Bank of New York Mellon Corp
Form 10-Q
August 08, 2016

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

FORM 10-Q

[X] Quarterly Report Pursuant To Section 13 or 15(d)
of the Securities Exchange Act of 1934

For the Quarterly Period Ended June 30, 2016

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.)

225 Liberty Street
New York, New York 10286
(Address of principal executive offices) (Zip Code)

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

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 X No ___

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes X No ___

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

Large accelerated filer [X] Accelerated filer [ ]
Non-accelerated filer [ ] (Do not check if a smaller reporting company) Smaller reporting company [ ]

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

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

Class	Outstanding as of June 30, 2016
Common Stock, $0.01 par value	1,067,674,419

THE BANK OF NEW YORK MELLON CORPORATION

Second Quarter 2016 Form 10-Q
Table of Contents

	Page
Consolidated Financial Highlights (unaudited)	2
Part I - Financial Information	
Items 2. and 3. Management's Discussion and Analysis of Financial Condition and Results of Operations; Quantitative and Qualitative Disclosures about Market Risk	
General	4
Overview	4
Key second quarter 2016 and subsequent events	4
Highlights of second quarter 2016 results	5
Fee and other revenue	7
Net interest revenue	10
Average balances and interest rates	11
Noninterest expense	13
Income taxes	14
Review of businesses	14
Critical accounting estimates	23
Consolidated balance sheet review	23
Liquidity and dividends	33
Capital	38
Trading activities and risk management	45
Asset/liability management	47
Off-balance sheet arrangements	48
Supplemental information - Explanation of GAAP and Non-GAAP financial measures	49
Recent accounting and regulatory developments	54
Website information	57
Item 1. Financial Statements:	
Consolidated Income Statement (unaudited)	58
Consolidated Comprehensive Income Statement (unaudited)	60
Consolidated Balance Sheet (unaudited)	61
Consolidated Statement of Cash Flows (unaudited)	62
Consolidated Statement of Changes in Equity (unaudited)	63

	Page
Notes to Consolidated Financial Statements:	
Note 1—Basis of presentation	64
Note 2—Acquisitions and dispositions	64
Note 3—Securities	65
Note 4—Loans and asset quality	69
Note 5—Goodwill and intangible assets	75
Note 6—Other assets	77
Note 7—Net interest revenue	78
Note 8—Employee benefit plans	78

Note 9—Restructuring charges 79
Note 10—Income taxes 79
Note 11—Securitizations and variable interest entities 79
Note 12—Preferred stock 81
Note 13—Other comprehensive income (loss) 82
Note 14—Fair value measurement 83
Note 15—Fair value option 93
Note 16—Derivative instruments 93
Note 17—Commitments and contingent liabilities 101
Note 18—Lines of business 106
Note 19—Supplemental information to the Consolidated Statement of Cash Flows 109

Item 4. Controls and Procedures 110
Forward-looking Statements 111

Part II - Other Information
Item 1. Legal Proceedings 113
Item 1A. Risk Factors 113
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds 114
Item 6. Exhibits 115

Signature 116
Index to Exhibits 117

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

Consolidated Financial Highlights (unaudited)

(dollar amounts in millions, except per common share amounts and unless otherwise noted)	Quarter ended June 30, 2016	March 31, 2016	June 30, 2015	Year-to-date June 30, 2016	June 30, 2015
Results applicable to common shareholders of The Bank of New York Mellon Corporation:					
Net income	$825	$804	$830	$1,629	$1,596
Basic earnings per share	0.76	0.73	0.74	1.49	1.41
Diluted earnings per share	0.75	0.73	0.73	1.48	1.40
Fee and other revenue	2,999	2,970	3,067	5,969	6,079
Income (loss) from consolidated investment management funds	10	(6)	40	4	92
Net interest revenue	767	766	779	1,533	1,507
Total revenue	$3,776	$3,730	$3,886	$7,506	$7,678
Return on common equity (annualized) (a)	9.3%	9.2%	9.4%	9.2%	9.1%
Return on common equity (annualized) – Non-GAAP (a)(b)	9.7%	9.7%	10.3%	9.7%	9.8%
Return on tangible common equity (annualized) – Non-GAAP (a)	20.4%	20.6%	21.5%	20.5%	20.9%
Return on tangible common equity (annualized) – Non-GAAP adjusted (a)(b)(c)	20.5%	20.8%	22.5%	20.7%	21.4%
Return on average assets (annualized)	0.89%	0.89%	0.88%	0.89%	0.86%
Fee revenue as a percentage of total revenue	79%	80%	79%	80%	79%
Percentage of non-U.S. total revenue	34%	33%	36%	33%	36%
Pre-tax operating margin (a)	31%	29%	30%	30%	29%
Pre-tax operating margin – Non-GAAP (a)(b)	33%	31%	33%	32%	31%
Net interest margin (FTE)	0.98%	1.01%	1.00%	1.00%	0.98%
Assets under management (“AUM”) at period end (in billions) (d)	$1,664	$1,639	$1,700	$1,664	$1,700
Assets under custody and/or administration (“AUC/A”) at period end (in trillions) (e)	$29.5	$29.1	$28.6	$29.5	$28.6
Market value of securities on loan at period end (in billions) (f)	$278	$300	$283	$278	$283
Average common shares and equivalents outstanding (in thousands):					
Basic	1,072,583	1,079,641	1,113,790	1,076,112	1,116,183
Diluted	1,078,271	1,085,284	1,122,135	1,081,847	1,124,154

Selected average balances:					
Interest-earning assets	$318,433	$310,678	$318,596	$314,556	$313,379
Assets of operations	$372,974	$363,245	$375,999	$368,110	$371,068
Total assets	$374,220	$364,554	$378,279	$369,387	$373,372
Interest-bearing deposits	$165,122	$162,017	$170,716	$163,569	$165,149
Noninterest-bearing deposits	$84,033	$82,944	$84,890	$83,489	$87,228
Preferred stock	$2,552	$2,552	$2,313	$2,552	$1,940
Total The Bank of New York Mellon Corporation common shareholders' equity	$35,827	$35,252	$35,516	$35,539	$35,501
Other information at period end:					
Cash dividends per common share	$0.17	$0.17	$0.17	$0.34	$0.34
Common dividend payout ratio	23%	23%	23%	23%	24%
Common dividend yield (annualized)	1.8%	1.9%	1.6%	1.8%	1.6%
Closing stock price per common share	$38.85	$36.83	$41.97	$38.85	$41.97
Market capitalization	$41,479	$39,669	$46,441	$41,479	$46,441
Book value per common share – GAAP (a)	$33.72	$33.34	$32.28	$33.72	$32.28
Tangible book value per common share – Non-GAAP (a)(c)	$16.25	$15.87	$14.86	$16.25	$14.86
Full-time employees	52,200	52,100	50,700	52,200	50,700
Common shares outstanding (in thousands)	1,067,674	1,077,083	1,106,518	1,067,674	1,106,518

Consolidated Financial Highlights (unaudited) (continued)

Capital ratios	June 30, 2016	March 31, 2016	Dec. 31, 2015
Consolidated regulatory capital ratios: (g)			
Standardized:			
Common equity Tier 1 ("CET1") ratio	11.8 %	11.8 %	11.5 %
Tier 1 capital ratio	13.4	13.5	13.1
Total (Tier 1 plus Tier 2) capital ratio	13.8	13.9	13.5
Advanced:			
CET1 ratio	10.2	10.6	10.8
Tier 1 capital ratio	11.5	12.0	12.3
Total (Tier 1 plus Tier 2) capital ratio	11.7	12.3	12.5
Leverage capital ratio	5.8	5.9	6.0
Supplementary leverage ratio ("SLR")	5.3	5.4	5.4
BNY Mellon shareholders' equity to total assets ratio – GAAP (a)	10.4	10.3	9.7
BNY Mellon common shareholders' equity to total assets ratio – GAAP (a)	9.7	9.6	9.0
BNY Mellon tangible common shareholders' equity to tangible assets of operations ratio – Non-GAAP (a)(c)	6.6	6.7	6.5
Selected regulatory capital ratios – fully phased-in – Non-GAAP:			
Estimated CET1 ratio: (h)			
Standardized Approach	11.0	11.0	10.2
Advanced Approach	9.5	9.8	9.5
Estimated SLR (i)	5.0	5.1	4.9

(a) See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 49 for a reconciliation of Non-GAAP measures.

(b) Non-GAAP information for all periods presented excludes the net income (loss) attributable to noncontrolling interests of consolidated investment management funds, amortization of intangible assets and M&I, litigation and restructuring charges.

(c) Tangible book value per common share - Non-GAAP and tangible common equity exclude goodwill and intangible assets, net of deferred tax liabilities. See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 49 for the reconciliation of Non-GAAP measures.

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

(e) Includes the AUC/A of CIBC Mellon Global Securities Services Company ("CIBC Mellon"), a joint venture with the Canadian Imperial Bank of Commerce, of $1.1 trillion at June 30, 2016, March 31, 2016 and June 30, 2015.

