
Foreign exchange	—	5,340	—	(3,428)	1,912
Equity and other contracts	3	6	—	(1)	8
Total derivative liabilities not designated as hedging	9	8,590	—	(5,415)	3,184
Total trading liabilities	1,559	8,697	—	(5,415)	4,841
Long-term debt *(c)*	—	387	—	—	387
Other liabilities – derivative liabilities designated as hedging:					
Interest rate	—	350	—	—	350
Foreign exchange	—	257	—	—	257
Total other liabilities – derivative liabilities designated as hedging	—	607	—	—	607
Subtotal liabilities of operations at fair value	1,559	9,691	—	(5,415)	5,835
Percentage of liabilities of operations prior to netting	14 %	86 %	— %		
Liabilities of consolidated investment management funds	1	—	—	—	1
Total liabilities	$ 1,560	$ 9,691	$ —	$ (5,415)	$ 5,836
Percentage of total liabilities prior to netting	14 %	86 %	— %		

(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 $640 million in Level 2 that was included in the former Grantor Trust.

(c) Includes certain interests in securitizations.

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

Details of certain available-for-sale securities measured at fair value on a recurring basis	Sept. 30, 2020					Dec. 31, 2019				
		Ratings *(a)*					Ratings *(a)*			
(dollars in millions)	Total carrying value *(b)*	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Total carrying value *(b)*	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower
Non-agency RMBS *(c)*, originated in:										
2007-2020	**$ 1,311**	**88 %**	**— %**	**— %**	**12 %**	$ 464	55 %	1 %	— %	44 %
2006	**244**	**—**	**23**	**—**	**77**	291	—	21	—	79
2005	**243**	**4**	**—**	**7**	**89**	305	5	2	8	85
2004 and earlier	**143**	**20**	**9**	**12**	**59**	173	22	24	4	50
Total non-agency RMBS	**$ 1,941**	**61 %**	**4 %**	**2 %**	**33 %**	$ 1,233	25 %	9 %	3 %	63 %
Non-agency commercial MBS originated in:										
2009-2020	**$ 2,711**	**100 %**	**— %**	**— %**	**— %**	$ 2,178	98 %	2 %	— %	— %
Foreign covered bonds:										
Canada	**$ 2,368**	**98 %**	**2 %**	**— %**	**— %**	$ 1,798	100 %	— %	— %	— %
UK	**1,130**	**100**	**—**	**—**	**—**	984	100	—	—	—
Australia	**775**	**100**	**—**	**—**	**—**	431	100	—	—	—
Norway	**609**	**100**	**—**	**—**	**—**	287	100	—	—	—
Germany	**479**	**100**	**—**	**—**	**—**	357	100	—	—	—
Other	**480**	**100**	**—**	**—**	**—**	340	100	—	—	—
Total foreign covered bonds	**$ 5,841**	**99 %**	**1 %**	**— %**	**— %**	$ 4,197	100 %	— %	— %	— %
Sovereign debt/sovereign guaranteed:										
Germany	**$ 2,155**	**100 %**	**— %**	**— %**	**— %**	$ 1,997	100 %	— %	— %	— %
UK	**2,037**	**100**	**—**	**—**	**—**	3,318	100	—	—	—
Italy	**1,974**	**—**	**—**	**100**	**—**	1,260	—	—	100	—
France	**1,846**	**100**	**—**	**—**	**—**	1,272	100	—	—	—
Spain	**1,835**	**—**	**5**	**95**	**—**	1,453	—	6	94	—
Singapore	**949**	**100**	**—**	**—**	**—**	742	100	—	—	—
Canada	**732**	**100**	**—**	**—**	**—**	271	100	—	—	—
Ireland	**522**	**—**	**100**	**—**	**—**	301	—	100	—	—
Netherlands	**471**	**100**	**—**	**—**	**—**	791	100	—	—	—
Japan	**437**	**—**	**100**	**—**	**—**	274	—	100	—	—
Austria	**294**	**100**	**—**	**—**	**—**	240	100	—	—	—
Belgium	**253**	**100**	**—**	**—**	**—**	79	100	—	—	—
Hong Kong	**206**	**100**	**—**	**—**	**—**	411	100	—	—	—
Other *(d)*	**382**	**51**	**—**	**18**	**31**	237	39	4	—	57
Total sovereign debt/sovereign guaranteed	**$ 14,093**	**65 %**	**7 %**	**27 %**	**1 %**	$ 12,646	73 %	5 %	21 %	1 %
Foreign government agencies:										
Germany	**$ 1,483**	**100 %**	**— %**	**— %**	**— %**	$ 1,131	100 %	— %	— %	— %
Netherlands	**800**	**100**	**—**	**—**	**—**	678	100	—	—	—
Canada	**442**	**72**	**28**	**—**	**—**	71	—	100	—	—
France	**293**	**100**	**—**	**—**	**—**	42	100	—	—	—
Sweden	**276**	**100**	**—**	**—**	**—**	202	100	—	—	—
Finland	**246**	**100**	**—**	**—**	**—**	245	100	—	—	—
Other	**430**	**77**	**23**	**—**	**—**	274	79	21	—	—
Total foreign government agencies	**$ 3,970**	**94 %**	**6 %**	**— %**	**— %**	$ 2,643	95 %	5 %	— %	— %

(a) Represents ratings by S&P or the equivalent.
(b) At Sept. 30, 2020 and Dec. 31, 2019, 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 $512 million at Sept. 30, 2020 and $640 million at Dec. 31, 2019 that were included in the former Grantor Trust.
(d) Includes non-investment grade sovereign debt/sovereign guaranteed securities related to Brazil of $119 million at Sept. 30, 2020 and $134 million at Dec. 31, 2019.

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 Sept. 30, 2020 and Dec. 31, 2019.

Assets measured at fair value on a nonrecurring basis	**Sept. 30, 2020**				Dec. 31, 2019			
(in millions)	Level 1	Level 2	Level 3	Total carrying value	Level 1	Level 2	Level 3	Total carrying value
Loans *(a)*	$ —	$ 52	$ —	52	$ —	$ 58	$ —	58
Other assets *(b)*	—	113	—	113	—	64	—	64
Total assets at fair value on a nonrecurring basis	**$ —**	**$ 165**	**$ —**	**165**	$ —	$ 122	$ —	122

(a) The fair value of these loans decreased less than $1 million in the third quarter of 2020 and the fourth quarter of 2019, based on the fair value of the underlying collateral, as required by guidance in ASC 326, Financial Instruments – Credit Losses, with an offset to the allowance for credit losses.

(b) Includes non-readily marketable equity securities carried at cost with upward or downward adjustments and other assets received in satisfaction of debt.

Estimated fair value of financial instruments

The following tables present the estimated fair value and the carrying amount of financial instruments not carried at fair value on the consolidated balance sheet at Sept. 30, 2020 and Dec. 31, 2019, by caption on the consolidated balance sheet and by the valuation hierarchy.

Summary of financial instruments	**Sept. 30, 2020**				
(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	**$ —**	**$ 106,185**	**$ —**	**$ 106,185**	**106,185**
Interest-bearing deposits with banks	**—**	**19,037**	**—**	**19,037**	**19,027**
Federal funds sold and securities purchased under resale agreements	**—**	**29,647**	**—**	**29,647**	**29,647**
Securities held-to-maturity	**4,415**	**43,043**	**—**	**47,458**	**46,096**
Loans *(a)*	**—**	**54,475**	**—**	**54,475**	**54,088**
Other financial assets	**4,104**	**1,121**	**—**	**5,225**	**5,225**
Total	**$ 8,519**	**$ 253,508**	**$ —**	**$ 262,027**	**260,268**
Liabilities:					
Noninterest-bearing deposits	**$ —**	**$ 79,470**	**$ —**	**$ 79,470**	**79,470**
Interest-bearing deposits	**—**	**216,499**	**—**	**216,499**	**216,842**
Federal funds purchased and securities sold under repurchase agreements	**—**	**15,907**	**—**	**15,907**	**15,907**
Payables to customers and broker-dealers	**—**	**23,514**	**—**	**23,514**	**23,514**
Commercial paper	**—**	**671**	**—**	**671**	**671**
Borrowings	**—**	**607**	**—**	**607**	**607**
Long-term debt	**—**	**27,457**	**—**	**27,457**	**25,721**
Total	**$ —**	**$ 364,125**	**$ —**	**$ 364,125**	**362,732**

(a) Does not include the leasing portfolio.

Summary of financial instruments	Dec. 31, 2019				
(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	$ —	$ 95,042	$ —	$ 95,042	$ 95,042
Interest-bearing deposits with banks	—	14,832	—	14,832	14,811
Federal funds sold and securities purchased under resale agreements	—	30,182	—	30,182	30,182
Securities held-to-maturity	4,630	30,175	—	34,805	34,483
Loans *(a)*	—	54,194	—	54,194	53,718
Other financial assets	4,830	1,233	—	6,063	6,063
Total	$ 9,460	$ 225,658	$ —	$ 235,118	$ 234,299
Liabilities:					
Noninterest-bearing deposits	$ —	$ 57,630	$ —	$ 57,630	$ 57,630
Interest-bearing deposits	—	200,846	—	200,846	201,836
Federal funds purchased and securities sold under repurchase agreements	—	11,401	—	11,401	11,401
Payables to customers and broker-dealers	—	18,758	—	18,758	18,758
Commercial paper	—	3,959	—	3,959	3,959
Borrowings	—	917	—	917	917
Long-term debt	—	27,858	—	27,858	27,114
Total	$ —	$ 321,369	$ —	$ 321,369	$ 321,615

(a) Does not include the leasing portfolio.

Note 16–Fair value option

We elected fair value as an alternative measurement for selected financial assets and liabilities that are not otherwise required to be measured at fair value, including the assets and liabilities of consolidated investment management funds and certain long-term debt. The following table presents the assets and liabilities of consolidated investment management funds, at fair value.

Assets and liabilities of consolidated investment management funds, at fair value		
(in millions)	**Sept. 30, 2020**	Dec. 31, 2019
Assets of consolidated investment management funds:		
Trading assets	**$ 579**	$ 229
Other assets	**9**	16
Total assets of consolidated investment management funds	**$ 588**	$ 245
Liabilities of consolidated investment management funds:		
Other liabilities	**4**	1
Total liabilities of consolidated investment management funds	**$ 4**	$ 1

BNY Mellon values the assets and liabilities of its 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 value of the assets and liabilities are recorded in the consolidated income statement as investment income of consolidated investment management funds and in the interest of investment management fund note holders, respectively.

We have elected the fair value option on $240 million of long-term debt. The fair value of this long-term debt was $400 million at Sept. 30, 2020 and $387 million at Dec. 31, 2019. The long-term debt is valued using observable market inputs and is included in Level 2 of the valuation hierarchy.

The following table presents the changes in fair value of long-term debt recorded in foreign exchange and other trading revenue in the consolidated income statement.

Change in fair value of long-term debt *(a)*					
(in millions)	**3Q20**	2Q20	3Q19	**YTD20**	YTD19
Foreign exchange and other trading revenue	**$ (1)**	$ (2)	**$ (3)**	**$ (13)**	$ (15)

(a) The changes in fair value are approximately offset by an economic hedge included in foreign exchange and other trading revenue.

Note 17–Derivative instruments

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

The notional amounts for derivative financial instruments express the dollar volume of the transactions; however, credit risk is much smaller. We perform credit reviews and enter into netting agreements and collateral arrangements to minimize the credit risk of derivative financial instruments. We enter into offsetting positions to reduce exposure to foreign currency, interest rate and equity price risk.

Use of derivative financial instruments involves reliance on counterparties. Failure of a counterparty to honor its obligation under a derivative contract is a risk we assume whenever we engage in a derivative contract. There were no counterparty default losses recorded in the third quarter of 2020.

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, corporate bonds and foreign covered bonds. At Sept. 30, 2020, $14.5 billion par value of available-for-sale securities were hedged with interest rate swaps designated as fair value hedges that had notional values of $14.5 billion.

The fixed rate long-term debt instruments hedged generally have original maturities of five to 30 years. In fair value hedging relationships, debt is hedged with “receive fixed rate, pay variable rate” swaps. At Sept. 30, 2020, $13.9 billion par value of debt was hedged with interest rate swaps designated as fair value hedges that had notional values of $13.9 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 15 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, Singapore dollar and Polish zloty used in revenue and expense transactions for entities that have the U.S. dollar as their functional currency. As of Sept. 30, 2020, the hedged forecasted foreign currency transactions and designated forward foreign exchange contract hedges were $319 million (notional), with a pre-tax gain of $5 million recorded in accumulated OCI. This gain 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 Sept. 30, 2020, $140 million par value of available-for-sale securities was hedged with foreign currency forward contracts that had a notional value of $140 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 Sept. 30, 2020, forward foreign exchange contracts with notional amounts totaling $7.9 billion were designated as net investment hedges.

In addition to forward foreign exchange contracts, we also designate non-derivative financial instruments as hedges of our net investments in foreign subsidiaries. Those non-derivative financial instruments designated as hedges of our net investments in foreign subsidiaries were all long-term liabilities of BNY Mellon and, at Sept. 30, 2020, had a combined U.S. dollar equivalent carrying value of $179 million.

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)	**3Q20**	2Q20	3Q19	**YTD20**	YTD19
Interest rate fair value hedges of available-for-sale securities						
Derivative	Interest revenue	**$ 150**	$ 19	$ (250)	**$ (864)**	$ (1,119)
Hedged item	Interest revenue	**(140)**	(15)	243	**856**	1,099
Interest rate fair value hedges of long-term debt						
Derivative	Interest expense	**(68)**	47	146	**693**	631
Hedged item	Interest expense	**66**	(49)	(145)	**(691)**	(627)
Foreign exchange fair value hedges of available-for-sale securities						
Derivative *(a)*	Other revenue	**1**	(5)	2	**(11)**	3
Hedged item	Other revenue	**1**	5	(2)	**13**	(2)
Cash flow hedge of interest rate risk						
(Loss) reclassified from OCI into income	Interest expense	**—**	—	(1)	**—**	(1)
Cash flow hedges of forecasted FX exposures						
(Loss) gain reclassified from OCI into income	Staff expense	**—**	(3)	2	**(2)**	1
Gain (loss) recognized in the consolidated income statement due to fair value and cash flow hedging relationships		**$ 10**	$ (1)	$ (5)	**$ (6)**	$ (15)

(a) Includes gains of less than $1 million in the third quarter of 2020, second quarter of 2020 and third quarter of 2019 and gains of $1 million in the first nine months of 2020 and first nine months of 2019 associated with the amortization of the excluded component. At Sept. 30, 2020 and Dec. 31, 2019, 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)

Derivatives in net investment hedging relationships	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				
	3Q20	2Q20	3Q19	**YTD20**	YTD19		**3Q20**	2Q20	3Q19	**YTD20**	YTD19
FX contracts	**$ (289)**	$ (45)	$ 252	**$ 103**	$ 322	Net interest revenue	**$ —**	$ —	$ —	**$ —**	$ —

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

Hedged items in fair value hedging relationships

(in millions)	Carrying amount of hedged asset or liability		Hedge accounting basis adjustment increase (decrease) *(a)*	
	Sept. 30, 2020	Dec. 31, 2019	**Sept. 30, 2020**	Dec. 31, 2019
Available-for-sale securities *(b)(c)*	**$ 14,629**	$ 13,792	**$ 1,650**	$ 687
Long-term debt	**$ 14,889**	$ 13,945	**$ 870**	$ 116

(a) Includes $187 million and $53 million of basis adjustment increases on discontinued hedges associated with available-for-sale securities at Sept. 30, 2020 and Dec. 31, 2019, respectively, and $136 million and $200 million of basis adjustment decreases on discontinued hedges associated with long-term debt at Sept. 30, 2020 and Dec. 31, 2019, 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 $140 million at Sept. 30, 2020 and $142 million at Dec. 31, 2019.

(c) Carrying amount represents the amortized cost.

The following table summarizes the notional amount and carrying values of our total derivative portfolio at Sept. 30, 2020 and Dec. 31, 2019.

Impact of derivative instruments on the balance sheet	Notional value		Asset derivatives fair value		Liability derivatives fair value	
(in millions)	**Sept. 30, 2020**	Dec. 31, 2019	**Sept. 30, 2020**	Dec. 31, 2019	**Sept. 30, 2020**	Dec. 31, 2019
Derivatives designated as hedging instruments: *(a)(b)*						
Interest rate contracts	**$ 28,441**	$ 28,365	**$ —**	$ —	**$ 803**	$ 350
Foreign exchange contracts	**8,369**	8,390	**56**	21	**194**	257
Total derivatives designated as hedging instruments			**$ 56**	$ 21	**$ 997**	$ 607
Derivatives not designated as hedging instruments: *(b)(c)*						
Interest rate contracts	**$ 206,771**	$ 306,790	**$ 4,962**	$ 3,690	**$ 4,246**	$ 3,250
Foreign exchange contracts	**753,812**	848,961	**4,410**	5,331	**4,522**	5,340
Equity contracts	**2,241**	3,189	**15**	19	**8**	5
Credit contracts	**165**	165	**—**	—	**3**	4
Total derivatives not designated as hedging instruments			**$ 9,387**	$ 9,040	**$ 8,779**	$ 8,599
Total derivatives fair value *(d)*			**$ 9,443**	$ 9,061	**$ 9,776**	$ 9,206
Effect of master netting agreements *(e)*			**(5,238)**	(5,819)	**(6,183)**	(5,415)
Fair value after effect of master netting agreements			**$ 4,205**	$ 3,242	**$ 3,593**	$ 3,791

(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 $675 million and $1,620 million, respectively, at Sept. 30, 2020, and $1,022 million and $618 million, respectively, at Dec. 31, 2019.