(f) Represents the total amount of securities on loan managed by the Investment Services business. Excludes securities for which BNY Mellon acts as an agent on behalf of CIBC Mellon clients, which totaled $56 billion at June 30, 2016 and March 31, 2016 and $68 billion at June 30, 2015.

(g) For our CET1, Tier 1 capital and Total capital ratios, our effective capital ratios under applicable capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches. The leverage capital ratios are based on Tier I capital, as phased-in, and quarterly average total assets. For additional information on these ratios, see "Capital" beginning on page 38.

(h)

The estimated fully phased-in CET1 ratios (Non-GAAP) are based on our interpretation of U.S. capital rules, which are being gradually phased-in over a multi-year period. For additional information on these Non-GAAP ratios, see "Capital" beginning on page 38.

(i) The estimated fully phased-in SLR (Non-GAAP) is based on our interpretation of the U.S. capital rules. When the SLR becomes effective in 2018 as a required minimum ratio, we expect to maintain an SLR of over 5%. The minimum required SLR is 3% and there is a 2% buffer, in addition to the minimum, that is applicable to BNY Mellon and other U.S. global systemically important banks ("G-SIBs"). For additional information on these Non-GAAP ratios, see "Capital" beginning on page 38.

Part I - Financial Information

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

General

In this Quarterly Report on Form 10-Q, references to "our," "we," "us," "BNY Mellon," the "Company" and similar terms refe 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, 2015 ("2015 Annual Report").

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

How we reported results

Throughout this Form 10-Q, certain measures, which are noted as "Non-GAAP financial measures," exclude certain items or otherwise include components that differ from U.S. generally accepted accounting principles ("GAAP"). BNY Mellon believes that these measures are useful to investors because they permit a focus on period-to-period comparisons using measures that relate to our ability to enhance revenues and limit expenses in circumstances where such matters are within our control. We also present the net interest revenue and net interest margin on a fully taxable equivalent ("FTE") basis. We believe that this presentation allows for comparison of amounts arising from both taxable and tax-exempt sources and is consistent with industry practice. See "Supplemental information - Explanation of GAAP and Non-GAAP financial measures" beginning on page 49 for a reconciliation of financial measures presented in accordance with GAAP to adjusted Non-GAAP financial measures.

When we refer to BNY Mellon's "Basel III" capital measures (e.g., CET1), we mean those capital measures as calculated under the U.S. capital rules.

Overview

The Bank of New York Mellon Corporation ("BNY Mellon") was the first company listed on the New York Stock Exchange (NYSE symbol: BK). With a rich history of maintaining our financial strength and stability through all business cycles, BNY Mellon is a global investments company dedicated to improving lives through investing.

We manage and service assets for financial institutions, corporations and individual investors in 35 countries and more than 100 markets. As of June 30, 2016, BNY Mellon had $29.5 trillion in assets under custody and/or administration, and $1.7 trillion in assets under management.

BNY Mellon is focused on enhancing our clients' experience by leveraging our scale and expertise to deliver innovative and strategic solutions for our clients, building trusted relationships that drive value. We hold a unique position in the global financial services industry. We service both the buy-side and sell-side, providing us with unique marketplace insights that enable us to support our clients' success.

BNY Mellon's businesses benefit from the global growth in financial assets, the globalization of the investment process, changes in demographics and the continued evolution of the regulatory landscape - each providing us with opportunities to advise and service clients.

Key second quarter 2016 and subsequent events

Capital plan, share repurchase program, preferred stock issuance and increase in cash dividend on common stock

In June 2016, BNY Mellon received confirmation that the Board of Governors of the Federal Reserve System ("Federal Reserve") did not object to its 2016 capital plan submitted to the Federal Reserve in connection with its Comprehensive Capital Analysis and Review. The board of directors subsequently approved the repurchase of up to $2.14 billion worth of common stock over a four-quarter period beginning in the third quarter of 2016 and continuing through the second quarter of 2017. The board of

directors also approved the additional repurchase of up to $560 million of common stock contingent on a prior issuance of $750 million of noncumulative perpetual preferred stock. This new share repurchase plan replaces all previously authorized share repurchase plans.

In conjunction with our 2016 capital plan, in August 2016, BNY Mellon issued $1 billion of noncumulative perpetual preferred stock, $750 million of which satisfied the contingency for the repurchase of up to $560 million of common stock.

Additionally, the board of directors approved a 12% increase in the quarterly cash dividend on common stock, which was also included in the 2016 capital plan, from $0.17 to $0.19 per share. This increased quarterly cash dividend will be paid on Aug. 12, 2016.

Resolution plan

In April 2016, the Federal Deposit Insurance Corporation (the "FDIC") and the Federal Reserve jointly announced determinations and provided firm-specific feedback on the 2015 resolution plans of eight systemically important domestic banking institutions, including BNY Mellon. The agencies determined that the Company's 2015 resolution plan was not credible or would not facilitate an orderly resolution under the U.S. Bankruptcy Code, the statutory standard established in the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), and issued a joint notice of deficiencies and shortcomings regarding the Company's plan and the actions that must be taken to address them. Deficiencies must be remedied by Oct. 1, 2016, and shortcomings must be addressed in our 2017 resolution plan, which is due on July 1, 2017.

Following the receipt of feedback from the Federal Reserve and the FDIC in April 2016 on our 2015 resolution plan, we are changing our preferred resolution strategy from a bridge bank to a single point of entry in the event of our material financial distress or failure. While we are still evaluating the impact of our single point of entry strategy, it is likely that related expenses will increase and our net interest revenue may be negatively impacted if we conclude that the revised strategy requires us to issue additional long-term debt to fund holdings of high-quality liquid assets ("HQLA") for potential contribution to material subsidiaries in times of distress.

Acquisition of Atherton Lane Advisers, LLC

In April 2016, BNY Mellon completed the acquisition of the assets of Menlo Park, CA-based Atherton Lane Advisers, LLC ("Atherton"), an investment manager with approximately $2.45 billion in AUM and servicer for approximately 700 high net worth clients.

Highlights of second quarter 2016 results

We reported net income applicable to common shareholders of $825 million, or $0.75 per diluted common share, or $830 million or $0.76 per diluted common share, adjusted for M&I, litigation and restructuring charges (Non-GAAP) in the second quarter of 2016. In the second quarter of 2015, net income applicable to common shareholders was $830 million, or $0.73 per diluted common share, or $868 million, or $0.77 per diluted common share, adjusted for M&I, litigation and restructuring charges (Non-GAAP). In the first quarter of 2016, net income applicable to common shareholders was $804 million, or $0.73 per diluted common share. See "Supplemental information - Explanation of GAAP and Non-GAAP financial measures" beginning on page 49 for the reconciliation of Non-GAAP measures.

Highlights of the second quarter of 2016 include:

- AUC/A totaled $29.5 trillion at June 30, 2016 compared with $28.6 trillion at June 30, 2015. The 3% increase primarily reflects net new business and higher market values, partially offset by the unfavorable impact of a stronger

U.S. dollar. (See “Investment Services business” beginning on page 19.)

- AUM totaled $1.66 trillion at June 30, 2016 compared with $1.70 trillion at June 30, 2015. The 2% decrease primarily reflects net outflows primarily in 2015 and the unfavorable impact of a stronger U.S. dollar (principally versus the British pound), partially offset by higher market values. AUM excludes securities lending cash management assets and assets managed in the Investment Services business and the Other segment. (See “Investment Management business” beginning on page 16.)
- Investment services fees totaled $1.792 billion, a slight increase compared with $1.785 billion in the second quarter of 2015. The increase primarily reflects higher money market fees and

net new business, partially offset by lower market values. (See “Investment Services business” beginning on page 19.)

- Investment management and performance fees totaled $830 million, a decrease of 5% compared with $878 million in the second quarter of 2015. The decrease primarily reflects net outflows in 2015, the unfavorable impact of a stronger U.S. dollar and lower performance fees, partially offset by higher money market fees and the impact of the Atherton acquisition. Investment management and performance fees decreased 4% on a constant currency basis (Non-GAAP). (See “Investment Management business” beginning on page 16 and “Supplemental information – Explanation of GAAP and Non-GAAP financial measures” beginning on page 49 for a reconciliation of Non-GAAP measures.)
- Foreign exchange and other trading revenue totaled $182 million compared with $187 million in the second quarter of 2015. Foreign exchange revenue totaled $166 million, a decrease of 8% compared with $181 million in the second quarter of 2015. The decrease primarily reflects lower volumes, partially offset by the positive net impact of foreign currency hedging activities. (See “Fee and other revenue” beginning on page 7.)
- Investment and other income totaled $74 million compared with $104 million in the second quarter of 2015. The decrease primarily reflects lower lease-related gains, partially offset by foreign currency remeasurement gains. (See “Fee and other revenue” beginning on page 7.)
- Net interest revenue totaled $767 million compared with $779 million in the second quarter of 2015. The decrease primarily reflects the negative impact of interest rate hedging activities and higher premium amortization adjustments related to the decrease in interest rates. Net interest margin (FTE) was 0.98% in the second quarter of 2016 compared with 1.00% in the second quarter of 2015. (See “Net interest revenue” beginning on page 10.)

- The provision for credit losses was a credit of $9 million compared with a credit of $6 million in the second quarter of 2015. (See “Asset quality and allowance for credit losses” beginning on page 29.)
- Noninterest expense totaled $2.62 billion compared with $2.73 billion in the second quarter of 2015. The decrease primarily reflects lower expenses in nearly all categories, driven by the favorable impact of a stronger U.S. dollar, lower litigation, staff and legal expenses and the benefit of the business improvement process, partially offset by higher net occupancy and distribution and servicing expenses. (See “Noninterest expense” beginning on page 13.)
- The provision for income taxes was $290 million and the effective rate was 24.9%. (See “Income taxes” on page 14.)
- The net unrealized pre-tax gain on the investment securities portfolio was $1.6 billion at June 30, 2016 compared with $1.2 billion at March 31, 2016. The increase was primarily driven by a decline in market interest rates. (See “Investment securities” beginning on page 25.)
- Our CET1 ratio was 10.2% at June 30, 2016 and 10.6% at March 31, 2016 under the Advanced Approach. The decrease primarily reflects higher risk-weighted assets, partially offset by an increase in capital. Our CET1 ratio was 11.8% at both June 30, 2016 and March 31, 2016 under the Standardized Approach. (See “Capital” beginning on page 38.)
- Our estimated CET1 ratio (Non-GAAP) calculated under the Advanced Approach on a fully phased-in basis was 9.5% at June 30, 2016 and 9.8% at March 31, 2016. The decrease primarily reflects higher risk-weighted assets, partially offset by an increase in capital. Our estimated CET1 ratio (Non-GAAP) calculated under the Standardized Approach on a fully phased-in basis was 11.0% at both June 30, 2016 and March 31, 2016. (See “Capital” beginning on page 38.)

Fee and other revenue

Fee and other revenue

(dollars in millions, unless otherwise noted)	2Q16	1Q16	2Q15	2Q16 vs. 1Q16	2Q16 vs. 2Q15	Year-to-date 2016	Year-to-date 2015	YTD16 vs. YTD15
Investment services fees:								
Asset servicing (a)	$1,069	$1,040	$1,060	3%	1%	$2,109	$2,098	1%
Clearing services	350	350	347	—	1	700	691	1
Issuer services	234	244	234	(4)	—	478	466	3
Treasury services	139	131	144	6	(3)	270	281	(4)
Total investment services fees	1,792	1,765	1,785	2	—	3,557	3,536	1
Investment management and performance fees	830	812	878	2	(5)	1,642	1,745	(6)
Foreign exchange and other trading revenue	182	175	187	4	(3)	357	416	(14)
Financing-related fees	57	54	58	6	(2)	111	98	13
Distribution and servicing	43	39	39	10	10	82	80	3
Investment and other income	74	105	104	(30)	(29)	179	164	9
Total fee revenue	2,978	2,950	3,051	1	(2)	5,928	6,039	(2)
Net securities gains	21	20	16	N/M	N/M	41	40	3
Total fee and other revenue	$2,999	$2,970	$3,067	1%	(2)%	$5,969	$6,079	(2)%
Fee revenue as a percentage of total revenue	79%	80%	79%			80%	79%	
AUM at period end (in billions) (b)	$1,664	$1,639	$1,700	2%	(2)%	$1,664	$1,700	(2)%
AUC/A at period end (in trillions) (c)	$29.5	$29.1	$28.6	1%	3%	$29.5	$28.6	3%

(a) Asset servicing fees include securities lending revenue of $52 million in the second quarter of 2016, $50 million in the first quarter of 2016, $49 million in the second quarter of 2015, $102 million in the first six months of 2016 and $92 million in the first six months of 2015.

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

(c) Includes the AUC/A of CIBC Mellon of $1.1 trillion at June 30, 2016, March 31, 2016 and June 30, 2015.

N/M - Not meaningful.

Fee and other revenue decreased 2% compared with the second quarter of 2015 and increased 1% (unannualized) compared with the first quarter of 2016. The year-over-year decrease primarily reflects lower investment management and performance fees and investment and other income, partially offset by higher investment services fees and net securities gains. The sequential increase primarily reflects higher investment services fees, investment management and performances fees and foreign exchange and other trading revenue, partially offset by lower investment and other income.

Investment services fees

Investment services fees were impacted by the following compared with the second quarter of 2015 and the first quarter of 2016:

- Asset servicing fees increased 1% compared with the second quarter of 2015 and 3% (unannualized) compared with the first quarter of 2016. The year-over-year increase primarily reflects net new business and higher money market fees, partially offset by lower market

values and the unfavorable impact of a stronger U.S. dollar. The sequential increase primarily reflects higher market values and net new business.

- Clearing services fees increased 1% compared with the second quarter of 2015 and was unchanged (unannualized) compared with the first quarter of 2016. The year-over-year increase was primarily driven by higher money market fees, partially offset by the impact of lost business. Sequentially, higher average balances and the increase in the number of trading days were offset by lower volumes.
- Issuer services fees were unchanged compared with the second quarter of 2015 and decreased 4% (unannualized) compared with the first quarter of 2016. Both comparisons reflect lower Depositary Receipts revenue. Year-over-year, issuer services fees also reflect higher money market fees in Corporate Trust.
- Treasury services fees decreased 3% compared with the second quarter of 2015 and increased 6% (unannualized) compared with the first quarter of

2016. The year-over-year decrease primarily reflects higher compensating balance credits provided to clients, which shifts revenue from fees to net interest revenue. The sequential increase primarily reflects higher payment volumes due to an increase in the number of trading days.

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

Investment management and performance fees

Investment management and performance fees totaled $830 million in the second quarter of 2016, a decrease of 5% compared with the second quarter of 2015 and an increase of 2% (unannualized) compared with the first quarter of 2016. The year-over-year decrease primarily reflects outflows in 2015, the unfavorable impact of a stronger U.S. dollar, lower performance fees and the July 2015 sale of Meriten Investment Management GmbH (“Meriten”), partially offset by higher money market fees and the impact of the Atherton acquisition. On a constant currency basis (Non-GAAP), investment management and performance fees decreased 4% year-over-year. The sequential increase primarily reflects higher equity market values and the impact of the Atherton acquisition, partially offset by net outflows. Performance fees were $9 million in the second quarter of 2016, $20 million in the second quarter of 2015 and $11 million in the first quarter of 2016.

Total AUM for the Investment Management business was $1.7 trillion at June 30, 2016, a decrease of 2% year-over-year and an increase of 2% sequentially. The year-over-year decrease primarily reflects net outflows primarily in 2015 and the unfavorable impact of a stronger U.S. dollar (principally versus the British pound), partially offset by higher market values. Net long-term outflows in the second quarter of 2016 totaled $5 billion driven by index investments, partially offset by the continued strength in liability-driven investments. Net short-term inflows totaled $4 billion in the second quarter of 2016.

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

Foreign exchange and other trading revenue

Foreign exchange and other trading revenue

				Year-to-date	
(in millions)	2Q16	1Q16	2Q15	2016	2015
Foreign exchange	$ 166	$ 171	$ 181	$ 337	$ 398
Other trading revenue	16	4	6	20	18
Total foreign exchange and other trading revenue	$ 182	$ 175	$ 187	$ 357	$ 416

Foreign exchange and other trading revenue totaled $182 million in the second quarter of 2016, $187 million in the second quarter of 2015 and $175 million in the first quarter of 2016.

Foreign exchange trading 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. In the second quarter of 2016, foreign exchange revenue totaled $166 million, a decrease of 8% compared with the second quarter of 2015 and 3% (unannualized) compared with the first quarter of 2016. The year-over-year decrease primarily reflects lower volumes, partially offset by the positive net impact of foreign currency hedging activities. The sequential decrease primarily reflects the continued trend of clients migrating to lower margin products. Foreign exchange revenue is reported in the Investment Services business and the Other segment.

Custody clients generally enter into foreign exchange transactions in one of three ways: negotiated trading with BNY Mellon, a BNY Mellon standing instruction program, or transactions with third-party foreign exchange providers. A shift by custody clients from our standing instruction programs to other trading options combined with competitive market pressures on the foreign exchange business is negatively impacting our foreign exchange revenue. For the quarter ended June 30, 2016, total revenue for all types of foreign exchange trading transactions was approximately 4% of our total revenue, and approximately 32% of our foreign exchange revenue was generated by transactions in our standing instruction programs.

Total other trading revenue was $16 million in the second quarter of 2016, compared with $6 million in the second quarter of 2015 and $4 million in the first quarter of 2016. The year-over-year increase primarily reflects higher fixed income trading. Year-over-year, losses on hedging activities in the

Investment Management businesses were offset by the positive impact of interest rate hedging. The sequential increase primarily reflects hedging activities in the Investment Management businesses. Other trading revenue is reported in all three business segments.

Financing-related fees

Financing-related fees, which are primarily reported in the Investment Services business and the Other segment, include capital markets fees, loan commitment fees and credit-related fees. Financing-related fees totaled $57 million in the second quarter of 2016, $58 million in the second quarter of 2015 and $54 million in the first quarter of 2016.