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 and other trading revenue on the consolidated income statement.

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

Foreign exchange and other trading revenue					
(in millions)	**3Q20**	2Q20	3Q19	**YTD20**	YTD19
Foreign exchange	**$ 151**	$ 174	$ 129	**$ 578**	$ 439
Other trading (loss) revenue	**(14)**	(8)	21	**44**	47
Total foreign exchange and other trading revenue	**$ 137**	$ 166	$ 150	**$ 622**	$ 486

Foreign exchange revenue includes income from purchasing and selling foreign currencies and currency forwards, futures and options. Other trading revenue reflects results from trading in cash instruments, including fixed income and equity securities and 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 gain of $12 million in the third quarter of 2020, a de minimis loss in the third quarter of 2019, a gain of $28 million in the second quarter of 2020, a loss of $1 million in the first nine months of 2020 and a gain of $23 million in the first nine months of 2019.

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

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

Counterparty credit risk and collateral

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

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

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

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

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

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

(in millions)	**Sept. 30, 2020**	Dec. 31, 2019
Aggregate fair value of OTC derivatives in net liability positions *(a)*	**$ 5,958**	$ 3,442
Collateral posted	**$ 6,384**	$ 3,671

(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 was downgraded.

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

Potential close-out exposures (fair value) *(a)*

(in millions)	**Sept. 30, 2020**	Dec. 31, 2019
If The Bank of New York Mellon's rating changed to: *(b)*		
A3/A-	**$ 10**	$ 56
Baa2/BBB	**$ 565**	$ 608
Ba1/BB+	**$ 3,113**	$ 2,084

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

If The Bank of New York Mellon's debt rating had fallen below investment grade on Sept. 30, 2020 and Dec. 31, 2019, existing collateral arrangements would have required us to post additional collateral of $31 million and $63 million, respectively.

Offsetting assets and liabilities

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

Offsetting of derivative assets and financial assets at Sept. 30, 2020

(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	**$ 3,183**	**$ 2,133**		**$ 1,050**	**$ 350**	**$ —**	**$ 700**
Foreign exchange contracts	**4,043**	**3,102**		**941**	**33**	**—**	**908**
Equity and other contracts	**8**	**3**		**5**	**—**	**—**	**5**
Total derivatives subject to netting arrangements	**7,234**	**5,238**		**1,996**	**383**	**—**	**1,613**
Total derivatives not subject to netting arrangements	**2,209**	**—**		**2,209**	**—**	**—**	**2,209**
Total derivatives	**9,443**	**5,238**		**4,205**	**383**	**—**	**3,822**
Reverse repurchase agreements	**72,507**	**54,629**	*(b)*	**17,878**	**17,852**	**—**	**26**
Securities borrowing	**11,769**	**—**		**11,769**	**11,216**	**—**	**553**
Total	**$ 93,719**	**$ 59,867**		**$ 33,852**	**$ 29,451**	**$ —**	**$ 4,401**

(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, 2019

(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	$ 2,394	$ 1,792		$ 602	$ 207	$ —	$ 395
Foreign exchange contracts	4,861	4,021		840	44	—	796
Equity and other contracts	9	6		3	—	—	3
Total derivatives subject to netting arrangements	7,264	5,819		1,445	251	—	1,194
Total derivatives not subject to netting arrangements	1,797	—		1,797	—	—	1,797
Total derivatives	9,061	5,819		3,242	251	—	2,991
Reverse repurchase agreements	112,355	93,794	*(b)*	18,561	18,554	—	7
Securities borrowing	11,621	—		11,621	11,278	—	343
Total	$ 133,037	$ 99,613		$ 33,424	$ 30,083	$ —	$ 3,341

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

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

Offsetting of derivative liabilities and financial liabilities at Sept. 30, 2020

(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	**$ 5,035**	**$ 2,551**		**$ 2,484**	**$ 2,477**	**$ —**	**$ 7**
Foreign exchange contracts	**4,294**	**3,631**		**663**	**224**	**—**	**439**
Equity and other contracts	**8**	**1**		**7**	**—**	**—**	**7**
Total derivatives subject to netting arrangements	**9,337**	**6,183**		**3,154**	**2,701**	**—**	**453**
Total derivatives not subject to netting arrangements	**439**	**—**		**439**	**—**	**—**	**439**
Total derivatives	**9,776**	**6,183**		**3,593**	**2,701**	**—**	**892**
Repurchase agreements	**69,494**	**54,629**	*(b)*	**14,865**	**14,863**	**1**	**1**
Securities lending	**1,002**	**—**		**1,002**	**961**	**—**	**41**
Total	**$ 80,272**	**$ 60,812**		**$ 19,460**	**$ 18,525**	**$ 1**	**$ 934**

(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, 2019

(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	$ 3,550	$ 1,986		$ 1,564	$ 1,539	$ —	$ 25
Foreign exchange contracts	4,873	3,428		1,445	74	—	1,371
Equity and other contracts	5	1		4	2	—	2
Total derivatives subject to netting arrangements	8,428	5,415		3,013	1,615	—	1,398
Total derivatives not subject to netting arrangements	778	—		778	—	—	778
Total derivatives	9,206	5,415		3,791	1,615	—	2,176
Repurchase agreements	104,451	93,794	*(b)*	10,657	10,657	—	—
Securities lending	718	—		718	694	—	24
Total	$ 114,375	$ 99,209		$ 15,166	$ 12,966	$ —	$ 2,200

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

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

Secured borrowings

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

Repurchase agreements and securities lending transactions accounted for as secured borrowings

	Sept. 30, 2020				Dec. 31, 2019			
	Remaining contractual maturity				Remaining contractual maturity			
(in millions)	Overnight and continuous	Up to 30 days	30 days or more	Total	Overnight and continuous	Up to 30 days	30 days or more	Total
Repurchase agreements:								
U.S. Treasury	**$ 60,350**	**$ —**	**$ —**	**$ 60,350**	$ 94,788	$ 10	$ —	$ 94,798
Agency RMBS	**2,913**	**675**	**2**	**3,590**	4,234	774	—	5,008
Corporate bonds	**232**	**64**	**1,432**	**1,728**	266	236	1,617	2,119
Sovereign debt/ sovereign guaranteed	**128**	**—**	**1,151**	**1,279**	—	22	—	22
State and political subdivisions	**43**	**39**	**810**	**892**	38	166	1,077	1,281
U.S. government agencies	**610**	**—**	**—**	**610**	594	16	—	610
Other debt securities	**47**	**44**	**186**	**277**	2	—	2	4
Equity securities	**—**	**53**	**715**	**768**	31	99	479	609
Total	**$ 64,323**	**$ 875**	**$ 4,296**	**$ 69,494**	$ 99,953	$ 1,323	$ 3,175	$ 104,451
Securities lending:								
Agency RMBS	**$ 180**	**$ —**	**$ —**	**$ 180**	$ 160	$ —	$ —	$ 160
U.S. government agencies	**1**	**—**	**—**	**1**	19	—	—	19
Other debt securities	**49**	**—**	**—**	**49**	41	—	—	41
Equity securities	**772**	**—**	**—**	**772**	498	—	—	498
Total	**$ 1,002**	**$ —**	**$ —**	**$ 1,002**	$ 718	$ —	$ —	$ 718
Total secured borrowings	**$ 65,325**	**$ 875**	**$ 4,296**	**$ 70,496**	$ 100,671	$ 1,323	$ 3,175	$ 105,169

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

Note 18–Commitments and contingent liabilities

Off-balance sheet arrangements

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

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

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

Off-balance sheet credit risks *(in millions)*	**Sept. 30, 2020**	Dec. 31, 2019
Lending commitments	**$ 47,658**	$ 49,119
Standby letters of credit ("SBLC") *(a)*	**2,175**	2,298
Commercial letters of credit	**87**	74
Securities lending indemnifications *(b)(c)*	**414,324**	408,378

(a) Net of participations totaling $145 million at Sept. 30, 2020 and $146 million at Dec. 31, 2019.

(b) Excludes the indemnification for securities for which BNY Mellon acts as an agent on behalf of CIBC Mellon clients, which totaled $58 billion at Sept. 30, 2020 and $57 billion at Dec. 31, 2019.

(c) Includes cash collateral, invested in indemnified repurchase agreements, held by us as securities lending agent of $43 billion at Sept. 30, 2020 and $37 billion at Dec. 31, 2019.

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: $31.0 billion in less than one year, $16.3 billion in one to five years and $336 million over five years.

SBLCs principally support obligations of corporate clients and were collateralized with cash and securities of $200 million at Sept. 30, 2020 and $184 million at Dec. 31, 2019. At Sept. 30, 2020, $1.6 billion of the SBLCs will expire within one year, $568 million in one to five years and $1 million over five years.

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

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

Standby letters of credit	**Sept. 30, 2020**	Dec. 31, 2019
Investment grade	**87 %**	90 %
Non-investment grade	**13 %**	10 %

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 $87 million at Sept. 30, 2020 and $74 million at Dec. 31, 2019.

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 $135 million at Sept. 30, 2020 and $94 million at Dec. 31, 2019.

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 $435 billion at Sept. 30, 2020 and $428 billion at Dec. 31, 2019.

CIBC Mellon, a joint venture between BNY Mellon and the Canadian Imperial Bank of Commerce ("CIBC"), engages in securities lending activities. CIBC Mellon, BNY Mellon and CIBC jointly and severally indemnify securities lenders against specific types of borrower default. At Sept. 30, 2020 and Dec. 31, 2019, $58 billion and $57 billion, respectively, of borrowings at CIBC Mellon, for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, were secured by collateral of $61 billion and $61 billion, respectively. If, upon a default, a borrower's collateral was not sufficient to cover its related obligations, certain losses related to the indemnification could be covered by the indemnitors.

Unsettled repurchase and reverse repurchase agreements

In the normal course of business, we enter into repurchase agreements and reverse repurchase agreements that settle at a future date. In repurchase agreements, BNY Mellon receives cash from and provides securities as collateral to a counterparty at settlement. In reverse repurchase agreements, BNY Mellon advances cash to and receives securities as collateral from the counterparty at settlement. These transactions are recorded on the consolidated balance sheet on the settlement date. At Sept. 30, 2020, we had $150 million of unsettled repurchase agreements and no unsettled reverse repurchase agreements.

Industry concentrations

We have significant industry concentrations related to credit exposure at Sept. 30, 2020. The tables below present our credit exposure in the financial institutions and commercial portfolios.

Financial institutions portfolio exposure *(in billions)*	**Sept. 30, 2020**		
	Loans	**Unfunded commitments**	**Total exposure**
Securities industry	**$ 2.8**	**$ 22.3**	**$ 25.1**
Asset managers	**1.2**	**6.5**	**7.7**
Banks	**6.1**	**1.1**	**7.2**
Insurance	**0.1**	**2.7**	**2.8**
Government	**0.1**	**0.2**	**0.3**
Other	**0.7**	**0.7**	**1.4**
Total	**$ 11.0**	**$ 33.5**	**$ 44.5**

Commercial portfolio exposure *(in billions)*	**Sept. 30, 2020**		
	Loans	**Unfunded commitments**	**Total exposure**
Services and other	**$ 1.0**	**$ 3.5**	**$ 4.5**
Manufacturing	**0.7**	**3.8**	**4.5**
Energy and utilities	**0.2**	**4.0**	**4.2**
Media and telecom	**—**	**0.9**	**0.9**
Total	**$ 1.9**	**$ 12.2**	**$ 14.1**

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

Indemnification arrangements

We have provided standard representations for underwriting agreements, acquisition and divestiture agreements, sales of loans and commitments, and other similar types of arrangements and customary indemnification for claims and legal proceedings related to providing financial services that are not otherwise included above. Insurance has been purchased to mitigate certain of these risks. Generally, there are no stated or notional amounts included in these indemnifications and the contingencies triggering the obligation for indemnification are not expected to occur. Furthermore, often counterparties to these transactions provide us with comparable indemnifications. We are unable to develop an estimate of the maximum payout under these

indemnifications for several reasons. In addition to the lack of a stated or notional amount in a majority of such indemnifications, we are unable to predict the nature of events that would trigger indemnification or the level of indemnification for a certain event. We believe, however, that the possibility that we will have to make any material payments for these indemnifications is remote. At Sept. 30, 2020 and Dec. 31, 2019, we have not recorded any material liabilities under these arrangements.

Clearing and settlement exchanges

We are a noncontrolling equity investor in, and/or member of, several industry clearing or settlement exchanges through which foreign exchange, securities, derivatives or other transactions settle. Certain of these industry clearing and settlement exchanges require their members to guarantee their obligations and liabilities and/or to provide liquidity support in the event other members do not honor their obligations. We believe the likelihood that a clearing or settlement exchange (of which we are a member) would become insolvent is remote. Additionally, certain settlement exchanges have implemented loss allocation policies that enable the exchange to allocate settlement losses to the members of the exchange. It is not possible to quantify such mark-to-market loss until the loss occurs. Any ancillary costs that occur as a result of any mark-to-market loss cannot be quantified. In addition, we also sponsor clients as members on clearing and settlement exchanges and guarantee their obligations. At Sept. 30, 2020 and Dec. 31, 2019, 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 $750 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; and one action commenced in May 2016 is pending in New York state court. A New York federal court action filed in August 2014 has been dismissed.

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. Thirteen lawsuits have been filed against Pershing in Louisiana, Florida and New Jersey federal courts in January 2010, January and February 2015, 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. All the cases that have been brought in federal court against Pershing and the case brought against The Bank of New York Mellon have been consolidated in Texas federal court for discovery purposes. On Dec. 19, 2019, the Court of Appeals for the Fifth Circuit affirmed the dismissal of six individual federal lawsuits brought under Florida law, which will also apply to four other similarly situated cases. On March 18, 2020, the plaintiffs in those lawsuits filed a Petition for Writ of Certiorari seeking permission to appeal to the United States Supreme Court. On Oct. 5, 2020, the United States Supreme Court denied the Petition. In July 2020, after being enjoined from pursuing claims before the Financial Industry Regulatory Authority, Inc. ("FINRA"), an investment firm filed an action against Pershing in Texas federal court. FINRA arbitration proceedings also have been initiated by alleged purchasers asserting similar claims.

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 has appealed that decision. 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 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, and the MPF has appealed that decision. In addition, the Tribunal de Contas da Uniao ("TCU"), an administrative tribunal, has initiated two proceedings with the purpose of determining liability for losses to two investment funds administered by DTVM in which Postalis was the exclusive 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 $41.7 million. TCU also imposed on DTVM a fine of approximately $1.8 million. DTVM has filed an administrative appeal of the decision. 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 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 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.

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. We have not received any tax demand concerning cum/ex trading. 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 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 19–Lines of business

We have an internal information system that produces performance data along product and service lines for our two principal businesses 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 2019 Annual Report.

Business accounting principles

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

Business 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 significant organizational changes in the second or third quarters of 2020. In the first quarter of 2020, we reclassified the results of certain services provided between the segments from noninterest expense to fee and other revenue. The intersegment activity is eliminated in the Other segment and relates to services that are also provided to third parties and provides consistency with the reporting of the revenues. This adjustment had no impact on income before taxes of the businesses. Also in the first quarter of 2020, we reclassified the results related to certain lending activities from the Wealth Management business to the Pershing business. These loans were originated by the Wealth Management business as a service to Pershing clients. This resulted in an increase in total revenue, noninterest expense and income before taxes in the Pershing business and corresponding decrease in the Wealth Management business. Prior periods were restated in the first quarter of 2020 for both reclassifications.

The accounting policies of the businesses are the same as those described in Note 1 of the Notes to Consolidated Financial Statements in our 2019 Annual Report.

The results of our businesses 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 revenue in each business.
- 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 Investment Services.
- 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 business segment.
- Incentives expense related to restricted stock is allocated to the businesses.
- 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 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. Businesses 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 businesses to our overall profitability.

For the quarter ended Sept. 30, 2020 *(dollars in millions)*	**Investment Services**	**Investment and Wealth Management**		**Other**	**Consolidated**	
Total fee and other revenue	**$ 2,246**	**$ 871**	*(a)*	**$ 20**	**$ 3,137**	*(a)*
Net interest revenue (expense)	**681**	**47**		**(25)**	**703**	
Total revenue (loss)	**2,927**	**918**	*(a)*	**(5)**	**3,840**	*(a)*
Provision for credit losses	**(10)**	**12**		**7**	**9**	
Noninterest expense	**2,020**	**661**		**—**	**2,681**	
Income (loss) before income taxes	**$ 917**	**$ 245**	*(a)*	**$ (12)**	**$ 1,150**	*(a)*
Pre-tax operating margin *(b)*	**31 %**	**27 %**		**N/M**	**30 %**	
Average assets	**$ 329,324**	**$ 30,160**		**$ 55,381**	**$ 414,865**	

(a) Total fee and other revenue includes net income from consolidated investment management funds of $20 million, representing $27 million of income and noncontrolling interests of $7 million. Total revenue and income before income taxes are net of noncontrolling interests of $7 million.
(b) Income before income taxes divided by total revenue.
N/M - Not meaningful.

For the quarter ended June 30, 2020 *(dollars in millions)*	Investment Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	$ 2,339	$ 838	*(a)*	$ 38	$ 3,215	*(a)*
Net interest revenue (expense)	768	48		(36)	780	
Total revenue	3,107	886	*(a)*	2	3,995	*(a)*
Provision for credit losses	145	7		(9)	143	
Noninterest expense	1,989	658		39	2,686	
Income (loss) before income taxes	$ 973	$ 221	*(a)*	$ (28)	$ 1,166	*(a)*
Pre-tax operating margin *(b)*	31 %	25 %		N/M	29 %	
Average assets	$ 335,288	$ 30,327		$ 49,744	$ 415,359	

(a) Total fee and other revenue includes net income from consolidated investment management funds of $39 million, representing $54 million of income and noncontrolling interests of $15 million. Total revenue and income before income taxes are net of noncontrolling interests of $15 million.
(b) Income before income taxes divided by total revenue.
N/M - Not meaningful.