Distribution and servicing fees

Distribution and servicing fee revenue was $43 million in the second quarter of 2016 and $39 million in both the second quarter of 2015 and first quarter of 2016. Distribution and servicing fees were favorably impacted by higher money market fees. The year-over-year increase was partially offset by fees paid to introducing brokers.

Investment and other income

Investment and other income

				Year-to-date	
(in millions)	2Q16	1Q16	2Q15	2016	2015
Corporate/bank-owned life insurance	$31	$31	$31	$62	$64
Lease-related gains	—	44	54	44	53
Expense reimbursements from joint venture	17	17	17	34	31
Seed capital gains (a)	11	11	2	22	18
Asset-related gains	1	—	1	1	4
Equity investment (losses)	(4)	(3)	(7)	(7)	(11)
Other income	18	5	6	23	5
Total investment and other income	$74	$105	$104	$179	$164

(a) Does not include the gain (loss) on seed capital investments in consolidated investment management funds which are reflected in operations of consolidated investment management funds, net of noncontrolling interests.

Investment and other income includes corporate and bank-owned life insurance contracts, lease-related gains, expense reimbursements from our CIBC Mellon joint venture, seed capital gains, asset-related gains, equity investment losses and other income. Expense reimbursements from our CIBC Mellon joint venture relate to expenses incurred by BNY Mellon

on behalf of the CIBC Mellon joint venture. Asset-related gains include real estate, loans and other asset dispositions. Other income primarily includes foreign currency remeasurement gain (loss), other investments and various miscellaneous revenues. Investment and other income was $74 million in the second quarter of 2016 compared with $104 million in the second quarter of 2015 and $105 million in the first quarter of 2016. Both decreases primarily reflect lower lease-related gains, partially offset by foreign currency remeasurement gains.

Year-to-date 2016 compared with year-to-date 2015

Fee and other revenue for the first six months of 2016 totaled $6.0 billion compared with $6.1 billion in the first six months of 2015. The decrease primarily reflects lower investment management and performance fees and lower foreign exchange and other trading revenue, partially offset by higher investment and other income, financing-related fees, issuer services fees and asset servicing fees. The decrease in investment management and performance fees

primarily reflects outflows in 2015, the unfavorable impact of a stronger U.S. dollar, the July 2015 sale of Meriten, lower market values and lower performance fees, partially offset by higher money market fees. The decrease in foreign exchange and other trading revenue primarily reflects lower volumes and the continued trend of clients migrating to lower margin products, partially offset by higher volatility. The increase in investment and other income primarily reflects foreign currency remeasurement gains, partially offset by lower lease-related gains. The increase in financing-related fees primarily reflects higher fees related to secured intraday credit. The increase in issuer services fees primarily reflects higher money market fees in Corporate Trust, partially offset by lower Depositary Receipts revenue. The increase in asset servicing fees primarily reflects net new business, higher money market fees and higher securities lending revenue, partially offset by lower market values.

Net interest revenue

Net interest revenue

(dollars in millions)	2Q16	1Q16	2Q15	2Q16 vs. 1Q16	2Q16 vs. 2Q15	Year-to-date 2016	Year-to-date 2015	YTD16 vs. YTD15
Net interest revenue (non-FTE)	$767	$766	$779	—	(2)%	$1,533	$1,507	2%
Tax equivalent adjustment	13	14	15	(7)	(13)	27	30	(10)
Net interest revenue (FTE)	$780	$780	$794	—	(2)%	$1,560	$1,537	1%
Average interest-earning assets	$318,433	$310,678	$318,596	2%	—	$314,556	$313,379	—
Net interest margin (FTE)	0.98%	1.01%	1.00%	(3) bps	(2) bps	1.00%	0.98%	2 bps

FTE - fully taxable equivalent.
bps - basis points.

Net interest revenue totaled $767 million in the second quarter of 2016, a decrease of $12 million compared with the second quarter of 2015 and an increase of $1 million compared with the first quarter of 2016. The year-over-year decrease primarily reflects the negative impact of interest rate hedging activities and higher premium amortization adjustments related to the decrease in interest rates. The sequential increase primarily reflects lower losses on interest rate hedging activities, partially offset by higher premium amortization.

The net interest margin (FTE) was 0.98% in the second quarter of 2016 compared with 1.00% in the second quarter of 2015 and 1.01% in the first quarter of 2016. The year-over-year decrease primarily reflects the factors noted above. The sequential decrease primarily reflects higher average interest-earning assets.

Average non-U.S. dollar deposits comprised approximately 20% of our average total deposits in the second quarter of 2016. Approximately 40% of the average non-U.S dollar deposits were euro-denominated in the second quarter of 2016.

Following the receipt of feedback from the Federal Reserve and the FDIC in April 2016 on our 2015 resolution plan, we are changing our preferred resolution strategy from a bridge bank to a single point of entry in the event of our material financial distress or failure. While we are still evaluating the impact of our single point of entry strategy, it is likely that our net interest revenue may be negatively impacted if we conclude that the revised strategy requires us to issue additional long-term debt to fund holdings of HQLA for potential contribution to material subsidiaries in times of distress.

Year-to-date 2016 compared with year-to-date 2015

Net interest revenue totaled $1.5 billion in the first six months of 2016, an increase of $26 million compared with the first six months of 2015. The increase primarily resulted from higher yields on interest-earning assets, partially offset by the negative impact of interest rate hedging activities. The net interest margin (FTE) was 1.00% in the first six months of 2016, compared with 0.98% in the first six months of 2015. The increase in the net interest margin (FTE) primarily reflects the factors noted above.

Average balances and interest rates (dollar amounts in millions, presented on an FTE basis)	Quarter ended June 30, 2016 Average balance	Average rates		March 31, 2016 Average balance	Average rates		June 30, 2015 Average balance	Average rates	
Assets									
Interest-earning assets:									
Interest-bearing deposits with banks (primarily foreign banks)	$14,394	0.68	%	$14,909	0.69	%	$20,235	0.56	%
Interest-bearing deposits held at the Federal Reserve and other central banks	97,788	0.30		89,092	0.28		81,846	0.21	
Federal funds sold and securities purchased under resale agreements	25,813	0.87		23,623	0.84		23,545	0.61	
Margin loans	18,226	1.40		18,907	1.34		20,467	1.01	
Non-margin loans:									
Domestic offices	29,413	2.25		28,506	2.21		26,716	2.06	
Foreign offices	12,645	1.57		13,783	1.39		13,893	1.19	
Total non-margin loans	42,058	2.04		42,289	1.95		40,609	1.77	
Securities:									
U.S. Government obligations	24,571	1.50		24,479	1.50		28,331	1.42	
U.S. Government agency obligations	56,050	1.68		55,966	1.79		56,332	1.77	
State and political subdivisions – tax-exempt	3,778	2.90		3,979	2.89		5,021	2.67	
Other securities	33,603	1.24		34,114	1.22		38,957	1.24	
Trading securities	2,152	2.45		3,320	2.16		3,253	2.63	
Total securities	120,154	1.57		121,858	1.62		131,894	1.59	
Total interest-earning assets	$318,433	1.14	%	$310,678	1.16	%	$318,596	1.08	%
Allowance for loan losses	(163)			(157)			(190)		
Cash and due from banks	4,141			3,879			6,785		
Other assets	50,563			48,845			50,808		
Assets of consolidated investment management funds	1,246			1,309			2,280		
Total assets	$374,220			$364,554			$378,279		
Liabilities									
Interest-bearing liabilities:									
Interest-bearing deposits:									
Money market rate accounts	$7,280	0.06	%	$7,385	0.06	%	$7,213	0.09	%
Savings	1,175	0.39		1,235	0.27		1,326	0.27	
Demand deposits	1,790	0.40		864	0.50		3,109	0.20	
Time deposits	46,629	0.06		42,678	0.04		46,807	0.03	
Foreign offices	108,248	0.01		109,855	0.03		112,261	—	
Total interest-bearing deposits	165,122	0.03		162,017	0.04		170,716	0.02	
Federal funds purchased and securities sold under repurchase agreements	18,204	0.28		18,689	0.20		16,732	(0.02)	
Trading liabilities	662	0.66		551	1.43		632	1.84	
Other borrowed funds	847	0.97		759	0.97		903	1.26	
Commercial paper	3,781	0.37		22	0.33		2,892	0.10	
Payables to customers and broker-dealers	16,935	0.05		16,801	0.09		11,234	0.07	
Long-term debt	22,838	1.54		21,556	1.57		20,625	0.99	
Total interest-bearing liabilities	$228,389	0.21	%	$220,395	0.21	%	$223,734	0.12	%
Total noninterest-bearing deposits	84,033			82,944			84,890		
Other liabilities	22,345			22,300			29,840		

Liabilities and obligations of consolidated investment management funds	253	259	857
Total liabilities	335,020	325,898	339,321
Temporary equity			
Redeemable noncontrolling interests	181	190	235
Permanent equity			
Total BNY Mellon shareholders' equity	38,379	37,804	37,829
Noncontrolling interests	640	662	894
Total permanent equity	39,019	38,466	38,723
Total liabilities, temporary equity and permanent equity	$374,220	$364,554	$378,279
Net interest margin (FTE)	0.98 %	1.01 %	1.00 %

Note: Interest and average rates were calculated on a taxable equivalent basis, at tax rates approximating 35%, using dollar amounts in thousands and actual number of days in the year.

Average balances and interest rates	Year-to-date					
	June 30, 2016			June 30, 2015		
(dollar amounts in millions, presented on an FTE basis)	Average balance	Average rates		Average balance	Average rates	
Assets						
Interest-earning assets:						
Interest-bearing deposits with banks (primarily foreign banks)	$14,651	0.68	%	$21,148	0.56	%
Interest-bearing deposits held at the Federal Reserve and other central banks	93,440	0.29		81,505	0.22	
Federal funds sold and securities purchased under resale agreements	24,718	0.85		21,989	0.60	
Margin loans	18,566	1.37		20,260	1.01	
Non-margin loans:						
Domestic offices	28,960	2.23		25,990	2.10	
Foreign offices	13,214	1.48		13,265	1.21	
Total non-margin loans	42,174	2.00		39,255	1.80	
Securities:						
U.S. Government obligations	24,526	1.50		27,894	1.40	
U.S. Government agency obligations	56,008	1.74		54,548	1.73	
State and political subdivisions – tax-exempt	3,879	2.89		5,116	2.65	
Other securities	33,858	1.23		38,514	1.28	
Trading securities	2,736	2.28		3,150	2.55	
Total securities	121,007	1.60		129,222	1.58	
Total interest-earning assets	$314,556	1.15	%	$313,379	1.08	%
Allowance for loan losses	(160)			(191)		
Cash and due from banks	4,010			6,496		
Other assets	49,704			51,384		
Assets of consolidated investment management funds	1,277			2,304		
Total assets	$369,387			$373,372		
Liabilities						
Interest-bearing liabilities:						
Interest-bearing deposits:						
Money market rate accounts	$7,332	0.06	%	$7,017	0.09	%
Savings	1,205	0.33		1,377	0.29	
Demand deposits	1,327	0.43		3,155	0.20	
Time deposits	44,653	0.05		45,044	0.03	
Foreign offices	109,052	0.02		108,556	0.01	
Total interest-bearing deposits	163,569	0.03		165,149	0.03	
Federal funds purchased and securities sold under repurchase agreements	18,446	0.24		15,312	(0.05)	
Trading liabilities	606	1.01		713	1.41	
Other borrowed funds	803	0.97		949	1.10	
Commercial paper	1,902	0.37		2,007	0.10	
Payables to customers and broker-dealers	16,868	0.07		11,084	0.07	
Long-term debt	22,197	1.56		20,414	1.10	
Total interest-bearing liabilities	$224,391	0.21	%	$215,628	0.14	%
Total noninterest-bearing deposits	83,489			87,228		
Other liabilities	22,323			31,082		
Liabilities and obligations of consolidated investment management funds	256			930		

Total liabilities	330,459		334,868	
Temporary equity				
Redeemable noncontrolling interests	186		234	
Permanent equity				
Total BNY Mellon shareholders' equity	38,091		37,441	
Noncontrolling interests	651		829	
Total permanent equity	38,742		38,270	
Total liabilities, temporary equity and permanent equity	$369,387		$373,372	
Net interest margin (FTE)	1.00	%	0.98	%

Note: Interest and average rates were calculated on a taxable equivalent basis, at tax rates approximating 35%, using dollar amounts in thousands and actual number of days in the year.

Noninterest expense

Noninterest expense								
				2Q16 vs.		Year-to-date		YTD16 vs.
(dollars in millions)	2Q16	1Q16	2Q15	1Q16	2Q15	2016	2015	YTD15
Staff	$1,412	$1,459	$1,434	(3)%	(2)%	$2,871	$2,919	(2)%
Professional, legal and other purchased services	290	278	299	4	(3)	568	601	(5)
Software	160	154	158	4	1	314	316	(1)
Net occupancy	152	142	149	7	2	294	300	(2)
Distribution and servicing	102	100	96	2	6	202	194	4
Sub-custodian	70	59	75	19	(7)	129	145	(11)
Furniture and equipment	63	65	70	(3)	(10)	128	140	(9)
Business development	65	57	72	14	(10)	122	133	(8)
Other	240	241	250	—	(4)	481	492	(2)
Amortization of intangible assets	59	57	65	4	(9)	116	131	(11)
M&I, litigation and restructuring charges	7	17	59	N/M	N/M	24	56	N/M
Total noninterest expense – GAAP	$2,620	$2,629	$2,727	—%	(4)%	$5,249	$5,427	(3)%
Total staff expense as a percentage of total revenue	37%	39%	37%			38%	38%	
Full-time employees at period end	52,200	52,100	50,700	—	3%	52,200	50,700	3%
Memo:								
Total noninterest expense excluding amortization of intangible assets and M&I, litigation and restructuring charges – Non-GAAP	$2,554	$2,555	$2,603	—%	(2)%	$5,109	$5,240	(3)%

N/M - Not meaningful.

Total noninterest expense decreased 4% compared with the second quarter of 2015 and decreased slightly compared with the first quarter of 2016. Excluding amortization of intangible assets and M&I, litigation and restructuring charges, noninterest expense (Non-GAAP) decreased 2% compared with the second quarter of 2015 and was flat compared with the first quarter of 2016. The year-over-year decrease reflects lower expenses in nearly all categories, primarily driven by the favorable impact of a stronger U.S. dollar, lower litigation, staff and legal expenses and the benefit of the business improvement process, partially offset by higher net occupancy and distribution and servicing expenses. The sequential decrease primarily reflects lower staff expense, offset by higher sub-custodian, net occupancy, legal and business development expenses.

We continue to invest in our risk management, regulatory compliance and other control functions in light of increasing regulatory requirements. As a result, we expect an increase in our expense run rate relating to these functions.

Staff expense

Given our mix of fee-based businesses, which are staffed with high-quality professionals, staff expense comprised 54% of total noninterest expense in the

second quarter of 2016, 53% in the second quarter of 2015 and 55% in the first quarter of 2016.

Staff expense decreased 2% compared with the second quarter of 2015 and 3% (unannualized) compared with the first quarter of 2016. The decrease compared with the second quarter of 2015 primarily reflects lower incentives and the favorable impact of a stronger U.S. dollar. The decrease compared with the first quarter of 2016 was primarily driven by the impact of vesting of long-term stock awards for retirement eligible employees recorded in the first quarter of 2016.

Non-staff expense

Non-staff expense includes certain expenses that vary with the levels of business activity and levels of expensed business investments, fixed infrastructure costs and expenses associated with corporate activities related to technology, compliance, legal, productivity initiatives and business development.

Non-staff expense totaled $1.2 billion in the second quarter of 2016, a decrease of 7% compared with the second quarter of 2015 and an increase of 3% (unannualized) compared with the first quarter of 2016. The decrease primarily reflects lower litigation expense. Non-staff expense, excluding amortization

of intangible assets and M&I, litigation and restructuring charges (Non-GAAP), totaled $1.1 billion in the second quarter of 2016, a decrease of 2% compared with the second quarter of 2015 and an increase of 4% (unannualized) compared with the first quarter of 2016. The year-over-year decrease primarily reflects lower legal expense and the benefit of the business improvement process, partially offset by higher distribution and servicing expense. The savings generated by the business improvement process primarily reflect the benefits of our technology insourcing strategy and the benefit of renegotiating vendor contacts. The sequential increase primarily reflects higher sub-custodian, net occupancy, legal and business development expenses. The increase in sub-custodian expenses primarily reflect higher client activity. The increase in net occupancy expense reflects the cost to exit leased space consistent with our global real estate strategy. The increase in business development expense was driven by the timing of client-related conferences.

For additional information on restructuring charges, see Note 9 of the Notes to Consolidated Financial Statements.

Year-to-date 2016 compared with year-to-date 2015

Noninterest expense totaled $5.2 billion in the first six months of 2016, a decrease of $178 million, or 3%, compared with $5.4 billion in the first six months of 2015. The decrease primarily reflects lower expenses in nearly all categories, except distribution and servicing expense. The lower expenses primarily reflect the favorable impact of a stronger U.S. dollar, lower estimated 2016 incentives, litigation and legal expenses and the benefit of the business improvement process. The savings generated by the business improvement process primarily reflect the benefits of our technology insourcing strategy and the benefit of renegotiating vendor contacts.

Income taxes

BNY Mellon recorded an income tax provision of $290 million (24.9% effective tax rate) in the second quarter of 2016. The income tax provision was $276 million (23.7% effective tax rate) in the second quarter of 2015 and $283 million (25.9% effective tax rate) in the first quarter of 2016. The effective tax rates primarily reflect tax benefits from foreign operations, tax-exempt income and tax credits for all periods presented. The effective tax rate in the

second quarter of 2015 also reflects the impact of litigation expense.