For the quarter ended Sept. 30, 2019 *(dollars in millions)*	Investment Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue (loss)	$ 2,296	$ 838	*(a)*	$ (6)	$ 3,128	*(a)*
Net interest revenue (expense)	761	49		(80)	730	
Total revenue (loss)	3,057	887	*(a)*	(86)	3,858	*(a)*
Provision for credit losses	(15)	—		(1)	(16)	
Noninterest expense	1,973	592		25	2,590	
Income (loss) before income taxes	$ 1,099	$ 295	*(a)*	$ (110)	$ 1,284	*(a)*
Pre-tax operating margin *(b)*	36 %	33 %		N/M	33 %	
Average assets	$ 269,926	$ 27,840		$ 52,913	$ 350,679	

(a) Total fee and other revenue includes net income from consolidated investment management funds of $— million, representing $3 million of income and noncontrolling interests of $3 million. Total revenue and income before income taxes are net of noncontrolling interests of $3 million.
(b) Income before income taxes divided by total revenue.
N/M - Not meaningful.

For the nine months ended Sept. 30, 2020 *(dollars in millions)*	**Investment Services**	**Investment and Wealth Management**		**Other**	**Consolidated**	
Total fee and other revenue	**$ 7,021**	**$ 2,555**	*(a)*	**$ 88**	**$ 9,664**	*(a)*
Net interest revenue (expense)	**2,255**	**147**		**(105)**	**2,297**	
Total revenue (loss)	**9,276**	**2,702**	*(a)*	**(17)**	**11,961**	*(a)*
Provision for credit losses	**284**	**28**		**9**	**321**	
Noninterest expense	**5,996**	**2,014**		**69**	**8,079**	
Income (loss) before income taxes	**$ 2,996**	**$ 660**	*(a)*	**$ (95)**	**$ 3,561**	*(a)*
Pre-tax operating margin *(b)*	**32 %**	**24 %**		**N/M**	**30 %**	
Average assets	**$ 322,924**	**$ 30,343**		**$ 51,936**	**$ 405,203**	

(a) Total fee and other revenue includes net income from consolidated investment management funds of $39 million, representing $43 million of income and noncontrolling interests of $4 million. Total revenue and income before income taxes are net of noncontrolling interests of $4 million.
(b) Income before income taxes divided by total revenue.
N/M - Not meaningful.

For the nine months ended Sept. 30, 2019 *(dollars in millions)*	Investment Services	Investment and Wealth Management		Other	Consolidated	
Total fee and other revenue	$ 6,690	$ 2,561	*(a)*	$ 43	$ 9,294	*(a)*
Net interest revenue (expense)	2,348	175		(150)	2,373	
Total revenue (loss)	9,038	2,736	*(a)*	(107)	11,667	*(a)*
Provision for credit losses	(11)	(1)		(5)	(17)	
Noninterest expense	5,917	1,916		103	7,936	
Income (loss) before income taxes	$ 3,132	$ 821	*(a)*	$ (205)	$ 3,748	*(a)*
Pre-tax operating margin *(b)*	35 %	30 %		N/M	32 %	
Average assets	$ 263,631	$ 29,815		$ 49,683	$ 343,129	

(a) Total fee and other revenue includes net income from consolidated investment management funds of $22 million, representing $39 million of income and noncontrolling interests of $17 million. Total revenue and income before income taxes are net of noncontrolling interests of $17 million.
(b) Income before income taxes divided by total revenue.
N/M - Not meaningful.

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

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

Non-cash investing and financing transactions *(in millions)*	Nine months ended Sept. 30, **2020**	2019	
Transfers from loans to other assets for other real estate owned	**$ 1**	$ 1	
Change in assets of consolidated investment management funds	**343**	120	
Change in liabilities of consolidated investment management funds	**3**	13	
Change in nonredeemable noncontrolling interests of consolidated investment management funds	**149**	102	
Securities purchased not settled	**846**	804	
Premises and equipment/capitalized software funded by finance lease obligations	**—**	14	
Premises and equipment/operating lease obligations	**126**	1,440	*(a)*

(a) Includes $1,244 million related to the adoption of ASU 2016-02, Leases, and $196 million related to new or modified leases.

Disclosure controls and procedures

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

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

Changes in internal control over financial reporting

In the ordinary course of business, we may routinely modify, upgrade or enhance our internal controls and procedures for financial reporting. There have not been any changes in our internal control over financial reporting as defined in Rule 13a-15(f) of the Exchange Act during the third quarter of 2020 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 all 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, 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), 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," "future," "potentially," "outlook" and words of similar meaning, may signify forward-looking statements.

Actual results may differ materially from those expressed or implied as a result of a number of factors, including those discussed in "Risk Factors" in this Quarterly Report and our 2019 Annual Report, such as:

- 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 to protect our computer systems, networks and information and our clients' information against cybersecurity threats, 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;
- our business may be materially adversely affected by operational risk;
- 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 risk management framework may not be effective in mitigating risk and reducing the potential for losses;
- we are subject to extensive government rulemaking, policies, regulation and supervision; these rules and regulations have, 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;
- our businesses may be negatively affected by adverse events, publicity, government scrutiny or other reputational harm;
- 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;
- a failure or circumvention of our controls and procedures could have a material adverse effect on our business, reputation, results of operations and financial condition;
- 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;
- impacts from climate change, natural disasters, acts of terrorism, pandemics, global conflicts and other geopolitical events may have a negative impact on our business and operations;
- 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, results of operations and financial condition;
- changes in interest rates and yield curves could have a material adverse effect on our profitability;
- transitions away from and the anticipated replacement of LIBOR and other IBORs could adversely impact our business and results of operations;
- the UK's withdrawal from the EU may have negative effects on global economic conditions, global financial markets, and our business and results of operations;
- we may experience losses on securities related to volatile and illiquid market conditions, reducing our earnings and impacting our financial condition;
- the failure or perceived weakness of any of our significant clients or counterparties, many of whom are major financial institutions and sovereign entities, and our assumption of credit and counterparty risk, could expose us to loss and adversely affect our business;
- our business, financial condition and results of operations could be adversely affected if we do not effectively manage our liquidity;
- we could incur losses if our allowance for credit losses, including loan and lending-related commitments reserves, is inadequate;
- 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 results of operations and financial condition and on the value of the securities we issue;
- new lines of business, new products and services or transformational or strategic project initiatives may subject us to 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 business may be adversely affected if we are unable to attract and retain employees;
- our strategic transactions present risks and uncertainties and could have an adverse effect on our business, results of operations and financial condition;
- 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;
- 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 the approval of our capital plan, applicable provisions of Delaware law or our failure to pay full and timely dividends on our preferred stock;
- 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; 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 this Quarterly Report and our 2019 Annual Report and any subsequent reports filed with the SEC by BNY Mellon pursuant to the Exchange Act. All forward-looking statements speak only as of the date on which such statements are made, and BNY Mellon undertakes no obligation to update any statement to reflect events or circumstances after the date on which such forward-looking statement is made or to reflect the occurrence of unanticipated events. The contents of BNY Mellon's website or any other website referenced herein are not part of this report.

Item 1. Legal Proceedings.

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

Item 1A. Risk Factors.

The following discussion supplements the discussion of risk factors that could affect our business, financial condition or results of operations set forth in Part I, Item 1A., Risk Factors, on pages 75 through 99 of our 2019 Annual Report. The discussion of Risk Factors, as so supplemented, sets forth our most significant risk factors that could affect our business, financial condition or results of operations. However, other factors, besides those discussed below or in our 2019 Annual Report or other of our reports filed with or furnished to the SEC, also could adversely affect our business, financial condition or results of operations. We cannot assure you that the risk factors described below or elsewhere in this report and such other reports address all potential risks that we may face. These risk factors also serve to describe factors which may cause our results to differ materially from those described in forward-looking statements included herein or in other documents or statements that make reference to this Form 10-Q. See "Forward-looking Statements."

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.

The coronavirus pandemic has negatively affected the global economy, decreased liquidity in fixed income markets, created significant volatility and disruption in financial and equity markets, increased unemployment levels and disrupted businesses in many industries. This has resulted in increased demand on our transaction processing and clearance capabilities in many of our Investment Services businesses and volatility in the levels and mix of the assets under management of our Investment and Wealth Management business. Moreover, governmental actions in response to the pandemic are meaningfully influencing the interest rate environment, which has reduced, and is expected to continue to reduce, our net interest margin. As a result, we have granted and may continue to grant money market fee waivers. The effects of the pandemic have resulted, and could continue to result, in higher and more volatile provisions for credit losses for financial instruments subject to ASU 2016-13, *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments*, held by us. The continuing effects of the pandemic could also result in increased credit losses and charge-offs, particularly if our credit exposures increase and as more clients and customers experience credit deterioration, as well as increased risk of other asset write-downs and impairments, including, but not limited to, equity investments, goodwill and intangibles. Any of these events could potentially result in a material adverse impact on our business and results of operations.

In addition, reliance on work-from-home capabilities by us, our clients and other industry participants, as well as the potential inability to maintain critical staff in operational facilities due to stay-at-home orders or operational precautions across jurisdictions, illness and quarantines present heightened cybersecurity, information security and operational risks. Any disruption to our ability to deliver services to our clients and customers could result in potential liability to our clients and customers, regulatory fines, penalties or other sanctions, increased operational costs or harm to our reputation.

The pandemic has resulted in an increase in our balance sheet and volatility in risk-weighted assets, as we experience elevated deposit levels. Moreover, on March 15, 2020, we, along with the other member banks of the Financial Services Forum, announced that we would temporarily suspend share repurchases through the second quarter of 2020 to preserve capital and liquidity in order to further our objective of using our capital and liquidity to support our clients and customers. Further, in June 2020, the Federal Reserve announced that it has required participating CCAR firms, including us, to update and resubmit their capital plans and that, as a result, unless otherwise approved by the Federal Reserve, participating firms would not be permitted, during the third quarter of 2020, to conduct open market common stock repurchases, to increase their common stock dividends or to pay common stock dividends that exceed average net income for the preceding four quarters. The Federal Reserve has extended these limitations to the fourth quarter and may further extend these limitations. Our ability to resume our common stock repurchase program and maintain our

common stock dividend depends on factors such as prevailing market conditions, our outlook for the economic environment, the performance of our business, the additional capital analysis required by the Federal Reserve, and whether the Federal Reserve keeps the limitations for the third and fourth quarters of 2020 in place for subsequent quarters.

The extent to which the pandemic impacts our business, financial condition, liquidity and results of operations, as well as our regulatory capital, will depend on future developments, which are highly uncertain and cannot be predicted, including the scope and duration of the pandemic, the effectiveness of our work-from-home arrangements, actions taken by governmental authorities in response to the pandemic, as well as the direct and indirect impact on us, our clients and customers, and third parties. As the pandemic adversely affects the United States or the global economy, or our business, financial condition, liquidity or results of operations, it may also have the effect of heightening many of the other risks described in the section entitled "Risk Factors" in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q.

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

(c) The following table discloses repurchases of our common stock made in the third quarter of 2020. All of the Company's preferred stock outstanding has preference over the Company's common stock with respect to the payment of dividends.

Issuer purchases of equity securities

Share repurchases – third quarter of 2020 *(dollars in millions, except per share amounts; common shares in thousands)*	Total shares repurchased	Average price per share	Total shares repurchased as part of a publicly announced plan or program	Maximum approximate dollar value of shares that may yet be purchased under the publicly announced plans or programs at Sept. 30, 2020
July 2020	$ 5	$ 37.41	$ 5	N/A
August 2020	2	37.96	2	N/A
September 2020	8	35.81	8	N/A
Third quarter of 2020 ***(a)***	**15**	**$ 36.65**	**15**	N/A *(b)*

(a) Reflects shares repurchased from employees, primarily in connection with the employees' payment of taxes upon the vesting of restricted stock.

(b) The Federal Reserve has announced that it will conduct additional analysis for all participating CCAR firms later this year and will not allow participating firms to make open market common stock repurchases during the third or fourth quarter of 2020. We are permitted to continue to repurchase shares from employees, primarily in connection with the employees' payment of taxes upon the vesting of restricted stock.

N/A - Not applicable.

In June 2020, the Federal Reserve announced that it has required participating Comprehensive Capital Analysis and Review ("CCAR") firms, including us, to update and resubmit their capital plans and that, as a result, unless otherwise approved by the Federal Reserve, participating firms were not permitted to conduct open market common stock repurchase in the third quarter of 2020. On Sept. 30, 2020, the Federal Reserve extended the limitation on open market common stock repurchase through the fourth quarter of 2020.

BNY Mellon intends to resume the common stock repurchase program as early as possible, depending on factors such as prevailing market conditions, our outlook for the economic environment and the additional capital analysis required by the Federal Reserve.

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 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 Commission on July 2, 2007, and incorporated herein by reference.
3.2	Certificate of Designations of The Bank of New York Mellon Corporation with respect to 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.
3.3	Certificate of Designations of The Bank of New York Mellon Corporation with respect to Series C Noncumulative Perpetual Preferred Stock, dated Sept. 13, 2012.	Previously filed as Exhibit 3.2 to the Company's Registration Statement on Form 8A12B (File No. 001-35651) as filed with the Commission on Sept. 14, 2012, 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 E Noncumulative Perpetual Preferred Stock, dated April 27, 2015.	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 28, 2015, and incorporated herein by reference.
3.6	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.
3.7	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.
3.8	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.
3.9	Certificate of Amendment to the Company'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.
3.10	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 Sept. 30, 2020. The Company hereby agrees to furnish to the Commission, upon request, a copy of any such instrument.	N/A
10.1	2020 Form of Performance Share Unit Agreement.	Filed herewith.
10.2	2020 Form of Restricted Stock Unit Agreement.	Filed herewith.
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 Company's Quarterly Report on Form 10-Q for the quarter ended Sept. 30, 2020, formatted in inline XBRL.	The cover page interactive data file is embedded within the inline XBRL document and included in Exhibit 101.

SIGNATURE

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

THE BANK OF NEW YORK MELLON CORPORATION
(Registrant)

Date: November 5, 2020

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

Exhibit 10.1

FORM OF THE BANK OF NEW YORK MELLON CORPORATION
2019 LONG-TERM INCENTIVE PLAN
FORM OF NOTICE OF AWARD – PERFORMANCE SHARE UNITS – EXECUTIVE COMMITTEE GENERAL

Subject to the terms and conditions of The Bank of New York Mellon Corporation 2019 Long-Term Incentive Plan (the "Plan"), this Notice of Award - Performance Share Units – Executive Committee General (the "Award Notice"), and the Terms and Conditions of Performance Share Units – Executive Committee General (the "Terms and Conditions"), The Bank of New York Mellon Corporation (the "Corporation") grants you performance share units ("PSUs") as reflected below and on the Corporation's equity award website (the "Equity Website"). Each PSU represents the opportunity to receive one (1) share of the Corporation's common stock, par value $.01 ("Common Stock"), upon satisfaction of the terms and conditions as set forth in the Award Notice and the Terms and Conditions (collectively, the "Award Agreement"), subject to the terms of the Plan. The purpose of the award is to incentivize you to align your interests with that of the Corporation and to reward your future contribution to the performance of the Corporation's business.

Participant	[PARTICIPANT NAME]
Grant Date	[GRANT DATE]
Number of PSUs **The "Grant Amount" of "PSUs" (assuming achievement of 100% earnout)**	[NUMBER OF SHARES GRANTED]

Vesting Schedule – Please refer to Appendix The Vesting Date may be delayed if and to the extent the Risk Adjustment Process set forth in Exhibit A is not completed by such date or achievement of performance as set forth on Attachment A have not been determined by such date, in each case, subject to Section 4.1 of the Terms and Conditions.
Risk Adjustment Process - Unvested PSUs are subject to forfeiture based upon the Risk Adjustment Process set forth in Exhibit A.

THE CORPORATION'S GRANT OF PSUs AS REFLECTED HEREIN IS CONTINGENT UPON YOUR ACKNOWLEDGEMENT AND ACCEPTANCE OF THE AWARD AGREEMENT AND THE PLAN ELECTRONICALLY ON THE EQUITY WEBSITE ON OR BEFORE [GRANT ACCEPT BY DATE] (THE "ACCEPTANCE DEADLINE"). IF YOU FAIL TO DO SO, THE CORPORATION'S GRANT OF PSUs AS REFLECTED HEREIN SHALL BE NULL AND VOID, AND SHALL NOT BE RE-INSTATED.