We expect the effective tax rate to be approximately 25-26% in 2016.

Review of businesses

We have an internal information system that produces performance data along product and service lines for our two principal businesses 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, the primary types of revenue by business and how our businesses are presented and analyzed, see Note 18 of the Notes to Consolidated Financial Statements.

Business results are subject to reclassification when organizational changes are made or when improvements are made in the measurement principles.

Beginning in the first quarter of 2016, we revised the net interest revenue for our business to reflect adjustments to our transfer pricing methodology to better reflect the value of certain deposits. Also beginning in the first quarter of 2016, we refined the expense allocation process for indirect expenses to simplify the expenses recorded in the Other segment to include only expenses not directly attributable to the Investment Management and Investment Services operations. These changes did not impact the consolidated results.

The results of our businesses may be influenced by client and other activities that vary by quarter. In the first quarter, incentive 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 paid in the quarter. Also in the third quarter, volume-related fees may decline due to reduced client

activity. In the fourth quarter, we typically incur higher business development and marketing expenses. In our Investment Management business, performance fees are typically higher in the fourth quarter, as the fourth quarter represents 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, euro and the Indian rupee. On a consolidated basis and in our Investment Services business, we typically have more foreign currency denominated expenses than revenues. However, our Investment Management business typically has more foreign currency denominated revenues than expenses. Overall, currency fluctuations impact the year-over-year growth rate in the Investment 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.

The following table presents key market metrics at period end and on an average basis.

Key market metrics						2Q16 vs.		Year-to-date		YTD16 vs.
	2Q16	1Q16	4Q15	3Q15	2Q15	1Q16	2Q15	2016	2015	YTD15
S&P 500 Index (a)	2099	2060	2044	1920	2063	2 %	2 %	2099	2063	2 %
S&P 500 Index – daily average	2075	1951	2052	2027	2102	6	(1)	2015	2083	(3)
FTSE 100 Index (a)	6504	6175	6242	6062	6521	5	—	6504	6521	—
FTSE 100 Index – daily average	6204	5988	6271	6399	6920	4	(10)	6097	6855	(11)
MSCI World Index (a)	1653	1648	1663	1582	1736	—	(5)	1653	1736	(5)
MSCI World Index – daily average	1656	1568	1677	1691	1780	6	(7)	1613	1754	(8)
Barclays Capital Global Aggregate Bond[SM] Index (a)(b)	382	368	342	346	342	4	12	382	342	12
NYSE and NASDAQ share volume (in billions)	203	218	198	206	185	(7)	10	422	372	13
JPMorgan G7 Volatility Index – daily average (c)	11.12	10.60	9.49	9.93	10.06	5	11	10.86	10.23	6
Average Fed Funds effective rate	0.37 %	0.36 %	0.16 %	0.13 %	0.13 %	1 bps	24 bps	0.36 %	0.12 %	24 bps
Foreign exchange rates vs. U.S. dollar:										
British pound (a)	$1.34	$1.44	$1.48	$1.52	$1.57	(7)%	(15)%	$1.34	$1.57	(15)%
British pound – average rate	1.43	1.43	1.52	1.55	1.53	—	(7)	1.43	1.52	(6)
Euro (a)	1.11	1.14	1.09	1.12	1.11	(3)	—	1.11	1.11	—
Euro – average rate	1.13	1.10	1.10	1.11	1.11	3	2	1.12	1.12	—

(a) Period end.
(b) Unhedged in U.S. dollar terms.
(c) The JPMorgan G7 Volatility Index is based on the implied volatility in 3-month currency options.
bps - basis points.

Fee revenue in Investment Management, and to a lesser extent in Investment Services, is impacted by the value of market indices. At June 30, 2016, we estimate 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 $0.02 to $0.04.

Fee waivers are highly sensitive to changes in the Fed Funds effective rate. Assuming no change in client behavior, we expect to recover approximately 70% of the pre-tax income related to fee waivers with a 50 basis point increase in the Fed Funds effective rate, inclusive of the 25 basis point increase in December 2015.

See Note 18 of the Notes to Consolidated Financial Statements for the consolidating schedules which show the contribution of our businesses to our overall profitability.

Investment Management business

(dollar amounts in millions)	2Q16	1Q16	4Q15	3Q15	2Q15	2Q16 vs. 1Q16	2Q16 vs. 2Q15	Year-to-date 2016	Year-to-date 2015	YTD16 vs. YTD15
Revenue:										
Investment management fees:										
Mutual funds	$304	$300	$294	$301	$312	1 %	(3)%	$604	$613	(1)%
Institutional clients	344	334	350	347	363	3	(5)	678	728	(7)
Wealth management	160	152	155	156	160	5	—	312	319	(2)
Investment management fees (a)	808	786	799	804	835	3	(3)	1,594	1,660	(4)
Performance fees	9	11	55	7	20	N/M	(55)	20	35	(43)
Investment management and performance fees	817	797	854	811	855	3	(4)	1,614	1,695	(5)
Distribution and servicing	49	46	39	37	38	7	29	95	76	25
Other (a)	(10)	(31)	22	(5)	17	N/M	N/M	(41)	58	N/M
Total fee and other revenue (a)	856	812	915	843	910	5	(6)	1,668	1,829	(9)
Net interest revenue	82	83	84	83	77	(1)	6	165	152	9
Total revenue	938	895	999	926	987	5	(5)	1,833	1,981	(7)
Provision for credit losses	1	(1)	(4)	1	3	N/M	N/M	—	2	N/M
Noninterest expense (ex. amortization of intangible assets)	684	660	689	665	700	4	(2)	1,344	1,408	(5)
Income before taxes (ex. amortization of intangible assets)	253	236	314	260	284	7	(11)	489	571	(14)
Amortization of intangible assets	19	19	24	24	25	—	(24)	38	49	(22)
Income before taxes	$234	$217	$290	$236	$259	8 %	(10)%	$451	$522	(14)%

Pre-tax operating margin	25	%24	%29	%25	%26	%			25	%26	%	
Adjusted pre-tax operating margin – Non-GAAP (b)	31	%30	%36	%34	%34	%			31	%34	%	
Average balances:												
Average loans	$14,795	$14,275	$13,447	$12,779	$12,298	4	%20	%	$14,535	$11,968	21	%
Average deposits	$15,518	$15,971	$15,497	$15,282	$14,638	(3	)%6	%	$15,745	$14,926	5	%

(a) Total fee and other revenue includes the impact of the consolidated investment management funds, net of noncontrolling interests. See page 53 for a breakdown of the revenue line items in the Investment Management business impacted by the consolidated investment management funds. Additionally, other revenue includes asset servicing, treasury services, foreign exchange and other trading revenue and investment and other income.

(b) Excludes the net negative impact of money market fee waivers, amortization of intangible assets and provision for credit losses and is net of distribution and servicing expense. See “Supplemental information – Explanation of GAAP and Non-GAAP financial measures” beginning on page 49 for the reconciliation of this Non-GAAP measure.

N/M - Not meaningful.

AUM trends (a)						2Q16 vs.	
(dollar amounts in billions)	2Q16	1Q16	4Q15	3Q15	2Q15	1Q16	2Q15
AUM at period end, by product type:							
Equity	$225	$222	$224	$224	$248	1 %	(9)%
Fixed income	218	219	216	216	215	—	1
Index	305	319	329	325	366	(4)	(17)
Liability-driven investments (b)	573	542	514	520	520	6	10
Alternative investments	68	66	63	62	62	3	10
Cash	275	271	279	278	289	1	(5)
Total AUM	$1,664	$1,639	$1,625	$1,625	$1,700	2 %	(2)%
AUM at period end, by client type:							
Institutional	$1,182	$1,155	$1,127	$1,129	$1,163	2 %	2 %
Mutual funds	398	405	420	419	454	(2)	(12)
Private client	84	79	78	77	83	6	1
Total AUM	$1,664	$1,639	$1,625	$1,625	$1,700	2 %	(2)%
Changes in AUM:							
Beginning balance of AUM	$1,639	$1,625	$1,625	$1,700	$1,717		
Net inflows (outflows):							
Long-term:							
Equity	(2)	(3)	(9)	(4)	(13)		
Fixed income	(2)	—	1	(3)	(2)		
Liability-driven investments (b)	15	14	11	11	5		
Alternative investments	1	1	2	1	3		
Total long-term active inflows (outflows)	12	12	5	5	(7)		
Index	(17)	(11)	(16)	(10)	(9)		
Total long-term (outflows) inflows	(5)	1	(11)	(5)	(16)		
Short term:							
Cash	4	(9)	2	(10)	(11)		
Total net (outflows)	(1)	(8)	(9)	(15)	(27)		
Net market impact/other	71	41	24	(35)	(29)		
Net currency impact	(47)	(19)	(15)	(25)	39		
Acquisition	2	—	—	—	—		
Ending balance of AUM	$1,664	$1,639	$1,625	$1,625	$1,700	2 %	(2)%

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

(b) Includes currency overlay AUM.