BY ELECTRONICALLY ACKNOWLEDGING AND ACCEPTING THE CORPORATION'S GRANT OF PSUs, YOU AFFIRMATIVELY AND EXPRESSLY AGREE:

(1) SUCH ACKNOWLEDGMENT AND ACCEPTANCE CONSTITUTES YOUR ELECTRONIC SIGNATURE IN EXECUTION OF THE AWARD AGREEMENT

(2) TO BE BOUND BY THE PROVISIONS OF THE AWARD AGREEMENT AND THE PLAN

(3) YOU HAVE REVIEWED THE AWARD AGREEMENT AND THE PLAN IN THEIR ENTIRETY, HAVE HAD AN OPPORTUNITY TO OBTAIN PROFESSIONAL LEGAL/TAX/INVESTMENT ADVICE PRIOR TO ACCEPTING THE PSUs AND FULLY UNDERSTAND ALL OF THE PROVISIONS OF THE AWARD AGREEMENT AND THE PLAN

(4) YOU HAVE BEEN PROVIDED WITH A COPY OR ELECTRONIC ACCESS TO A COPY OF THE PLAN AND THE U.S. PROSPECTUS FOR THE PLAN

(5) TO ACCEPT AS BINDING, CONCLUSIVE AND FINAL ALL DECISIONS OR INTERPRETATIONS OF THE CORPORATION UPON ANY QUESTIONS ARISING UNDER THE AWARD AGREEMENT AND THE PLAN

PARTICIPANT ACCEPTANCE DATE: [ACCEPTANCE DATE]

****

EXHIBIT A
Risk Adjustment/Forfeiture Decision Process

For any performance year in which you remain a covered employee, your risk performance will be assessed via a Risk Culture Summary Scorecard ("RCSS") Score or a Performance Management Platform ("PMP") Risk Goal Rating. If, in any year, you receive an RCSS Score of 4 or worse, or a PMP Risk Goal Rating of "Below Expectations" or "Unsatisfactory," your unvested PSUs (including any PSUs resulting from dividend equivalents) will be subject to review by the Incentive Compensation Review Committee ("ICRC") for consideration of forfeiture. If you are no longer a covered employee or have left the Corporation, any unvested portion of the PSUs (including any PSUs resulting from dividend equivalents) will also be subject to a risk review by the ICRC. The ICRC is generally comprised of senior managers and senior control managers.

In that event, as part of its review, ICRC will ask –

- Did your score/rating reflect poor risk behavior by you in a prior year?
- Did you receive an award in that year?

If the answer to both questions is yes, ICRC asks the following questions with respect to each of the designated prior years:

- Financial Impact: How much did/will the issue cost the Company?
- Reputational Impact: How much of a regulatory impact did/will it have on the Company?

ICRC selects the impact answer that falls into the highest category below to determine the impact forfeiture percentage.

Criteria	Metric	None	Low	Medium	High
Financial Impact					
Reputational Impact					

As used in this Exhibit A, the term "Company" shall mean the Corporation and its Affiliates.

Then the ICRC asks how much, if any, control/responsibility you had regarding the situation. The answer to the last question determines the modifier to be applied to the impact forfeiture percentage.

Criteria	None	Indirect	Direct
Your role & responsibility			

Example: *[Insert Example]*

The ICRC will submit its recommendations to the Human Resources and Compensation Committee of the Corporation's Board of Directors for final action and approval.

THE BANK OF NEW YORK MELLON CORPORATION

FORM OF TERMS AND CONDITIONS
OF PERFORMANCE SHARE UNITS – EXECUTIVE COMMITTEE GENERAL

The Performance Share Units ("PSUs") with respect to Common Stock of The Bank of New York Mellon Corporation (the "Corporation") granted to you on the Grant Date are subject to the Notice of Award - Performance Share Units – Executive Committee General (the "Award Notice"), these Terms and Conditions of Performance Share Units – Executive Committee General (the "Terms and Conditions") and all of the terms and conditions of The Bank of New York Mellon Corporation 2019 Long-Term Incentive Plan (the "Plan"), which is incorporated herein by reference. In the case of a conflict between the Award Notice, these Terms and Conditions and the terms of the Plan, the provisions of the Plan shall govern. Capitalized terms used but not defined herein shall have the same meaning as provided or reflected in the Award Notice or the Plan, as applicable. For purposes of these Terms and Conditions, "Employer" means the Corporation or any Affiliate that employs you on the applicable date.

SECTION 1: Performance Share Unit Award

1.1 Grant of Award. Subject to these Terms and Conditions and the terms of the Plan, the Corporation grants you the number of PSUs as reflected in the Award Notice. The PSUs shall vest in accordance with the Vesting Schedule and shall be subject to the Risk Adjustment Process as reflected in the Award Notice.

1.2 Dividend Equivalents. During the period prior to vesting, dividend equivalents shall be determined with respect to the PSUs as if reinvested as additional PSUs on the dividend payment date and shall be paid to you pursuant to Section 4 of these Terms and Conditions only if and to the extent that the underlying PSUs become vested as provided in the Award Agreement, and any remaining dividend equivalents (including any PSUs resulting from dividend equivalents) shall be forfeited. In the event that you receive any additional PSUs as an adjustment with respect to the Grant Amount, such additional PSUs will be subject to the same restrictions as if granted under the Award Agreement as of the Grant Date and paid pursuant to Section 4 of this Agreement.

1.3 No Voting Rights. Prior to the settlement of your PSUs pursuant to these Terms and Conditions, you shall not be entitled to vote the shares of Common Stock underlying the PSUs.

1.4 Nontransferable. The PSUs shall be transferable only by will or the laws of descent and distribution. If you purport to make any transfer of the PSUs, except as described herein, the PSUs and all rights thereunder immediately shall terminate and be forfeited.

SECTION 2: Vesting, Performance Period, Forfeiture, Termination of Employment and Disability

2.1 Vesting, Performance Period and Forfeiture.

(a) *Vesting*. Subject to Sections 3 and 5.4 of these Terms and Conditions, PSUs (as may be adjusted from the Grant Amount by reference to the performance goals and the Risk Adjustment Process) may be earned as set forth in Attachment A for the period *[Insert Performance Period]* (the "Performance Period") and shall vest on the _____ anniversary of the Grant Date; provided that you remain continuously employed with your Employer through the close of business on _____; and provided further that unvested PSUs are subject to forfeiture based upon the Risk Adjustment Process each year and following completion of the Performance Period as set forth on Exhibit A. Notwithstanding anything to the contrary contained in the Award Agreement and in accordance with Section 4.1, a vesting may be delayed if, on the Vesting Date, you are the subject of ongoing disciplinary or performance management investigations or proceedings concerning the circumstances under which forfeiture or clawback of this award could apply. In such cases, the applicable portion of the award, if any, will

vest following the completion of such investigations and proceedings to the extent the Corporation determines that forfeiture and/or clawback does not apply.

(b) *Forfeiture upon Termination of Employment*. Subject to Sections 2.2 and 2.3 of these Terms and Conditions, if you cease to be continuously employed with your Employer prior to _____, you shall cease vesting in your PSUs as of your Termination Date and any unvested PSUs immediately shall terminate and be forfeited, **except** in situations where vesting would have occurred but for the fact that a determination has not yet been made as to whether a risk adjustment pursuant to Exhibit A is required, in which case vesting shall occur in accordance with the terms of the Award Agreement provided that the Committee determines the effect, if any, of a risk adjustment. As used herein, "Termination Date" shall mean the last day on which you are an employee of your Employer.

(c) *Forfeiture upon Termination of Employment for Cause*. Notwithstanding anything to the contrary contained in these Terms and Conditions, if your Employer terminates your employment for Cause, your PSUs, whether vested (but unsettled) or unvested, and including any dividend equivalent rights (including any PSUs resulting from dividend equivalents), immediately shall terminate and be forfeited. For purposes of these Terms and Conditions, "Cause" shall mean:

(i) you have been convicted of, or have entered into a pretrial diversion or entered a plea of guilty or nolo contendere (plea of no contest) to a crime or offense constituting a felony (or its equivalent under applicable laws outside of the United States), or to any other crime or offense involving moral turpitude, dishonesty, fraud, breach of trust, money laundering, or any other offense that may preclude you from being employed with a financial institution;

(ii) you are grossly negligent in the performance of your duties or have failed to perform in any material respect the duties of your employment, including, without limitation, failure to comply with any lawful directive from your Employer or the Corporation, other than by reason of incapacity due to disability or from any permitted leave of absence required by law;

(iii) you have violated the Corporation's Code of Conduct or any of the policies of the Corporation or your Employer governing the conduct of business or your employment;

(iv) you have engaged in any misconduct which has the effect of being materially injurious to the Corporation, any Affiliate or your Employer, including, but not limited to, its reputation;

(v) you have engaged in an act of fraud or dishonesty, including, but not limited to, taking or failing to take actions intending to result in personal gain; or

(vi) if you are employed outside the United States, any other circumstances (beyond those listed above) that permit the immediate termination of your employment without notice or payment in accordance with the terms of your employment agreement or Applicable Laws (as defined in Section 5.2).

The determination of whether your actions will be considered Cause for purposes of these Terms and Conditions will be determined by the Corporation or any of its Affiliates, in its or their sole discretion, as applicable. Any determinations of Cause will be considered conclusive and binding on you.

2.2 Specified Terminations of Employment.

(a) *Death*. If you cease to be continuously employed with your Employer by reason of your death prior to the date that your PSUs become fully vested, all unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period and the balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period. In such case, the

Corporation will issue your legal representative or your estate the vested PSUs settled in shares of Common Stock in accordance with Section 4.

(b) *Age & Years of Service Rule; Termination Providing Transition/Separation Pay prior to Age 55.*

(i) *Age & Years of Service Rule*. If you cease to be continuously employed with your Employer (i) on or after your attainment of age 55 but prior to age 60, and (ii) the combination of your age and years of credited employment with your Employer (in both instances, full and partial years) on your Termination Date equals or exceeds 65 (satisfaction of (i) and (ii) being a "Rule of 65 Retirement-Eligible Event"), a pro rata portion of the unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period, so long as you fully comply with the applicable covenants provided in Section 3 hereof and provided that, if requested by your Employer (to the extent not prohibited by Applicable Laws), you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer. Such pro rata portion shall be determined as set forth in subsection (iii) below. For purposes of the foregoing, partial years shall be determined based upon the number of days since your prior birthday or the number of days of credited employment since your prior employment anniversary, as the case may be. Notwithstanding the foregoing, in the case of continued vesting following a Rule of 65 Retirement-Eligible Event, if you commence employment with a new employer that grants you a new award that replaces all or any portion of this award, any portion of this award that has been replaced by your new employer will be forfeited and will no longer vest and, where relevant, will be promptly repaid by you if the award or any portion of this award has already vested.

(ii) *Termination Providing Transition/Separation Pay prior to Age 55*. Provided that you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer, if you cease to be continuously employed with your Employer by reason of a termination by your Employer prior to your attainment of age 55 and in connection with such termination you receive transition/separation pay from the Corporation or your Employer, a pro rata portion of the unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period, so long as you fully comply with the applicable covenants provided in Section 3 hereof. Such pro rata portion shall be determined as set forth in subsection (iii) below.

(iii) *Calculation of Pro Rata Portion.* In the event of continued vesting pursuant to subsection (b)(i) or (b)(ii) above, the pro rata portion of the PSUs that vests shall equal (i) the number of days from the first day of the Performance Period through the Termination Date, divided by (ii) _____, with the result multiplied by (iii) the number of PSUs, with that result multiplied by (iv) the applicable final earnout percentage as determined under Attachment A. In such case, the balance of the PSUs awarded shall be deemed forfeited at the end of the Performance Period.

(c) *Special Age Rule.* If you cease to be continuously employed with your Employer on or after your attainment of age 60 ("Rule of 60 Retirement-Eligible Event"), all unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period so long as you fully comply with the covenants provided in Section 3 hereof and provided that, if requested by your Employer, you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period. Notwithstanding the foregoing, in the case of continued vesting following a Rule of 60 Retirement-Eligible Event, if you commence employment with a new employer that grants you a new award that replaces all or any portion of this award, any portion of this award that has been replaced by your new employer will be forfeited and will no longer vest and, where relevant, will be promptly repaid by you if the award or any portion of this award has already vested.

(d) *Termination Providing Transition/Separation Pay on or after Age 55.* Provided that you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer, if you cease to be continuously employed with your Employer by reason of a termination by your Employer on or after your attainment of age 55 and in connection with such termination you receive transition/separation pay from the Corporation or your Employer, all unvested PSUs may vest as provided in Section 2.1(a) above following

completion of the Performance Period so long as you fully comply with the applicable covenants provided in Section 3 hereof. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period.

(e) For purposes of Sections 2(b)(ii) and 2(d) above, "transition/separation pay" means any severance, redundancy or ex-gratia compensation payment to you from the Corporation or your Employer in connection with your termination of employment that is in excess of the amount payable to you on account of any notice period to which you are entitled pursuant to the terms of your contract of employment or otherwise (or payment in lieu of such notice).

(f) *Sale of Business*. If you cease to be continuously employed with your Employer due to a sale of a business unit or your Employer and you are not otherwise entitled to transition/separation pay, all unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period so long as you fully comply with the applicable covenants provided in Section 3 hereof. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period.

(g) *Change in Control*. If your employment is terminated by your Employer without Cause within two (2) years after a Change in Control occurring after the Grant Date, all unvested PSUs may vest as provided in Section 2.1(a) above following completion of the Performance Period so long as you fully comply with the applicable covenants provided in Section 3 hereof. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period.

2.3 Disability. If you receive current benefits under a long-term disability plan maintained by the Corporation or your Employer while any portion of your PSUs remains unvested, all unvested PSUs will remain eligible to vest as provided in Section 2.1(a) above following completion of the Performance Period so long as you are eligible to receive such benefits provided you fully comply with the applicable covenants provided in Section 3 hereof. The balance of the PSUs that do not vest with respect to the Performance Period shall be deemed forfeited at the end of the Performance Period.

SECTION 3: Notice of Resignation, Non-Solicitation, Non-Competition, Confidential Information, Non-Disparagement and Cooperation

3.1 Notice of Resignation. As consideration for this award, you will provide your Employer with 90 days' advance written notice of any voluntary termination of your employment with your Employer.

3.2 Non-Solicitation of Clients and Employees. You agree that until one (1) year from the Termination Date or, if later, the final vesting date set forth in the Award Notice, you will not directly or indirectly solicit or attempt to solicit or induce, directly or indirectly, (i) any current or prospective client of the Corporation or an Affiliate known to you, to initiate or continue a client relationship with you other than with the Corporation or Affiliate or to terminate or reduce its client relationship with the Corporation or Affiliate, or (ii) any employee of the Corporation or an Affiliate, to terminate such employee's employment relationship with the Corporation or Affiliate in order to enter into a similar relationship with you, or any other person or any other entity. You expressly agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify Human Resources equity administration if you are not in compliance with your obligations above.

3.3 Non-Competition. In the case of a Rule of 65 Retirement-Eligible Event, a termination providing transition/separation pay prior to age 55, a Rule of 60 Retirement-Eligible Event or a termination providing transition/separation pay on or after age 55 only, as specified in Sections 2.2(b)(i), 2.2(b)(ii), 2.2(c) and 2.2(d) respectively, you agree that until one (1) year from the Termination Date or, if later, the final vesting date set forth in the Award Notice, you will not, directly or indirectly, (without the prior written consent of the Corporation) (i) associate (including as a director, officer, employee, partner, consultant, agent or advisor) with a Competitive Enterprise, or (ii) transact business on behalf of a Competitive Enterprise. For purposes of the Award Agreement,

"Competitive Enterprise" means any business enterprise that either (A) is a member of the Corporation's competitive peer group as disclosed in the Corporation's proxy statement that was most recently filed with the Securities and Exchange Commission preceding the Termination Date; or (B) is any other business enterprise for whom you would be performing services similar to those performed at the Corporation or any Affiliate within the twelve (12) months preceding the Termination Date. For the sake of clarity, the foregoing non-compete restriction does not prohibit you from being employed by the government or a not-for profit organization (i.e. an organization exempt from local and national tax laws). In view of the limited scope of the non-compete obligation assumed under this Section, which does not prevent you from working in other entities that are not affected by it, you hereby acknowledge that the ability to continue to vest in your PSUs, including any dividend equivalent rights, following a Rule of 65 Retirement-Eligible Event, a Rule of 60 Retirement-Eligible Event or a termination providing transition/separation pay is appropriate consideration for the non-compete obligation agreed to herein. You expressly agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify Human Resources equity administration if you are not in compliance with your obligations above.

3.4 Confidential Information.

(a) Except as may be permitted in accordance with Section 3.7 below, during the course of your employment with the Corporation or any Affiliate and continuing thereafter, you will not, either directly or indirectly, at any time, while an employee of the Corporation or any Affiliate or thereafter, make known, divulge, reveal, furnish, make available, or use (except for use in the regular course of your duties for the Corporation or its Affiliates) any Confidential Information (as defined below) without the written consent of the Corporation. You also agree that this obligation is in addition to, and not in limitation or preemption of, all other obligations of confidentiality that you may have to the Corporation or its Affiliates under the Code of Conduct, Securities Trading Policy or other rules or policies governing the conduct of their respective businesses, or general or specific legal or equitable principles.

(b) As used herein, "Confidential Information" means the information you have been given or to which you have access or become informed of which the Corporation or its Affiliates possess or have access and which relates to the Corporation or its Affiliates, is not generally known to the public or in the trade or is a competitive asset and/or otherwise constitutes a "trade secret," as that term is defined by Applicable Laws (as defined below), of the Corporation or its Affiliates, including without limitation, non- public: (i) planning data and marketing strategies; (ii) terms of any new products and investment strategies; (iii) information relating to other officers and employees of the Corporation or its Affiliates; (iv) financial results and information about the business condition of the Corporation or its Affiliates; (v) terms of any investment, management or advisory agreement or other material contract; (vi) proprietary software and related documents; (vii) customer and potential customer information (for example, client lists, prospecting lists, information about client accounts, pricing strategies, and current or proposed transactions and contact persons at such customers and customer prospects); and (viii) material information or internal analyses concerning customers or customer prospects of the Corporation or its Affiliates or their respective operations, condition (financial or otherwise) or plans.

3.5 Non-Disparagement. Subject to Section 3.7 below, during the course of your employment with the Corporation or any Affiliate and continuing thereafter, you will not, directly or indirectly make, issue, authorize or publish any comments or statements (orally or in writing) to the media, including without limitation traditional vehicles and social media, to any individual or entity with whom or which the Corporation, or any of its Affiliates, has a business relationship, or to any other individual or entity, which disparages, criticizes or otherwise reflects adversely upon the Corporation, any of its Affiliates or any of their respective employees, officers or directors.

3.6 Cooperation. Upon the termination of your employment for any reason or no reason, including but not limited to resignation of employment, you will fully cooperate with the Corporation and its Affiliates upon reasonable notice and at reasonable times, in the prosecution and defense of complaints, investigations, litigation, arbitration and mediation of any complaints, claims or actions now in existence or that may be threatened or

brought in the future relating to events or occurrences that transpired while employed by the Corporation or any Affiliate.

3.7 Governmental Authorities. Nothing in the Award Agreement prohibits or interferes with your right to disclose any relevant and necessary information in any action or proceeding relating to the Award Agreement or as otherwise required by law or legal process. In addition, nothing in the Award Agreement prohibits or interferes with your or your attorney's right: (a) to initiate communications directly with or report or disclose possible violations of law or regulation to, any governmental agency or entity, legislative body, or any self-regulatory organization, including but not limited to the U.S. Department of Justice ("DOJ"), the U.S. Securities and Exchange Commission ("SEC"), the U.S. Financial Industry Regulatory Authority ("FINRA"), the U.S. Equal Employment Opportunity Commission ("EEOC"), or U.S. Congress, and such reports or disclosures do not require prior notice to, or authorization from, the Corporation; (b) to participate, cooperate, or testify in any action, investigation or proceeding with, provide information to, or respond to any inquiry from any governmental agency or legislative body, any self-regulatory organization, including but not limited to the IRS, SEC, FINRA, the EEOC, DOJ, U.S. Congress ("Governmental Authorities"), or the Corporation's Legal or Compliance Departments and such communications do not require prior notice to, or authorization from the Corporation. However, with respect to such communications, reports, participation, cooperation or testimony to the Governmental Authorities, as set forth above in clauses (a) and (b) of this Section, you may not disclose privileged communications with the Corporation's counsel. To the extent permitted by law, upon receipt of a subpoena, court order or other legal process compelling the disclosure of any information, you will give prompt written notice to the Corporation so as to provide the Corporation ample opportunity to protect its interests in confidentiality to the fullest extent possible unless the subpoena, court order or other legal process pertains to an action described above in clauses (a) or (b) of this Section, in which event no such notice is required. Notwithstanding any confidentiality and non-disclosure obligations you may have, you are hereby advised as follows pursuant to the U.S. Federal Defend Trade Secrets Act of 2016: "An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. An individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (A) files any document containing the trade secret under seal; and (B) does not disclose the trade secret, except pursuant to court order."

3.8 Existing Obligations. The terms of the Award Agreement shall not in any way (a) limit your obligations pursuant to any other agreements with the Corporation or any of its Affiliates or other corporate plans or policies applicable to you; or (b) limit the Corporation's or your Employer's rights to exercise any remedies it may have under Applicable Laws or under the terms of such other agreements, plans or policies.

3.9 Failure to Comply with Covenants. If you fail to comply with any of the foregoing applicable covenants, the PSUs shall be immediately forfeited and may be subject to repayment as provided in Section 5.4 of these Terms and Conditions.

SECTION 4: Settlement

4.1 Time of Settlement. Vested PSUs shall be settled within two and one-half (2 ½) months following the end of the Performance Period, contingent upon the Committee's determination of the earnout achieved and subject to the individual per-employee limitations included in the Plan; *provided,* if you are a "specified employee" under Section 409A of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), upon separation from service and if such settlement is deferred compensation conditioned upon a separation from service and not compensation you could receive without separating from service, then settlement shall not be made until the first day following the six (6) month anniversary of your separation from service (or upon your death, if earlier).

4.2 Form of Settlement. PSUs, including any PSUs resulting from dividend equivalents, shall be settled in the form of Common Stock delivered in book-entry form.

SECTION 5: Other Terms and Conditions

5.1 No Right to Employment. Neither the award of PSUs nor anything else contained in these Terms and Conditions nor the Plan shall be deemed to limit or restrict the right of your Employer to terminate your employment at any time, for any reason, with or without Cause.

5.2 Compliance with Laws. Notwithstanding any other provision of these Terms and Conditions, you agree to take any action, and consent to the taking of any action by the Corporation and your Employer with respect to the PSUs awarded hereunder necessary to achieve compliance with applicable laws, regulations or relevant regulatory requirements or interpretations in effect from time to time ("Applicable Laws"). Any determination by the Corporation in this regard shall be final, binding and conclusive. The Corporation shall in no event be obligated to register any securities pursuant to the U.S. Securities Act of 1933 (as the same shall be in effect from time to time) or other applicable foreign securities laws, or to take any other affirmative action in order to cause the delivery of shares in book-entry form or otherwise therefore to comply with any Applicable Laws. For the avoidance of doubt, you understand and agree that if any payment or other obligation under or arising from these Terms and Conditions, including without limitation dividend equivalent rights, or the Plan is in conflict with or is restricted by any Applicable Laws, the Corporation may reduce, revoke, cancel, clawback or impose different terms and conditions to the extent it deems necessary or appropriate, in its sole discretion, to effect such compliance. If the Corporation determines that it is necessary or appropriate for any payments under these Terms and Conditions to be delayed in order to avoid additional tax, interest and or penalties under Section 409A of the Code, then the payments would not be made before the date which is the first day following the six (6) month anniversary of the date of your termination of employment (or upon earlier death).

5.3 Tax Withholding. Regardless of any action the Corporation or your Employer take with respect to any or all income tax (including U.S. federal, state and local taxes or non-U.S. taxes), social insurance, payroll tax, payment on account or other tax-related withholding ("Tax-Related Items"), you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Corporation and your Employer (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the PSUs, including the grant of the PSUs, the vesting of the PSUs, the subsequent sale of any shares of Common Stock acquired pursuant to the PSUs and the receipt of any dividends or dividend equivalents (including any PSUs resulting from dividend equivalents), and (b) do not commit to structure the terms of the grant or any aspect of the PSUs to reduce or eliminate your liability for Tax-Related Items. Further, if you are or become subject to taxation in more than one country you acknowledge that the Corporation and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one country.

Prior to the delivery of shares of Common Stock upon the vesting of your PSUs, if your country of residence (and/or the country of employment, if different) requires withholding of Tax-Related Items, the Corporation shall be authorized to withhold a sufficient number of whole shares of Common Stock otherwise issuable upon the vesting of the PSUs that have an aggregate Fair Market Value sufficient to pay the Tax-Related Items required to be withheld with respect to the shares of Common Stock. The cash equivalent of the shares of Common Stock withheld will be used to settle the obligation to withhold the Tax-Related Items. In the event that withholding in shares of Common Stock is prohibited or problematic under Applicable Laws or otherwise may trigger adverse consequences to the Corporation or your Employer, your Employer is authorized to withhold the Tax-Related Items required to be withheld with respect to the shares of Common Stock in cash from your regular salary and/or wages or any other amounts payable to you. In the event the withholding requirements are not satisfied through the withholding of shares of Common Stock by the Corporation or through your regular salary and/or wages or other amounts payable to you by your Employer, no shares of Common Stock will be issued to you (or your estate) upon vesting of the PSUs unless and until satisfactory arrangements have been made by you with respect to the payment of any Tax-Related Items that the Corporation or your Employer determines, in its sole discretion,

must be withheld or collected with respect to such PSUs. By accepting this grant of PSUs, you expressly consent to the withholding of shares of Common Stock and/or withholding from your regular salary and/or wages or other amounts payable to you as provided for hereunder. All other Tax-Related Items related to the PSUs and any shares of Common Stock delivered in payment thereof are your sole responsibility.

Depending on the withholding method, the Corporation or your Employer may withhold or account for Tax-Related Items by considering applicable statutory or other withholding rates, including minimum or maximum rates applicable in your jurisdiction(s). In the event of over-withholding, you may receive a refund of any over-withheld amount in cash (with no entitlement to the equivalent in Common Stock). If the obligation for Tax-Related Items is satisfied by withholding in shares of Common Stock, you shall be deemed to have been issued the full number of shares of Common Stock subject to the vested PSUs, notwithstanding that a number of the shares of Common Stock are held back solely for the purpose of paying the Tax-Related Items.

5.4 Forfeiture and Repayment. If, directly or indirectly:

(a) during the course of your employment with your Employer, you violate any obligations set forth in the Award Agreement (including without limitation those obligations set forth in Section 3 of these Terms and Conditions) or engage in conduct or it is discovered that you engaged in conduct that is materially adverse to the interests of the Corporation or its Affiliates, including failures to comply with the Corporation's or any of its Affiliate's rules or regulations, fraud, or conduct contributing to any financial restatements or irregularities;

(b) during the course of your employment with your Employer and, unless you have post-termination obligations or duties owed to the Corporation or its Affiliates pursuant to an individual agreement set forth in subsection (d) below, for one (1) year thereafter, you engage (other than for the benefit of the Corporation or its Affiliates) in solicitation and/or diversion of customers or employees;

(c) during the course of your employment with your Employer, you engage in competition with the Corporation or its Affiliates;

(d) following termination of your employment with your Employer for any reason, with or without Cause, you violate any post-termination obligations or duties owed to the Corporation or its Affiliates under any agreement with the Corporation or its Affiliates, including without limitation, any employment, confidentiality, non-solicitation, non-competition or other agreement restricting post-employment conduct (including without limitation those obligations set forth in Section 3 of these Terms and Conditions); or

(e) any compensation that the Corporation or its Affiliates has promised or paid to you is required to be forfeited and/or repaid to the Corporation or its Affiliates pursuant to applicable regulatory requirements;

then the Corporation may cancel all or any portion of the PSUs and/or require repayment of any shares of Common Stock (or the value thereof) or other amounts which were acquired pursuant to the PSUs (including dividends paid on the shares of Common Stock and dividend equivalents). The Corporation shall have sole discretion to determine what constitutes grounds for forfeiture and/or repayment under this Section 5.4, and, in such event, the portion of the PSUs that shall be cancelled and the sums or amounts that shall be repaid. For purposes of the foregoing, you expressly and explicitly authorize the Corporation to issue instructions, on your behalf, to any brokerage firm and/or third party administrator engaged by the Corporation to hold the shares of Common Stock and other amounts acquired pursuant to the PSUs to re-convey, transfer or otherwise return such shares and/or other amounts to the Corporation.

5.5 Governing Law and Choice of Forum. The Award Notice and these Terms and Conditions shall be construed and enforced in accordance with the laws of the State of New York, other than any choice of law provisions calling for the application of laws of another jurisdiction. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or these Terms and Conditions, the parties hereby submit to and consent to the exclusive jurisdiction of the State of New York and

agree that such litigation shall be conducted only in the courts of New York County, New York, or the federal courts for the United States for the Southern District of New York, and no other courts, where this grant is made and/or to be performed and agree to such other choice of forum provisions as are included in the Plan.

5.6 Nature of Plan. By participating in the Plan, you acknowledge, understand and agree that:

(a) The Plan is discretionary in nature and limited in duration, and may be amended, cancelled, or terminated by the Corporation, in its sole discretion, at any time.

(b) The grant of PSUs under the Plan is a one-time benefit and does not create any contractual or other right to receive PSUs or benefits in lieu of such awards in the future. Future awards, if any, will be at the sole discretion of the Corporation, including, but not limited to, the form and timing of the award, the number of shares of Common Stock subject to the award, the vesting provisions applicable to the award and the purchase price (if any).

(c) Your participation in the Plan is voluntary, and the value of your PSUs is an extraordinary item of compensation and is outside the scope of your employment (and your employment contract, if any). As such, your PSUs are not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, dismissal, termination or end of service payments, bonuses, long-service awards, pension or retirement benefits, or similar payments.

(d) No claim or entitlement to compensation or damages shall arise from forfeiture of the PSUs resulting from the termination of your employment or other service relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any). **In consideration of the grant of the PSUs, you expressly agree not to institute any such claim against the Corporation, any of its Affiliates or your Employer.**

5.7 ***Data Privacy. By accepting the PSUs, you declare that you agree with the data processing practices described herein and consent to the collection, processing and use of your Personal Data (as defined below) by the Corporation and the transfer of your Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other non-U.S.) data protection law perspective, for the purposes described herein.***

(a) Declaration of Consent. You understand that you need to review the following information about the processing of your personal data by or on behalf of the Corporation, your Employer and/or any of its Affiliates, as described herein, and any other PSU grant materials (the "Personal Data") and declare your consent. With regard to the processing of your Personal Data in connection with the Plan, you understand that the Corporation is the controller of the Personal Data.

(b) Data Processing and Legal Basis. The Corporation collects, uses and otherwise processes your Personal Data for the purposes of allocating shares and implementing, administering and managing the Plan. You understand that this Personal Data may include, without limitation, your name, home address and telephone number, email address, personal bank account details, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of Common Stock or directorships held in the Corporation or its Affiliates, details of all PSUs or any other entitlement to shares of Common Stock or equivalent benefits awarded, canceled, purchased, vested, unvested or outstanding in your favor. The Corporation's legal basis for the processing of your Personal Data is your consent.

(c) Stock Plan Administration Service Providers. You understand that the Corporation may transfer your Personal Data, or parts thereof, to Fidelity Stock Plan Services LLC and certain of its affiliated companies, an independent service provider based in the United States which assists the Corporation with the

implementation, administration and management of the Plan. In the future, the Corporation may select a different service provider and share your Personal Data with such different service provider that serves the Corporation in a similar manner. You understand and acknowledge that the Corporation's service provider may open an account for you to receive and trade shares acquired under the Plan and that you will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of your ability to participate in the Plan.

(d) International Data Transfers. You understand that the Corporation and, as of the date hereof, certain third parties assisting in the implementation, administration and management of the Plan, such as the Corporation's service providers, are based in the United States. If you are located outside the United States, you understand and acknowledge that your country has enacted data privacy laws that are different from the laws of the United States. For example, the European Commission has issued only a limited adequacy finding with respect to the United States that applies solely if and to the extent that companies self-certify and remain self-certified under the EU/U.S. Privacy Shield program. Otherwise, transfers of personal data from the EU to the United States can be made on the basis of Standard Contractual Clauses approved by the European Commission or other appropriate safeguards permissible under the Applicable Laws. If you are located in the EU or EEA, the Corporation may receive, process and transfer your Personal Data onward to third-party service providers solely on the basis of appropriate data transfer agreements or other appropriate safeguards permissible under Applicable Laws. If applicable, you understand that you can ask for a copy of the appropriate data processing agreements underlying the transfer of your Personal Data by contacting your local human resources representative. The Corporation's legal basis for the transfer of your Personal Data is your consent.

(e) Data Retention. You understand that the Corporation will use your Personal Data only as long as is necessary to implement, administer and manage your participation in the Plan, or to comply with Applicable Laws, including under tax and securities laws. In the latter case, you understand and acknowledge that the Corporation's legal basis for the processing of your Personal Data would be compliance with the Applicable Laws or the pursuit by the Corporation of respective legitimate interests not outweighed by your interests, rights or freedoms. When the Corporation no longer needs your Personal Data for any of the above purposes, you understand the Corporation will remove it from its systems.

(f) Voluntariness and Consequences of Denial/Withdrawal of Consent. You understand that your participation in the Plan and your grant of consent is purely voluntary. You may deny or later withdraw your consent at any time, with future effect and for any or no reason. If you deny or later withdraw your consent, the Corporation can no longer offer you participation in the Plan or offer other awards to you or administer or maintain such awards and you would no longer be able to participate in the Plan. You further understand that denial or withdrawal of your consent would not affect your status or salary as an employee or your career and that you would merely forfeit the opportunities associated with the Plan.

(g) Data Subject Rights. You understand that data subject rights regarding the processing of personal data vary depending on the Applicable Laws and that, depending on where you are based and subject to the conditions set out in the Applicable Laws, you may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Corporation holds about you and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about you that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of your objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Corporation to restrict the processing of your Personal Data in certain situations where you feel its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of your Personal Data that you have actively or passively provided to the Corporation (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or your employment or service contract and is carried out by automated means. In case of concerns, you understand that you may also have the right to lodge a complaint

with the competent local data protection authority. Further, to receive clarification of, or to exercise any of your rights, you should contact your local human resources representative.

5.8 Insider Trading/Market Abuse Laws. You may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the shares of Common Stock are listed and in applicable jurisdictions including the United States and your country or your broker's country, if different, which may affect your ability to accept, acquire, sell or otherwise dispose of shares of Common Stock, rights to shares of Common Stock (e.g., PSUs) or rights linked to the value of shares of Common Stock under the Plan during such times as you are considered to have "inside information" regarding the Corporation (as defined by the laws in the applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders you placed before you possessed inside information. Furthermore, you could be prohibited from (a) disclosing the inside information to any third party and (b) "tipping" third parties or causing them otherwise to buy or sell securities (third parties include fellow employees). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable insider trading policy of the Corporation. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you should speak to your personal advisor on this matter.

5.9 Electronic Delivery and Acceptance. The Corporation may, in its sole discretion, deliver any documents related to current or future participation in the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Corporation or a third party designated by the Corporation.

5.10 Severability. The provisions of these Terms and Conditions are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable. Alternatively, the Corporation, in its sole discretion, shall have the power and authority to revise or strike such provision to the minimum extent necessary to render it valid and enforceable to the full extent permitted under Applicable Laws.

5.11 Liability for Breach. You shall indemnify the Corporation and hold it harmless from and against any and all damages or liabilities incurred by the Corporation (including liabilities for attorneys' fees and disbursements) arising out of any breach by you of these Terms and Conditions, including, without limitation, any attempted transfer of PSUs in violation of Section 1.4 of these Terms and Conditions.

5.12 Waiver. You acknowledge that a waiver by the Corporation of any provision of these Terms and Conditions shall not operate or be construed as a waiver of any other provision of these Terms and Conditions, or of any subsequent breach of these Terms and Conditions.