Business description

Our Investment Management business consists of our affiliated investment management boutiques, wealth management business and global distribution companies. See pages 23 and 24 of our 2015 Annual Report for additional information on our Investment Management business.

Review of financial results

Investment management and performance fees are dependent on the overall level and mix of AUM and the management fees expressed in basis points (one-hundredth of one percent) charged for managing those assets. Assets

under management were $1.66 trillion at June 30, 2016 compared with $1.70 trillion at June 30, 2015, a decrease of 2%. The decrease primarily reflects net outflows primarily in 2015 and the unfavorable impact of a stronger U.S. dollar

(principally versus the British pound), offset by higher market values.

Net long-term outflows were $5 billion in the second quarter of 2016 driven by index investments, offset by the continued strength in liability-driven investments. Net short-term inflows were $4 billion in the second quarter of 2016.

Total revenue was $938 million, a decrease of 5% compared with the second quarter of 2015 and an increase of 5% (unannualized) compared with the first quarter of 2016. The year-over-year decrease primarily reflects losses on hedging activities, net outflows in 2015 and the unfavorable impact of a stronger U.S. dollar. The sequential increase primarily reflects higher equity market values, lower losses on hedging activities, higher seed capital gains, and the impact of the Atherton acquisition, partially offset by net outflows.

Revenue generated in the Investment Management business included 40% from non-U.S. sources in the second quarter of 2016, compared with 42% in the second quarter of 2015 and 40% in the first quarter of 2016.

Investment management fees in the Investment Management business were $808 million, a decrease of 3% compared with the second quarter of 2015 and an increase of 3% (unannualized) compared with the first quarter of 2016. The year-over-year decrease primarily reflects outflows in 2015 and the unfavorable impact of a stronger U.S. dollar, partially offset by higher money market fees and the impact of the Atherton acquisition. On a constant currency basis (Non-GAAP), investment management fees decreased 2% compared with the second quarter of 2015. The sequential increase primarily reflects higher equity market values and the impact of the Atherton acquisition, partially offset by net outflows.

In the second quarter of 2016, 38% of investment management fees in the Investment Management business were generated from managed mutual fund fees. These fees are based on the daily average net assets of each fund and the management fee paid by that fund. Managed mutual fund fee revenue was $304 million in the second quarter of 2016 compared with $312 million in the second quarter of 2015 and $300 million in the first quarter of 2016. The decrease compared with the second quarter of 2015 primarily reflects net outflows. The increase compared with the first quarter of 2016 primarily reflects higher equity market values, partially offset by net outflows.

Performance fees were $9 million compared with $20 million in the second quarter of 2015 and $11 million in the first quarter of 2016.

Distribution and servicing fees were $49 million compared with $38 million in the second quarter of 2015 and $46 million in the first quarter of 2016. The year-over-year increase primarily reflects higher money market fees.

Other losses were $10 million compared with other revenue of $17 million in the second quarter of 2015 and other losses of $31 million in the first quarter of 2016. The year-over-year decrease primarily reflects losses on hedging activities and increased payments to Investment Services related to higher money market fees, partially offset by higher seed capital gains. The sequential increase primarily reflects

lower losses on hedging activities and higher seed capital gains.

Net interest revenue was $82 million compared with $77 million in the second quarter of 2015 and $83 million in the first quarter of 2016. The increase compared with the second quarter of 2015 primarily reflects record average loans and increased deposits, partially offset by the impact of changes in the internal crediting rates for deposits beginning in the first quarter of 2016. Average loans increased 20% compared with the second quarter of 2015 and 4% compared with the first quarter of 2016, while average deposits increased 6% compared with the second quarter of 2015 and decreased 3% compared with the first quarter of 2016.

Noninterest expense, excluding amortization of intangible assets, was $684 million, a decrease of 2% compared with the second quarter of 2015 and an increase of 4% compared with the first quarter of 2016. The year-over-year decrease primarily reflects lower incentive expense and the favorable impact of a stronger U.S. dollar, partially offset by higher distribution and servicing expense driven by lower money market fee waivers. Both comparisons reflect the impact of the Atherton acquisition and higher professional, legal and other purchased services. The sequential increase also reflects higher staff expense.

Year-to-date 2016 compared with year-to-date 2015

Income before taxes totaled $451 million in the first six months of 2016 compared with $522 million in the first six months of 2015. Income before taxes excluding amortization of intangible assets, was $489 million compared with $571 million in the first six months of 2015. Fee and other revenue decreased $161 million compared with the first six

months of 2015, primarily reflecting net outflows primarily in 2015, lower seed capital gains, losses on hedging activities and the unfavorable impact of a stronger U.S. dollar, partially offset by higher money market fees. Net interest revenue increased $13 million compared with the first six months of 2015, primarily due to increased loans and deposits, partially offset by the impact of changes in the internal crediting rates for deposits beginning in the first quarter of 2016. Noninterest expense, excluding amortization of intangible assets, decreased $64 million compared with the first six months of 2015, primarily reflecting lower incentive expense and the favorable impact of a stronger U.S. dollar, partially offset by higher distribution and servicing expense driven by lower money market fee waivers.

Investment Services business

(dollars in millions, unless otherwise noted)	2Q16	1Q16	4Q15	3Q15	2Q15	2Q16 vs. 1Q16	2Q16 vs. 2Q15	Year-to-date 2016	Year-to-date 2015	YTD16 vs. YTD15
Revenue:										
Investment services fees:										
Asset servicing	$1,043	$1,016	$1,009	$1,034	$1,038	3 %	— %	$2,059	$2,055	— %
Clearing services	350	348	337	345	346	1	1	698	688	1
Issuer services	233	244	199	312	234	(5)	—	477	465	3
Treasury services	137	129	135	135	141	6	(3)	266	276	(4)
Total investment services fees	1,763	1,737	1,680	1,826	1,759	1	—	3,500	3,484	—
Foreign exchange and other trading revenue	161	168	150	179	181	(4)	(11)	329	393	(16)
Other (a)	130	125	127	129	117	4	11	255	209	22
Total fee and other revenue	2,054	2,030	1,957	2,134	2,057	1	—	4,084	4,086	—
Net interest revenue	690	679	664	662	667	2	3	1,369	1,296	6
Total revenue	2,744	2,709	2,621	2,796	2,724	1	1	5,453	5,382	1
Provision for credit losses	(7)	14	8	7	6	N/M	N/M	7	13	N/M
Noninterest expense (ex. amortization of intangible assets)	1,819	1,770	1,791	1,853	1,874	3	(3)	3,589	3,696	(3)
Income before taxes (ex. amortization of intangible assets)	932	925	822	936	844	1	10	1,857	1,673	11
Amortization of intangible assets	40	38	40	41	40	5	—	78	81	(4)
Income before taxes	$892	$887	$782	$895	$804	1 %	11 %	$1,779	$1,592	12 %
Pre-tax operating margin	33 %	33 %	30 %	32 %	30 %			33 %	30 %	

Pre-tax operating margin (ex. provision for credit losses and amortization of intangible assets)	34 %	35 %	32 %	34 %	31 %				34 %	31 %		
Investment services fees as a percentage of noninterest expense (ex. amortization of intangible assets) (b)	97 %	98 %	94 %	99 %	94 %				98 %	94 %		
Securities lending revenue	$42	$42	$39	$33	$43	—	%	(2)%	$84	$81	4	%
Metrics:												
Average loans	$43,786	$45,004	$45,844	$46,222	$45,822	(3)%		(4)%	$44,395	$45,448	(2)%	
Average deposits	$221,998	$215,707	$229,241	$232,250	$238,404	3	%	(7)%	$218,852	$236,972	(8)%	
AUC/A at period end (in trillions) (c)	$29.5	$29.1	$28.9	$28.5	$28.6	1	%	3 %	$29.5	$28.6	3	%
Market value of securities on loan at period end (in billions) (d)	$278	$300	$277	$288	$283	(7)%		(2)%	$278	$283	(2)%	
Asset servicing:												
Estimated new business wins (AUC/A) (in billions)	$167	$40	$49	$84	$933							
Depositary Receipts:												
Number of sponsored programs	1,112	1,131	1,145	1,176	1,206	(2)%		(8)%				

Clearing services:								
Average active clearing accounts (U.S. platform) (in thousands)	5,946	5,947	5,959	6,107	6,046	—	%	(2)%
Average long-term mutual fund assets (U.S. platform)	$431,150	$415,025	$437,260	$447,287	$466,195	4	%	(8)%
Average investor margin loans (U.S. platform)	$10,633	$11,063	$11,575	$11,806	$11,890	(4)%		(11)%
Broker-Dealer:								
Average tri-party repo balances (in billions)	$2,108	$2,104	$2,153	$2,142	$2,174	—	%	(3)%

(a) Other revenue includes investment management fees, financing-related fees, distribution and servicing revenue and investment and other income.

(b) Investment services fees as a percentage of noninterest expense (ex. amortization of intangible assets) was lower in 2Q15 primarily reflecting litigation expense.

(c) Includes the AUC/A of CIBC Mellon of $1.1 trillion at June 30, 2016 and March 31, 2016, $1.0 trillion at Dec. 31, 2015 and Sept. 30, 2015 and $1.1 trillion at June 30, 2015.