5.13 Addendum. The grant of your PSUs shall be subject to any special terms and conditions set forth in any Addendum to these Terms and Conditions (the "Addendum") for your state of residence (and your state of employment, if different). If you relocate your residency or employment to one of the states included in the Addendum, the special terms and conditions for such state will apply to you, to the extent the Corporation determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Addendum shall constitute part of the Terms and Conditions.

5.14 Additional Requirements. The Corporation reserves the right to impose other requirements on the PSUs, any payment made pursuant to the PSUs, and your participation in the Plan, to the extent the Corporation determines, in its sole discretion, that such other requirements are necessary or advisable for legal or administrative reasons. Such requirements may include (but are not limited to) requiring you to sign any agreements or undertakings that may be necessary to accomplish the foregoing.

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Attachment A
Performance Goals

[Complete as appropriate]

THE BANK OF NEW YORK MELLON CORPORATION

FORM OF ADDENDUM TO
TERMS AND CONDITIONS
OF PERFORMANCE SHARE UNITS

In addition to the terms of the Award Notice – Executive Committee General and the Terms and Conditions - Executive Committee General and as well as the terms of the Plan, the PSUs are subject to the following additional terms and conditions (the "Addendum"). All capitalized terms as contained in this Addendum shall have the same meaning as set forth in the Award Notice, the Terms and Conditions and the Plan. Pursuant to Section 5.13 of the Terms and Conditions, if you transfer your residence and/or employment to another state reflected in an Addendum at the time of transfer, the special terms and conditions for such state will apply to you to the extent the Corporation determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable in order to comply with local law, rules and regulations, or to facilitate the operation and administration of the award of PSUs and the Plan (or the Corporation may establish alternative terms and conditions as may be necessary or advisable to accommodate your transfer).

COMMONWEALTH OF MASSACHUSETTS

1. Non-Solicitation of Clients and Employees. The following provision shall replace Section 3.2 of the Terms and Conditions in its entirety:

Non-Solicitation of Clients and Employees. Because of the Corporation's legitimate business interests as described herein and the good and valuable consideration offered pursuant to the Award Agreement, which is in excess of any consideration you are otherwise entitled to as a current employee, you agree that until one (1) year from the Termination Date or, if later and to the maximum extent permissible by law, the final vesting date set forth in the Award Notice, you will not directly or indirectly solicit or attempt to solicit or induce, directly or indirectly, (i) any current or prospective client of the Corporation or an Affiliate known to you, to initiate or continue a client relationship with you other than with the Corporation or Affiliate or to terminate or reduce its client relationship with the Corporation or Affiliate, or (ii) any employee of the Corporation or an Affiliate, to terminate such employee's employment relationship with the Corporation or Affiliate in order to enter into a similar relationship with you, or any other person or any entity. You expressly agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify Human Resources equity administration if you are not in compliance with your obligations above.

2. Non-Competition. The following provision shall replace Section 3.3 of the Terms and Conditions in its entirety:

Non-Competition. Because of the Corporation's legitimate business interests as described herein and the good and valuable consideration offered pursuant to the Award Agreement, which is in excess of any consideration you are otherwise entitled to as a current employee, in the case of a Rule of 65 Retirement-Eligible Event a termination providing transition/separation pay prior to age 55, a Rule of 60 Retirement-Eligible Event or a termination providing transition/separation pay on or after age 55 only, as specified in Sections 2.2(b)(i), 2.2(b)(ii), 2.2(c) and 2.2(d) respectively, you agree that until one (1) year from the Termination Date or, if later and to the maximum extent permissible by law, the final vesting date set forth in the Award Notice, you will not, directly or indirectly (without the prior written consent of the Corporation), (i) associate (including as a director, officer, employee, partner, consultant, agent or advisor) with a Competitive Enterprise in a Restricted Territory, or (ii) transact business on behalf of a Competitive Enterprise in a Restricted Territory. For purposes of the Award Agreement, "Competitive Enterprise" means any business enterprise that either (A) is a member of the Corporation's competitive peer group as disclosed in the Corporation's proxy statement that was most recently filed with the Securities and Exchange Commission preceding the Termination Date; or (B) is any other business enterprise for whom you would be performing services similar to those performed at the Corporation or any Affiliate within the twelve (12) months preceding the Termination Date. For the purposes of the Award

Agreement, "Restricted Territory" means all geographic areas in which you, during any time within the last 24 months preceding the end of your employment with the Corporation, provided services or had a material presence or influence, which given your current senior role in the Corporation shall be presumed to mean the entire world. For the sake of clarity, the foregoing non-compete restriction does not prohibit you from being employed by the government or a not-for profit organization (i.e. an organization exempt from local and national tax laws). In view of the limited scope of the non-compete obligation assumed under this Section, which does not prevent you from working in other entities that are not affected by it, you hereby acknowledge that the continued vesting in your PSUs, including any dividend equivalent rights, following a Rule of 65 Retirement-Eligible Event, a Rule of 60 Retirement-Eligible Event or a termination providing transition/separation pay is appropriate consideration for the non-compete obligation agreed to herein. You expressly agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify Human Resources equity administration if you are not in compliance with your obligations above.

3. Governing Law and Choice of Forum. The following provision shall replace Section 5.5 of the Terms and Conditions in its entirety:

Governing Law and Choice of Forum. The Award Notice and these Terms and Conditions shall be construed and enforced in accordance with the laws of the Commonwealth of Massachusetts, other than any choice of law provisions calling for the application of laws of another jurisdiction. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or these Terms and Conditions, the parties hereby submit to and consent to the exclusive jurisdiction of the Commonwealth of Massachusetts and agree that such litigation shall be conducted only in the courts of Suffolk County, Massachusetts, and no other courts, where this grant is made and/or to be performed and agree to such other choice of forum provisions as are included in the Plan.

4. **Acknowledgment of Full Understanding. YOU ACKNOWLEDGE AND AGREE THAT:**

(A) YOU HAVE FULLY READ, UNDERSTAND AND VOLUNTARILY ENTERED INTO THE AWARD AGREEMENT;

(B) YOU HAVE HAD A RIGHT AND REASONABLE OPPORTUNITY OF AT LEAST TEN (10) DAYS TO ASK QUESTIONS AND CONSULT WITH AN ATTORNEY OF YOUR CHOICE BEFORE ELECTRONICALLY ACKNOWLEDGING AND ACCEPTING THE TERMS OF THE AWARD AGREEMENT;

(C) SECTION 3.3 OF THE AGREEMENT SHALL NOT BE EFFECTIVE UNTIL TEN DAYS FOLLOWING THE DATE THAT YOU HAVE BEEN PROVIDED NOTICE OF THE TERMS AND CONDITIONS OF THE AWARD AGREEMENT;

(D) YOU HAVE UNTIL THE ACCEPTANCE DEADLINE (AS DEFINED IN THE AWARD NOTICE) TO ACKNOWLEDGE AND ACCEPT THE AWARD AGREEMENT AND PLAN DOCUMENT ELECTRONICALLY ON THE EQUITY WEBSITE; AND

(E) **IF YOU ELECTRONICALLY ACKNOWLEDGE AND ACCEPT THE AWARD AGREEMENT AND PLAN DOCUMENT ON OR BEFORE THE TENTH DAY FOLLOWING THE DATE THAT YOU HAVE BEEN PROVIDED NOTICE THAT THE AWARD AGREEMENT HAS BEEN POSTED ON THE EQUITY WEBSITE, YOU AGREE THAT YOU HAVE DONE SO WILLINGLY, VOLUNTARILY AND WITHOUT ANY COERCION BY THE CORPORATION.**

IN WITNESS WHEREOF, the Corporation has caused the Award Agreement to be executed by its duly authorized officer.

_____
Global Head of Compensation and Benefits

Exhibit 10.2

FORM OF RESTRICTED STOCK UNIT AGREEMENT

THE BANK OF NEW YORK MELLON CORPORATION
2019 LONG-TERM INCENTIVE PLAN
FORM OF NOTICE OF AWARD - RESTRICTED STOCK UNITS – EXECUTIVE COMMITTEE GENERAL

Subject to the terms and conditions of The Bank of New York Mellon Corporation 2019 Long-Term Incentive Plan (the "Plan"), this Notice of Award - Restricted Stock Units – Executive Committee General (the "Award Notice"), and the Terms and Conditions of Restricted Stock Units – Executive Committee General (the "Terms and Conditions"), The Bank of New York Mellon Corporation (the "Corporation") grants you restricted stock units ("RSUs") as reflected below and on the Corporation's equity award website (the "Equity Website"). Each RSU represents the opportunity to receive one (1) share of the Corporation's common stock, par value $.01 ("Common Stock"), upon satisfaction of the terms and conditions as set forth in the Award Notice and the Terms and Conditions (collectively, the "Award Agreement"), subject to the terms of the Plan.

Participant	[PARTICIPANT NAME]
Grant Date	[GRANT DATE]
Number of RSUs	[NUMBER OF SHARES GRANTED]
Vesting Schedule – Please refer to Appendix [A Vesting Date may be delayed if and to the extent the Risk Adjustment Process set forth in Exhibit A is not completed by such date subject to Section 4.1 of the Terms and Conditions.	
Risk Adjustment Process - Unvested RSUs (and accrued dividends) are subject to forfeiture based upon the Risk Adjustment Process set forth in Exhibit A.]	

THE CORPORATION'S GRANT OF RSUs AS REFLECTED HEREIN IS CONTINGENT UPON YOUR ACKNOWLEDGEMENT AND ACCEPTANCE OF THE AWARD AGREEMENT AND THE PLAN ELECTRONICALLY ON THE EQUITY WEBSITE ON OR BEFORE [GRANT ACCEPT BY DATE] (THE "ACCEPTANCE DEADLINE"). IF YOU FAIL TO DO SO, THE CORPORATION'S GRANT OF RSUs AS REFLECTED HEREIN SHALL BE NULL AND VOID, AND SHALL NOT BE RE-INSTATED.

BY ELECTRONICALLY ACKNOWLEDGING AND ACCEPTING THE CORPORATION'S GRANT OF RSUs, YOU AFFIRMATIVELY AND EXPRESSLY AGREE:

(1) SUCH ACKNOWLEDGEMENT AND ACCEPTANCE CONSTITUTES YOUR ELECTRONIC SIGNATURE IN EXECUTION OF THE AWARD AGREEMENT

(2) TO BE BOUND BY THE PROVISIONS OF THE AWARD AGREEMENT AND THE PLAN

(3) YOU HAVE REVIEWED THE AWARD AGREEMENT AND THE PLAN IN THEIR ENTIRETY, HAVE HAD AN OPPORTUNITY TO OBTAIN PROFESSIONAL LEGAL/TAX/INVESTMENT ADVICE PRIOR TO ACCEPTING THE RSUs AND FULLY UNDERSTAND ALL OF THE PROVISIONS OF THE AWARD AGREEMENT AND THE PLAN

(4) YOU HAVE BEEN PROVIDED WITH A COPY OR ELECTRONIC ACCESS TO A COPY OF THE PLAN AND THE U.S. PROSPECTUS FOR THE PLAN

(5) TO ACCEPT AS BINDING, CONCLUSIVE AND FINAL ALL DECISIONS OR INTERPRETATIONS OF THE CORPORATION UPON ANY QUESTIONS ARISING UNDER THE AWARD AGREEMENT AND THE PLAN

PARTICIPANT ACCEPTANCE DATE: [ACCEPTANCE DATE]

****

[EXHIBIT A
Risk Adjustment/Forfeiture Decision Process

For any performance year in which you remain a covered employee, your risk performance will be assessed via a Risk Culture Summary Scorecard ("RCSS") Score or a Performance Management Platform ("PMP") Risk Goal Rating. If, in any year, you receive an RCSS Score of 4 or worse, or a PMP Risk Goal Rating of "Below Expectations" or "Unsatisfactory," your unvested RSUs (including any accrued dividend equivalents) will be subject to review by the Incentive Compensation Review Committee ("ICRC") for consideration of forfeiture. If you are no longer a covered employee or have left the Corporation, any unvested portion of the RSUs (including any accrued dividend equivalents) will also be subject to a risk review by the ICRC. The ICRC is generally comprised of senior managers and senior control managers.

In that event, as part of its review, ICRC will ask –

- Did your score/rating reflect poor risk behavior by you in a prior year?
- Did you receive an award in that year?

If the answer to both questions is yes, ICRC asks the following questions with respect to each of the designated prior years:

- Financial Impact: How much did/will the issue cost the Company?
- Reputational Impact: How much of a regulatory impact did/will it have on the Company?

ICRC selects the impact answer that falls into the highest category below to determine the impact forfeiture percentage.

Criteria	Metric	None	Low	Medium	High
Financial Impact					
Reputational Impact					

As used in this Exhibit A, the term "Company" shall mean the Corporation and its Affiliates.

Then the ICRC asks how much, if any, control/responsibility you had regarding the situation. The answer to the last question determines the modifier to be applied to the impact forfeiture percentage.

Criteria	None	Indirect	Direct
Your role & responsibility			

Example: *[Insert Example]*

The ICRC will submit its recommendations to the Human Resources and Compensation Committee of the Corporation's Board of Directors for final action and approval.]

THE BANK OF NEW YORK MELLON CORPORATION

FORM OF TERMS AND CONDITIONS
OF RESTRICTED STOCK UNITS – EXECUTIVE COMMITTEE GENERAL

The Restricted Stock Units ("RSUs") with respect to Common Stock of The Bank of New York Mellon Corporation (the "Corporation") granted to you on the Grant Date are subject to the Notice of Award - Restricted Stock Units – Executive Committee General (the "Award Notice"), these Terms and Conditions of Restricted Stock Units – Executive Committee General (the "Terms and Conditions") and all of the terms and conditions of The Bank of New York Mellon Corporation 2019 Long-Term Incentive Plan (the "Plan"), which is incorporated herein by reference. In the case of a conflict between the Award Notice, these Terms and Conditions and the terms of the Plan, the provisions of the Plan shall govern. Capitalized terms used but not defined herein shall have the same meaning as provided or reflected in the Award Notice or the Plan, as applicable. For purposes of these Terms and Conditions, "Employer" means the Corporation or any Affiliate that employs you on the applicable date.

SECTION 1: Restricted Stock Unit Award

1.1 Grant of Award. Subject to these Terms and Conditions and the terms of the Plan, the Corporation grants you the number of RSUs as reflected in the Award Notice. The RSUs shall vest in accordance with the Vesting Schedule [and shall be subject to the Risk Adjustment Process as reflected in the Award Notice].

1.2 Dividend Equivalents. Upon the payment of any dividend on the Common Stock occurring during the period preceding the settlement of your RSUs pursuant to these Terms and Conditions, your Employer will accrue an amount in cash equal to the value of the dividends you otherwise would have received had you actually been the shareholder of record of the number of shares of Common Stock underlying your RSUs[, which dividend equivalents will be subject to the Risk Adjustment Process as reflected in the Award Notice]. Your Employer will pay you such dividend equivalents in cash without interest pursuant to Section 4 of these Terms and Conditions if and to the extent that the underlying RSUs become vested as provided in the Award Agreement.

1.3 No Voting Rights. Prior to the settlement of your RSUs pursuant to these Terms and Conditions, you shall not be entitled to vote the shares of Common Stock underlying the RSUs.

1.4 Nontransferable. The RSUs shall be transferable only by will or the laws of descent and distribution. If you purport to make any transfer of the RSUs, except as described herein, the RSUs and all rights thereunder immediately shall terminate and be forfeited.

SECTION 2: Vesting, Forfeiture, Termination of Employment and Disability

2.1 Vesting and Forfeiture.

(a) *Vesting*. Subject to Sections 3 and 5.4 of these Terms and Conditions, if you remain continuously employed with your Employer through the close of business on the applicable Vesting Date reflected in the Award Notice, the number of RSUs corresponding to such Vesting Date will vest and the Corporation will issue you the underlying shares of Common Stock in accordance with Section 4 of these Terms and Conditions. Notwithstanding anything to the contrary contained in the Award Agreement and in accordance with Section 4.1, a vesting may be delayed if, on the Vesting Date, you are the subject of ongoing disciplinary or performance management investigations or proceedings concerning the circumstances under which forfeiture or clawback of this award could apply. In such cases, the applicable portion of the award, if any, will vest following the completion of such investigations and proceedings to the extent the Corporation determines that forfeiture and/or clawback does not apply.

(b) *Forfeiture upon Termination of Employment*. Subject to Sections 2.2 and 2.3 of these Terms and Conditions, if you cease to be continuously employed with your Employer prior to the date that your RSUs become fully vested, you shall cease vesting in your RSUs as of your Termination Date and any unvested RSUs, including any dividend equivalent rights, immediately shall terminate and be forfeited[, **except** in situations where vesting would have occurred but for the fact that a determination has not yet been made as to whether a risk adjustment pursuant to Exhibit A is required, in which case vesting shall occur in accordance with the terms of the Award Agreement provided that the Committee determines the effect, if any of a risk adjustment]. As used herein, "Termination Date" shall mean the last day on which you are an employee of your Employer.

(c) *Forfeiture upon Termination of Employment for Cause*. Notwithstanding anything to the contrary contained in these Terms and Conditions, if your Employer terminates your employment for Cause, your RSUs, whether vested (but unsettled) or unvested, and including any dividend equivalent rights, immediately shall terminate and be forfeited. For purposes of these Terms and Conditions, "Cause" shall mean:

(i) you have been convicted of, or have entered into a pretrial diversion or entered a plea of guilty or nolo contendere (plea of no contest) to a crime or offense constituting a felony (or its equivalent under applicable laws outside of the United States), or to any other crime or offense involving moral turpitude, dishonesty, fraud, breach of trust, money laundering, or any other offense that may preclude you from being employed with a financial institution;

(ii) you are grossly negligent in the performance of your duties or have failed to perform in any material respect the duties of your employment, including, without limitation, failure to comply with any lawful directive from your Employer or the Corporation, other than by reason of incapacity due to disability or from any permitted leave of absence required by law;

(iii) you have violated the Corporation's Code of Conduct or any of the policies of the Corporation or your Employer governing the conduct of business or your employment;

(iv) you have engaged in any misconduct which has the effect of being materially injurious to the Corporation, any Affiliate or your Employer, including, but not limited to, its reputation;

(v) you have engaged in an act of fraud or dishonesty, including, but not limited to, taking or failing to take actions intending to result in personal gain; or

(vi) if you are employed outside the United States, any other circumstances (beyond those listed above) that permit the immediate termination of your employment without notice or payment in accordance with the terms of your employment agreement or Applicable Laws (as defined in Section 5.2).

The determination of whether your actions will be considered Cause for purposes of these Terms and Conditions will be determined by the Corporation or any of its Affiliates, in its or their sole discretion, as applicable. Any determinations of Cause will be considered conclusive and binding on you.

2.2 Specified Terminations of Employment.

(a) *Death*. If you cease to be continuously employed with your Employer by reason of your death prior to the date that your RSUs become fully vested (or if your death occurs following termination of employment during a period in which you have outstanding RSUs), your estate will become fully vested in your RSUs, including any dividend equivalent rights, as of your date of death and the Corporation will issue your legal representative or your estate the underlying shares of Common Stock in accordance with Section 4.

[(b) *Specified Age & Years of Service Rule.* If you cease to be continuously employed with your Employer (i) on or after your attainment of age 60 and (ii) the combination of your age and years of credited employment with your Employer (in both instances, full and partial years) on your Termination Date equals or

exceeds 65 (satisfaction of (i) and (ii) being a "Retirement-Eligible Event"), you will continue to vest in your RSUs, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof and provided that, if requested by your Employer (to the extent not prohibited by Applicable Laws), you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer. For purposes of the foregoing, partial years shall be determined based upon the number of days since your prior birthday or the number of days of credited employment since your prior employment anniversary, as the case may be. Notwithstanding the foregoing, in the case of continued vesting following a Retirement-Eligible Event, if you commence employment with a new employer that grants you a new award that replaces all or any portion of this award, any portion of this award that has been replaced by your new employer will be forfeited and will no longer vest and, where relevant, will be promptly repaid by you if the award or any portion of this award has already vested.]

(c) *Termination Providing Transition/Separation Pay*. Provided that you execute and do not revoke a Transition/Separation Agreement and Release acceptable to your Employer, if you cease to be continuously employed with your Employer by reason of a termination by your Employer and in connection with such termination you receive transition/separation pay from the Corporation or your Employer, you will continue to vest in your RSUs, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof. For purposes of the foregoing, "transition/separation pay" means any severance, redundancy or ex-gratia compensation payment to you from the Corporation or your Employer in connection with your termination of employment that is in excess of the amount payable to you on account of any notice period to which you are entitled pursuant to the terms of your contract of employment or otherwise (or payment in lieu of such notice).

(d) *Sale of Business*. If you cease to be continuously employed with your Employer due to a sale of a business unit or your Employer and you are not otherwise entitled to transition/separation pay, you will continue to vest in your RSUs, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof.

(e) *Change in Control*. If your employment is terminated by your Employer without Cause within two (2) years after a Change in Control occurring after the Grant Date, you will continue to vest in your RSUs, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof.

[*(f) Additional Vesting Provisions, if any.*]

2.3 Disability. If you receive current benefits under a long-term disability plan maintained by the Corporation or your Employer while any portion of your RSUs remains unvested, you will continue to vest in your RSUs during the period you are eligible to receive such benefits, including any dividend equivalent rights, in accordance with the Vesting Schedule set forth in the Award Notice so long as you fully comply with the applicable covenants provided in Section 3 hereof.

SECTION 3: Notice of Resignation, Non-Solicitation, Non-Competition, Confidential Information, Non-Disparagement and Cooperation

3.1 Notice of Resignation. As consideration for this award, you will provide your Employer with 90 days' advance written notice of any voluntary termination of your employment with your Employer.

3.2 Non-Solicitation of Clients and Employees. You agree that until one (1) year from the Termination Date or, if later, the final vesting date set forth in the Award Notice, you will not directly or indirectly solicit or attempt to solicit or induce, directly or indirectly, (i) any current or prospective client of the Corporation or an Affiliate known to you, to initiate or continue a client relationship with you other than with the Corporation or Affiliate or to terminate or reduce its client relationship with the Corporation or Affiliate, or (ii) any employee of the Corporation or an Affiliate, to terminate such employee's employment relationship with the

Corporation or Affiliate in order to enter into a similar relationship with you, or any other person or any other entity. You expressly agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify Human Resources equity administration if you are not in compliance with your obligations above.

3.3 Non-Competition. In the case of [a Retirement-Eligible Event or] a termination providing transition/separation pay only, as specified in Sections 2.2(b) and 2.2(c) respectively, you agree that until one (1) year from the Termination Date or, if later, the final vesting date set forth in the Award Notice, you will not, directly or indirectly (without the prior written consent of the Corporation), (i) associate (including as a director, officer, employee, partner, consultant, agent or advisor) with a Competitive Enterprise, or (ii) transact business on behalf of a Competitive Enterprise. For purposes of the Award Agreement, "Competitive Enterprise" means any business enterprise that either (A) is a member of the Corporation's competitive peer group as disclosed in the Corporation's proxy statement that was most recently filed with the Securities and Exchange Commission preceding the Termination Date; or (B) is any other business enterprise for whom you would be performing services similar to those performed at the Corporation or any Affiliate within the twelve (12) months preceding the Termination Date. For the sake of clarity, the foregoing non-compete restriction does not prohibit you from being employed by the government or a not-for profit organization (i.e. an organization exempt from local and national tax laws). In view of the limited scope of the non-compete obligation assumed under this Section, which does not prevent you from working in other entities that are not affected by it, you hereby acknowledge that the continued vesting in your RSUs, including any dividend equivalent rights, following a [Retirement-Eligible Event or] termination providing transition/separation pay is appropriate consideration for the non-compete obligation agreed to herein. You expressly agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify Human Resources equity administration if you are not in compliance with your obligations above.

3.4 Confidential Information.

(a) Except as may be permitted in accordance with Section 3.7 below, during the course of your employment with the Corporation or any Affiliate and continuing thereafter, you will not, either directly or indirectly, at any time, while an employee of the Corporation or any Affiliate or thereafter, make known, divulge, reveal, furnish, make available, or use (except for use in the regular course of your duties for the Corporation or its Affiliates) any Confidential Information (as defined below) without the written consent of the Corporation. You also agree that this obligation is in addition to, and not in limitation or preemption of, all other obligations of confidentiality that you may have to the Corporation or its Affiliates under the Code of Conduct, Securities Trading Policy or other rules or policies governing the conduct of their respective businesses, or general or specific legal or equitable principles.

(b) As used herein, "Confidential Information" means the information you have been given or to which you have access or become informed of which the Corporation or its Affiliates possess or have access and which relates to the Corporation or its Affiliates, is not generally known to the public or in the trade or is a competitive asset and/or otherwise constitutes a "trade secret," as that term is defined by Applicable Laws (as defined below), of the Corporation or its Affiliates, including without limitation, non-public: (i) planning data and marketing strategies; (ii) terms of any new products and investment strategies; (iii) information relating to other officers and employees of the Corporation or its Affiliates; (iv) financial results and information about the business condition of the Corporation or its Affiliates; (v) terms of any investment, management or advisory agreement or other material contract; (vi) proprietary software and related documents; (vii) customer and potential customer information (for example, client lists, prospecting lists, information about client accounts, pricing strategies, and current or proposed transactions and contact persons at such customers and customer prospects); and (viii) material information or internal analyses concerning customers or customer prospects of the Corporation or its Affiliates or their respective operations, condition (financial or otherwise) or plans.

3.5 Non-Disparagement. Subject to Section 3.7 below, during the course of your employment with the Corporation or any Affiliate and continuing thereafter, you will not, directly or indirectly make, issue,

authorize or publish any comments or statements (orally or in writing) to the media, including without limitation traditional vehicles and social media, to any individual or entity with whom or which the Corporation, or any of its Affiliates, has a business relationship, or to any other individual or entity, which disparages, criticizes or otherwise reflects adversely upon the Corporation, any of its Affiliates or any of their respective employees, officers or directors.

3.6 Cooperation. Upon the termination of your employment for any reason or no reason, including but not limited to resignation of employment, you will fully cooperate with the Corporation and its Affiliates upon reasonable notice and at reasonable times, in the prosecution and defense of complaints, investigations, litigation, arbitration and mediation of any complaints, claims or actions now in existence or that may be threatened or brought in the future relating to events or occurrences that transpired while employed by the Corporation or any Affiliate.

3.7 Governmental Authorities. Nothing in the Award Agreement prohibits or interferes with your right to disclose any relevant and necessary information in any action or proceeding relating to the Award Agreement or as otherwise required by law or legal process. In addition, nothing in the Award Agreement prohibits or interferes with your or your attorney's right: (a) to initiate communications directly with or report or disclose possible violations of law or regulation to, any governmental agency or entity, legislative body, or any self-regulatory organization, including but not limited to the U.S. Department of Justice ("DOJ"), the U.S. Securities and Exchange Commission ("SEC"), the U.S. Financial Industry Regulatory Authority ("FINRA"), the U.S. Equal Employment Opportunity Commission ("EEOC"), or U.S. Congress, and such reports or disclosures do not require prior notice to, or authorization from, the Corporation; (b) to participate, cooperate, or testify in any action, investigation or proceeding with, provide information to, or respond to any inquiry from any governmental agency or legislative body, any self-regulatory organization, including but not limited to the IRS, SEC, FINRA, the EEOC, DOJ, U.S. Congress ("Governmental Authorities"), or the Corporation's Legal or Compliance Departments and such communications do not require prior notice to, or authorization from the Corporation. However, with respect to such communications, reports, participation, cooperation or testimony to the Governmental Authorities, as set forth above in clauses (a) and (b) of this Section, you may not disclose privileged communications with the Corporation's counsel. To the extent permitted by law, upon receipt of a subpoena, court order or other legal process compelling the disclosure of any information, you will give prompt written notice to the Corporation so as to provide the Corporation ample opportunity to protect its interests in confidentiality to the fullest extent possible unless the subpoena, court order or other legal process pertains to an action described above in clauses (a) or (b) of this Section, in which event no such notice is required. Notwithstanding any confidentiality and non-disclosure obligations you may have, you are hereby advised as follows pursuant to the U.S. Federal Defend Trade Secrets Act of 2016: "An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. An individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (A) files any document containing the trade secret under seal; and (B) does not disclose the trade secret, except pursuant to court order."

3.8 Existing Obligations. The terms of the Award Agreement shall not in any way (a) limit your obligations pursuant to any other agreements with the Corporation or any of its Affiliates or other corporate plans or policies applicable to you; or (b) limit the Corporation's or your Employer's rights to exercise any remedies it may have under Applicable Laws or under the terms of such other agreements, plans or policies.

3.9 Failure to Comply with Covenants. If you fail to comply with any of the foregoing applicable covenants, the RSUs shall be immediately forfeited and may be subject to repayment as provided in Section 5.4 of these Terms and Conditions.

SECTION 4: Settlement

4.1 Time of Settlement. Vested RSUs shall be settled as soon as administratively practicable following each Vesting Date as reflected in the Award Notice and in all events no later than two and one-half (2 ½) months following the end of the calendar year in which the RSUs vest; *provided,* if you are a "specified employee" under Section 409A of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), upon separation from service and if such settlement is deferred compensation conditioned upon a separation from service and not compensation you could receive without separating from service, then settlement shall not be made until the first day following the six (6) month anniversary of your separation from service (or upon your death, if earlier).

4.2 Form of Settlement. Vested RSUs shall be settled in the form of Common Stock delivered in book-entry form. Notwithstanding the foregoing, the Corporation may, in its sole discretion, settle any vested RSUs in the form of a cash payment to the extent settlement of the RSUs in shares of Common Stock is prohibited under local law or would require you, your Employer, the Corporation or any Affiliate to obtain the approval of any governmental and/or regulatory body in your country of residence (or country of employment, if different). Alternatively, the Corporation may, in its sole discretion, settle the vested RSUs in the form of Common Stock but require an immediate sale of such shares of Common Stock (in which case, these Terms and Conditions shall give the Corporation the authority to issue sales instructions on your behalf). Accrued dividend equivalents corresponding to vested RSUs, if any, shall be settled in the form of cash, payable without interest, on the next administratively practicable pay date following vesting of such RSUs.

SECTION 5: Other Terms and Conditions

5.1 No Right to Employment. Neither the award of RSUs nor anything else contained in these Terms and Conditions nor the Plan shall be deemed to limit or restrict the right of your Employer to terminate your employment at any time, for any reason, with or without Cause.

5.2 Compliance with Laws. Notwithstanding any other provision of these Terms and Conditions, you agree to take any action, and consent to the taking of any action by the Corporation and your Employer with respect to the RSUs awarded hereunder necessary to achieve compliance with applicable laws, regulations or relevant regulatory requirements or interpretations in effect from time to time ("Applicable Laws"). Any determination by the Corporation in this regard shall be final, binding and conclusive. The Corporation shall in no event be obligated to register any securities pursuant to the U.S. Securities Act of 1933 (as the same shall be in effect from time to time) or other applicable foreign securities laws, or to take any other affirmative action in order to cause the delivery of shares in book-entry form or otherwise therefore to comply with any Applicable Laws. For the avoidance of doubt, you understand and agree that if any payment or other obligation under or arising from these Terms and Conditions, including without limitation dividend equivalent rights, or the Plan is in conflict with or is restricted by any Applicable Laws, the Corporation may reduce, revoke, cancel, clawback or impose different terms and conditions to the extent it deems necessary or appropriate, in its sole discretion, to effect such compliance. If the Corporation determines that it is necessary or appropriate for any payments under these Terms and Conditions to be delayed in order to avoid additional tax, interest and or penalties under Section 409A of the Code, then the payments would not be made before the date which is the first day following the six (6) month anniversary of the date of your termination of employment (or upon earlier death).

5.3 Tax Withholding. Regardless of any action the Corporation or your Employer take with respect to any or all income tax (including U.S. federal, state and local taxes or non-U.S. taxes), social insurance, payroll tax, payment on account or other tax-related withholding ("Tax-Related Items"), you acknowledge that the ultimate liability for all Tax-Related Items legally due by you is and remains your responsibility and that the Corporation and your Employer (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the RSUs, including the grant of the RSUs, the vesting of the RSUs, the subsequent sale of any shares of Common Stock acquired pursuant to the RSUs and the receipt of any dividends or dividend equivalents, and (b) do not commit to structure the terms of the grant or any aspect of the

RSUs to reduce or eliminate your liability for Tax-Related Items. Further, if you are or become subject to taxation in more than one country, you acknowledge that the Corporation and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one country.

Prior to the delivery of shares of Common Stock upon the vesting of your RSUs, if your country of residence (and/or the country of employment, if different) requires withholding of Tax-Related Items, the Corporation shall be authorized to withhold a sufficient number of whole shares of Common Stock otherwise issuable upon the vesting of the RSUs that have an aggregate Fair Market Value sufficient to pay the Tax-Related Items required to be withheld with respect to the shares of Common Stock. The cash equivalent of the shares of Common Stock withheld will be used to settle the obligation to withhold the Tax-Related Items. In the event that withholding in shares of Common Stock is prohibited or problematic under Applicable Laws or otherwise may trigger adverse consequences to the Corporation or your Employer, your Employer is authorized to withhold the Tax-Related Items required to be withheld with respect to the shares of Common Stock in cash from your regular salary and/or wages or any other amounts payable to you. In the event the withholding requirements are not satisfied through the withholding of shares of Common Stock by the Corporation or through your regular salary and/or wages or other amounts payable to you by your Employer, no shares of Common Stock will be issued to you (or your estate) upon vesting of the RSUs unless and until satisfactory arrangements have been made by you with respect to the payment of any Tax-Related Items that the Corporation or your Employer determines, in its sole discretion, must be withheld or collected with respect to such RSUs. By accepting this grant of RSUs, you expressly consent to the withholding of shares of Common Stock and/or withholding from your regular salary and/or wages or other amounts payable to you as provided for hereunder. All other Tax-Related Items related to the RSUs and any shares of Common Stock delivered in payment thereof are your sole responsibility.

Depending on the withholding method, the Corporation or your Employer may withhold or account for Tax-Related Items by considering applicable statutory or other withholding rates, including minimum or maximum rates applicable in your jurisdiction(s). In the event of over-withholding, you may receive a refund of any over-withheld amount in cash (with no entitlement to the equivalent in Common Stock). If the obligation for Tax-Related Items is satisfied by withholding in shares of Common Stock, you shall be deemed to have been issued the full number of shares of Common Stock subject to the vested RSUs, notwithstanding that a number of the shares of Common Stock are held back solely for the purpose of paying the Tax-Related Items.

5.4 Forfeiture and Repayment. If, directly or indirectly:

(a) during the course of your employment with your Employer, you violate any obligations set forth in the Award Agreement (including without limitation those obligations set forth in Section 3 of these Terms and Conditions) or engage in conduct or it is discovered that you engaged in conduct that is materially adverse to the interests of the Corporation or its Affiliates, including failures to comply with the Corporation's or any of its Affiliate's rules or regulations, fraud, or conduct contributing to any financial restatements or irregularities;

(b) during the course of your employment with your Employer and, unless you have post-termination obligations or duties owed to the Corporation or its Affiliates pursuant to an individual agreement set forth in subsection (d) below, for one (1) year thereafter, you engage (other than for the benefit of the Corporation or its Affiliates) in solicitation and/or diversion of customers or employees;

(c) during the course of your employment with your Employer, you engage in competition with the Corporation or its Affiliates;

(d) following termination of your employment with your Employer for any reason, with or without Cause, you violate any post-termination obligations or duties owed to the Corporation or its Affiliates under any agreement with the Corporation or its Affiliates, including without limitation, any employment, confidentiality, non-solicitation, non-competition or other agreement restricting post-employment conduct (including without limitation those obligations set forth in Section 3 of these Terms and Conditions); or

(e) any compensation that the Corporation or its Affiliates has promised or paid to you is required to be forfeited and/or repaid to the Corporation or its Affiliates pursuant to applicable regulatory requirements;

then the Corporation may cancel all or any portion of the RSUs and/or require repayment of any shares of Common Stock (or the value thereof) or other amounts which were acquired pursuant to the RSUs (including without limitation any dividends paid on the shares of Common Stock and dividend equivalents). The Corporation shall have sole discretion to determine what constitutes grounds for forfeiture and/or repayment under this Section 5.4, and, in such event, the portion of the RSUs that shall be cancelled and the sums or amounts that shall be repaid. For purposes of the foregoing, you expressly and explicitly authorize the Corporation to issue instructions, on your behalf, to any brokerage firm and/or third party administrator engaged by the Corporation to hold the shares of Common Stock and other amounts acquired pursuant to the RSUs to re-convey, transfer or otherwise return such shares and/or other amounts to the Corporation.

5.5 Governing Law and Choice of Forum. The Award Notice and these Terms and Conditions shall be construed and enforced in accordance with the laws of the State of New York, other than any choice of law provisions calling for the application of laws of another jurisdiction. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or these Terms and Conditions, the parties hereby submit to and consent to the exclusive jurisdiction of the State of New York and agree that such litigation shall be conducted only in the courts of New York County, New York, or the federal courts for the United States for the Southern District of New York, and no other courts, where this grant is made and/or to be performed and agree to such other choice of forum provisions as are included in the Plan.

5.6 Nature of Plan. By participating in the Plan, you acknowledge, understand and agree that:

(a) The Plan is discretionary in nature and limited in duration, and may be amended, cancelled, or terminated by the Corporation, in its sole discretion, at any time.

(b) The grant of RSUs under the Plan is a one-time benefit and does not create any contractual or other right to receive RSUs or benefits in lieu of such awards in the future. Future awards, if any, will be at the sole discretion of the Corporation, including, but not limited to, the form and timing of the award, the number of shares of Common Stock subject to the award, the vesting provisions applicable to the award and the purchase price (if any).

(c) Your participation in the Plan is voluntary, and the value of your RSUs is an extraordinary item of compensation and is outside the scope of your employment (and your employment contract, if any). As such, your RSUs are not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, dismissal, termination or end of service payments, bonuses, long-service awards, pension or retirement benefits, or similar payments.

(d) No claim or entitlement to compensation or damages shall arise from forfeiture of the RSUs resulting from the termination of your employment or other service relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any). **In consideration of the grant of the RSUs, you expressly agree not to institute any such claim against the Corporation, any of its Affiliates or your Employer.**

5.7 ***Data Privacy. By accepting the RSUs, you declare that you agree with the data processing practices described herein and consent to the collection, processing and use of your Personal Data (as defined below) by the Corporation and the transfer of your Personal Data to the recipients mentioned herein, including recipients located in countries which do not adduce an adequate level of protection from a European (or other non-U.S.) data protection law perspective, for the purposes described herein.***

(a) Declaration of Consent. You understand that you need to review the following information about the processing of your personal data by or on behalf of the Corporation, your Employer and/or any of its Affiliates, as described herein, and any other RSU grant materials (the "Personal Data") and declare your consent. With regard to the processing of your Personal Data in connection with the Plan, you understand that the Corporation is the controller of the Personal Data.

(b) Data Processing and Legal Basis. The Corporation collects, uses and otherwise processes your Personal Data for the purposes of allocating shares and implementing, administering and managing the Plan. You understand that this Personal Data may include, without limitation, your name, home address and telephone number, email address, personal bank account details, date of birth, social insurance number, passport number or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of Common Stock or directorships held in the Corporation or its Affiliates, details of all RSUs or any other entitlement to shares of Common Stock or equivalent benefits awarded, canceled, purchased, vested, unvested or outstanding in your favor. The Corporation's legal basis for the processing of your Personal Data is your consent.

(c) Stock Plan Administration Service Providers. You understand that the Corporation may transfer your Personal Data, or parts thereof, to Fidelity Stock Plan Services LLC and certain of its affiliated companies, an independent service provider based in the United States which assists the Corporation with the implementation, administration and management of the Plan. In the future, the Corporation may select a different service provider and share your Personal Data with such different service provider that serves the Corporation in a similar manner. You understand and acknowledge that the Corporation's service provider may open an account for you to receive and trade shares acquired under the Plan and that you will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of your ability to participate in the Plan.

(d) International Data Transfers. You understand that the Corporation and, as of the date hereof, certain third parties assisting in the implementation, administration and management of the Plan, such as the Corporation's service providers, are based in the United States. If you are located outside the United States, you understand and acknowledge that your country has enacted data privacy laws that are different from the laws of the United States. For example, the European Commission has issued only a limited adequacy finding with respect to the United States that applies solely if and to the extent that companies self-certify and remain self-certified under the EU/U.S. Privacy Shield program. Otherwise, transfers of personal data from the EU to the United States can be made on the basis of Standard Contractual Clauses approved by the European Commission or other appropriate safeguards permissible under the Applicable Laws. If you are located in the EU or EEA, the Corporation may receive, process and transfer your Personal Data onward to third-party service providers solely on the basis of appropriate data transfer agreements or other appropriate safeguards permissible under Applicable Laws. If applicable, you understand that you can ask for a copy of the appropriate data processing agreements underlying the transfer of your Personal Data by contacting your local human resources representative. The Corporation's legal basis for the transfer of your Personal Data is your consent.

(e) Data Retention. You understand that the Corporation will use your Personal Data only as long as is necessary to implement, administer and manage your participation in the Plan, or to comply with Applicable Laws, including under tax and securities laws. In the latter case, you understand and acknowledge that the Corporation's legal basis for the processing of your Personal Data would be compliance with the Applicable Laws or the pursuit by the Corporation of respective legitimate interests not outweighed by your interests, rights or freedoms. When the Corporation no longer needs your Personal Data for any of the above purposes, you understand the Corporation will remove it from its systems.

(f) Voluntariness and Consequences of Denial/Withdrawal of Consent. You understand that your participation in the Plan and your grant of consent is purely voluntary. You may deny or later withdraw your consent at any time, with future effect and for any or no reason. If you deny or later withdraw your consent, the Corporation can no longer offer you participation in the Plan or offer other awards to you or administer or

maintain such awards and you would no longer be able to participate in the Plan. You further understand that denial or withdrawal of your consent would not affect your status or salary as an employee or your career and that you would merely forfeit the opportunities associated with the Plan.

(g) Data Subject Rights. You understand that data subject rights regarding the processing of personal data vary depending on the Applicable Laws and that, depending on where you are based and subject to the conditions set out in the Applicable Laws, you may have, without limitation, the rights to (i) inquire whether and what kind of Personal Data the Corporation holds about you and how it is processed, and to access or request copies of such Personal Data, (ii) request the correction or supplementation of Personal Data about you that is inaccurate, incomplete or out-of-date in light of the purposes underlying the processing, (iii) obtain the erasure of Personal Data no longer necessary for the purposes underlying the processing, processed based on withdrawn consent, processed for legitimate interests that, in the context of your objection, do not prove to be compelling, or processed in non-compliance with applicable legal requirements, (iv) request the Corporation to restrict the processing of your Personal Data in certain situations where you feel its processing is inappropriate, (v) object, in certain circumstances, to the processing of Personal Data for legitimate interests, and to (vi) request portability of your Personal Data that you have actively or passively provided to the Corporation (which does not include data derived or inferred from the collected data), where the processing of such Personal Data is based on consent or your employment or service contract and is carried out by automated means. In case of concerns, you understand that you may also have the right to lodge a complaint with the competent local data protection authority. Further, to receive clarification of, or to exercise any of your rights, you should contact your local human resources representative.

5.8 Insider Trading/Market Abuse Laws. You may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the shares of Common Stock are listed and in applicable jurisdictions including the United States and your country or your broker's country, if different, which may affect your ability to accept, acquire, sell or otherwise dispose of shares of Common Stock, rights to shares of Common Stock (e.g., RSUs) or rights linked to the value of shares of Common Stock under the Plan during such times as you are considered to have "inside information" regarding the Corporation (as defined by the laws in the applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders you placed before you possessed inside information. Furthermore, you could be prohibited from (a) disclosing the inside information to any third party and (b) "tipping" third parties or causing them otherwise to buy or sell securities (third parties include fellow employees). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable insider trading policy of the Corporation. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you should speak to your personal advisor on this matter.

5.9 Electronic Delivery and Acceptance. The Corporation may, in its sole discretion, deliver any documents related to current or future participation in the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Corporation or a third party designated by the Corporation.

5.10 Severability. The provisions of these Terms and Conditions are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable. Alternatively, the Corporation, in its sole discretion, shall have the power and authority to revise or strike such provision to the minimum extent necessary to render it valid and enforceable to the full extent permitted under Applicable Laws.

5.11 Liability for Breach. You shall indemnify the Corporation and hold it harmless from and against any and all damages or liabilities incurred by the Corporation (including liabilities for attorneys' fees and disbursements) arising out of any breach by you of these Terms and Conditions, including, without limitation, any attempted transfer of RSUs in violation of Section 1.4 of these Terms and Conditions.

5.12 Waiver. You acknowledge that a waiver by the Corporation of any provision of these Terms and Conditions shall not operate or be construed as a waiver of any other provision of these Terms and Conditions, or of any subsequent breach of these Terms and Conditions.

5.13 Addendum. The grant of your RSUs shall be subject to any special terms and conditions set forth in any Addendum to these Terms and Conditions (the "Addendum") for your state of residence (and your state of employment, if different). If you relocate your residency or employment to one of the states included in the Addendum, the special terms and conditions for such state will apply to you, to the extent the Corporation determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Addendum shall constitute part of the Terms and Conditions.

5.14 Additional Requirements. The Corporation reserves the right to impose other requirements on the RSUs, any payment made pursuant to the RSUs, and your participation in the Plan, to the extent the Corporation determines, in its sole discretion, that such other requirements are necessary or advisable for legal or administrative reasons. Such requirements may include (but are not limited to) requiring you to sign any agreements or undertakings that may be necessary to accomplish the foregoing.

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THE BANK OF NEW YORK MELLON CORPORATION

ADDENDUM TO
TERMS AND CONDITIONS
OF RESTRICTED STOCK UNITS

In addition to the terms of the Award Notice – Executive Committee General and the Terms and Conditions - Executive Committee General and as well as the terms of the Plan, the RSUs are subject to the following additional terms and conditions (the "Addendum"). All capitalized terms as contained in this Addendum shall have the same meaning as set forth in the Award Notice, the Terms and Conditions and the Plan. Pursuant to Section 5.13 of the Terms and Conditions, if you transfer your residence and/or employment to another state reflected in an Addendum at the time of transfer, the special terms and conditions for such state will apply to you to the extent the Corporation determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable in order to comply with local law, rules and regulations, or to facilitate the operation and administration of the award of RSUs and the Plan (or the Corporation may establish alternative terms and conditions as may be necessary or advisable to accommodate your transfer).

COMMONWEALTH OF MASSACHUSETTS

1. Non-Solicitation of Clients and Employees. The following provision shall replace Section 3.2 of the Terms and Conditions in its entirety:

Non-Solicitation of Clients and Employees. Because of the Corporation's legitimate business interests as described herein and the good and valuable consideration offered pursuant to the Award Agreement, which is in excess of any consideration you are otherwise entitled to as a current employee, you agree that until one (1) year from the Termination Date or, if later and to the maximum extent permissible by law, the final vesting date set forth in the Award Notice, you will not directly or indirectly solicit or attempt to solicit or induce, directly or indirectly, (i) any current or prospective client of the Corporation or an Affiliate known to you, to initiate or continue a client relationship with you other than with the Corporation or Affiliate or to terminate or reduce its client relationship with the Corporation or Affiliate, or (ii) any employee of the Corporation or an Affiliate, to terminate such employee's employment relationship with the Corporation or Affiliate in order to enter into a similar relationship with you, or any other person or any entity. You expressly agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify Human Resources equity administration if you are not in compliance with your obligations above.

2. Non-Competition. The following provision shall replace Section 3.3 of the Terms and Conditions in its entirety:

Non-Competition. Because of the Corporation's legitimate business interests as described herein and the good and valuable consideration offered pursuant to the Award Agreement, which is in excess of any consideration you are otherwise entitled to as a current employee, in the case of [a Retirement-Eligible Event or] a termination providing transition/separation pay only, as specified in Sections 2.2(b) and 2.2(c) respectively, you agree that until one (1) year from the Termination Date or, if later and to the maximum extent permissible by law, the final vesting date set forth in the Award Notice, you will not, directly or indirectly (without the prior written consent of the Corporation), (i) associate (including as a director, officer, employee, partner, consultant, agent or advisor) with a Competitive Enterprise in a Restricted Territory, or (ii) transact business on behalf of a Competitive Enterprise in a Restricted Territory. For purposes of the Award Agreement, "Competitive Enterprise" means any business enterprise that either (A) is a member of the Corporation's competitive peer group as disclosed in the Corporation's proxy statement that was most recently filed with the Securities and Exchange Commission preceding the Termination Date; or (B) is any other business enterprise for whom you would be performing services similar to those performed at the Corporation or any Affiliate within the twelve (12) months preceding the Termination Date. For the purposes of the Award Agreement, "Restricted Territory" means all geographic areas in which you, during any time within the last 24 months preceding the end of your employment with the

Corporation, provided services or had a material presence or influence, which given your current senior role in the Corporation shall be presumed to mean the entire world. For the sake of clarity, the foregoing non-compete restriction does not prohibit you from being employed by the government or a not-for profit organization (i.e. an organization exempt from local and national tax laws). In view of the limited scope of the non-compete obligation assumed under this Section, which does not prevent you from working in other entities that are not affected by it, you hereby acknowledge that the continued vesting in your RSUs, including any dividend equivalent rights, following [a Retirement-Eligible Event or] termination providing transition/separation pay is appropriate consideration for the non-compete obligation agreed to herein. You expressly agree to (i) advise any person or entity that seeks to employ you of the terms of these covenants; and (ii) immediately notify Human Resources equity administration if you are not in compliance with your obligations above.

3. Governing Law and Choice of Forum. The following provision shall replace Section 5.5 of the Terms and Conditions in its entirety:

Governing Law and Choice of Forum. The Award Notice and these Terms and Conditions shall be construed and enforced in accordance with the laws of the Commonwealth of Massachusetts, other than any choice of law provisions calling for the application of laws of another jurisdiction. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or these Terms and Conditions, the parties hereby submit to and consent to the exclusive jurisdiction of the Commonwealth of Massachusetts and agree that such litigation shall be conducted only in the courts of Suffolk County, Massachusetts, and no other courts, where this grant is made and/or to be performed and agree to such other choice of forum provisions as are included in the Plan.

4. **Acknowledgment of Full Understanding. YOU ACKNOWLEDGE AND AGREE THAT:**

(A) YOU HAVE FULLY READ, UNDERSTAND AND VOLUNTARILY ENTERED INTO THE AWARD AGREEMENT;

(B) YOU HAVE HAD A RIGHT AND REASONABLE OPPORTUNITY OF AT LEAST TEN (10) DAYS TO ASK QUESTIONS AND CONSULT WITH AN ATTORNEY OF YOUR CHOICE BEFORE ELECTRONICALLY ACKNOWLEDGING AND ACCEPTING THE TERMS OF THE AWARD AGREEMENT;

(C) SECTION 3.3 OF THE AGREEMENT SHALL NOT BE EFFECTIVE UNTIL TEN DAYS FOLLOWING THE DATE THAT YOU HAVE BEEN PROVIDED NOTICE OF THE TERMS AND CONDITIONS OF THE AWARD AGREEMENT;

(D) YOU HAVE UNTIL THE ACCEPTANCE DEADLINE (AS DEFINED IN THE AWARD NOTICE) TO ACKNOWLEDGE AND ACCEPT THE AWARD AGREEMENT AND PLAN DOCUMENT ELECTRONICALLY ON THE EQUITY WEBSITE; AND

(E) IF YOU ELECTRONICALLY ACKNOWLEDGE AND ACCEPT THE AWARD AGREEMENT AND PLAN DOCUMENT ON OR BEFORE THE TENTH DAY FOLLOWING THE DATE THAT YOU HAVE BEEN PROVIDED NOTICE THAT THE AWARD AGREEMENT HAS BEEN POSTED ON THE EQUITY WEBSITE, YOU AGREE THAT YOU HAVE DONE SO WILLINGLY, VOLUNTARILY AND WITHOUT ANY COERCION BY THE CORPORATION.

IN WITNESS WHEREOF, the Corporation has caused the Award Agreement to be executed by its duly authorized officer.

_____
Global Head of Compensation and Benefits

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: November 5, 2020

/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: November 5, 2020

/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 Sept. 30, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of BNY Mellon.

Dated: November 5, 2020

/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 his knowledge, that BNY Mellon's Quarterly Report on Form 10-Q for the quarter ended Sept. 30, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of BNY Mellon.

Dated: November 5, 2020

/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.