(d) Represents the total amount of securities on loan managed by the Investment Services business. Excludes securities for which BNY Mellon acts as agent on behalf of CIBC Mellon clients, which totaled $56 billion at June 30, 2016 and March 31, 2016, $55 billion at Dec. 31, 2015, $61 billion at Sept. 30, 2015 and $68 billion at June 30, 2015.

N/M - Not meaningful.

Business description

Our Investment Services business provides global custody and related services, government clearing, global collateral services, corporate trust and depositary receipt and clearing services, as well as global payment/working capital solutions to global financial institutional clients.

Our comprehensive suite of financial solutions includes: global custody, global fund services, securities lending, investment manager outsourcing, performance and risk analytics, alternative investment services, securities clearance, collateral management, corporate trust, American and global depositary receipt programs, cash management solutions, payment services, liquidity services and other linked revenues, principally foreign exchange, global clearing and execution, managed account services and global prime brokerage solutions. Our clients include corporations, public funds and government agencies, foundations and endowments; global financial institutions including banks, broker-dealers, asset managers, insurance companies and central banks; financial intermediaries and independent registered investment advisors; hedge fund managers; and funds that we manage through our Investment Management business. We help our clients service their financial assets through a network of offices and service delivery centers in 35 countries across six continents.

The results of this business are driven by a number of factors, which include: the level of transaction activity; the range of services provided, which may include custody, accounting, fund administration, daily valuations, performance measurement and risk analytics, securities lending, and investment manager back-office outsourcing; the number of accounts; and the market value of assets under custody and/or administration. Market interest rates impact both securities lending revenue and the earnings on client balances. Business expenses are driven by staff, technology investment, equipment and space required to support the services provided by the business and the cost of execution, clearance and custody of securities.

We are one of the leading global securities servicing providers with $29.5 trillion of AUC/A at June 30, 2016. We are one of the largest custodians for U.S. corporate and public pension plans and we service 50% of the top-50 endowments. We are a leading custodian in the UK, servicing around a fifth of UK pensions that require a custodian, and with

approximately 20% of such assets for the sector in our custody. Globalization tends to drive cross-border investment and capital flows, which increases the opportunity to provide solutions to our clients. The changing regulatory environment is also driving client demand for new solutions and services.

BNY Mellon is a leader in both global and U.S. Government securities clearance. We settle securities transactions in over 100 markets and handle most of the transactions cleared through the Federal Reserve Bank of New York for 19 of the 23 primary dealers. We are a leader in servicing tri-party collateral with approximately $2.1 trillion serviced globally. We currently service approximately $1.3 trillion, or approximately 85%, of the $1.6 trillion tri-party repo market in the U.S.

Global Collateral Services serves broker-dealers and institutional investors facing expanding collateral management needs as a result of current and emerging regulatory and market requirements. Global Collateral Services brings together BNY Mellon’s global capabilities in segregating, optimizing, financing and transforming collateral on behalf of clients, including its market leading broker-dealer collateral management, securities lending, collateral financing, liquidity and derivatives services teams.

In securities lending, we are one of the largest lenders of U.S. Treasury securities and depositary receipts and service a lending pool of approximately $3.0 trillion in 33 markets.

We served as depositary for 1,112 sponsored American and global depositary receipt programs at June 30, 2016, acting in partnership with leading companies from 63 countries - an estimated 57% global market share.

Pershing and its affiliates provide business solutions to approximately 1,500 financial organizations globally by delivering dependable operational support, robust trading services, flexible technology and an expansive array of investment solutions, practice management support and service excellence.

Role of BNY Mellon, as a trustee, for mortgage-backed securitizations

BNY Mellon acts as trustee and document custodian for certain mortgage-backed security ("MBS") securitization trusts. The role of trustee for MBS securitizations is limited; our primary role as trustee

is to calculate and distribute monthly bond payments to bondholders. As a document custodian, we hold the mortgage, note, and related documents provided to us by the loan originator or seller and provide periodic reporting to these parties. BNY Mellon, either as document custodian or trustee, does not receive mortgage underwriting files (the files that contain information related to the creditworthiness of the borrower). As trustee or custodian, we have no responsibility or liability for the quality of the portfolio; we are liable only for performance of our limited duties as described above and in the trust documents. BNY Mellon is indemnified by the servicers or directly from trust assets under the governing agreements. BNY Mellon may appear as the named plaintiff in legal actions brought by servicers in foreclosure and other related proceedings because the trustee is the nominee owner of the mortgage loans within the trusts.

BNY Mellon also has been named as a defendant in legal actions brought by MBS investors alleging that the trustee has expansive duties under the governing agreements, including to investigate and pursue claims against other parties to the MBS transaction. For additional information on our legal proceedings related to this matter, see Note 17 of the Notes to Consolidated Financial Statements.

Review of financial results

AUC/A totaled $29.5 trillion, an increase from $28.6 trillion at June 30, 2015. The increase was primarily driven by net new business and higher market values, partially offset by the unfavorable impact of a stronger U.S. dollar. AUC/A consisted of 34% equity securities and 66% fixed income securities at June 30, 2016 compared with 36% equity securities and 64% fixed income securities at June 30, 2015.

Investment services fees were $1.8 billion, flat compared with the second quarter of 2015 and an increase of 1% compared with the first quarter of 2016 (unannualized) reflecting the following factors:

- Asset servicing fees (global custody, broker-dealer services and Global Collateral Services) were $1.043 billion compared with $1.038 billion in the second quarter of 2015 and $1.016 billion in the first quarter of 2016. The year-over-year increase primarily reflects net new business and higher money market fees, partially offset by lower market values and the unfavorable impact of a stronger U.S. dollar. The sequential increase primarily reflects higher market values and net new business.
- Clearing services fees were $350 million compared with $346 million in the second quarter of 2015 and $348 million in the first quarter of 2016. The year-over-year increase was primarily driven by higher money market fees, partially offset by the impact of lost business. Sequentially, higher average balances and the increase in the number of trading days were partially offset by lower volumes.
- Issuer services fees (Corporate Trust and Depositary Receipts) were $233 million compared with $234 million in the second quarter of 2015 and $244 million in the first quarter of 2016. Both comparisons reflect lower Depositary Receipts revenue. Year-over-year, issuer services fees also reflect higher money market fees in Corporate Trust.
- Treasury services fees were $137 million compared with $141 million in the second quarter of 2015 and $129 million in the first quarter of 2016. The year-over-year decrease primarily reflects higher compensating balance credits provided to clients, which shifts revenue from fees to net interest revenue. The sequential increase primarily reflects higher payment volumes due to an increase in the number of trading days.

Foreign exchange and other trading revenue totaled $161 million compared with $181 million in the second quarter of 2015 and $168 million in the first quarter of 2016. The year-over-year decrease primarily reflects lower volumes. The sequential decrease primarily reflects the continued trend of clients migrating to lower margin products.

Other revenue was $130 million compared with $117 million in the second quarter of 2015 and $125 million in the first quarter of 2016. The year-over-year increase primarily reflects increased payments from Investment Management related to higher money market fees, partially offset by certain fees paid to introducing brokers. The sequential

increase primarily reflects higher financing-related fees.

Net interest revenue was $690 million compared with $667 million in the second quarter of 2015 and $679 million in the first quarter of 2016. The year-over-year increase primarily reflects the impact of changes in the internal crediting rates for deposits, partially

offset by lower average deposits. The sequential increase primarily reflects higher average deposits.

Noninterest expense, excluding amortization of intangible assets, was $1.82 billion compared with $1.87 billion in the second quarter of 2015 and $1.77 billion in the first quarter of 2016. The year-over-year decrease primarily reflects lower litigation expense, partially offset by higher staff expense. The sequential increase primarily reflects higher staff expense, partially offset by lower litigation expense.

Year-to-date 2016 compared with year-to-date 2015

Income before taxes totaled $1.8 billion in the first six months of 2016 compared with $1.6 billion in the first six months of 2015. Excluding intangible amortization, income before taxes increased $184 million. Fee and other revenue decreased slightly as higher investment servicing fees and other revenue were offset by lower foreign exchange and other trading revenue. The $73 million increase in net interest revenue primarily reflects the impact of changes in the internal crediting rates for deposits, partially offset by lower average deposits. Noninterest expense, excluding intangible amortization, decreased $107 million primarily due to lower litigation, professional, legal and other purchased services and staff expenses.

Other segment

						Year-to-date	
(dollars in millions)	2Q16	1Q16	4Q15	3Q15	2Q15	2016	2015
Revenue:							
Fee and other revenue	$95	$129	$89	$59	$103	$224	$188
Net interest (expense) revenue	(5)	4	12	14	35	(1)	59
Total revenue	90	133	101	73	138	223	247
Provision for credit losses	(3)	(3)	159	(7)	(15)	(6)	(19)
Noninterest expense (ex. amortization of intangible assets and M&I and restructuring charges (recoveries))	53	141	150	97	79	194	187
Income (loss) before taxes (ex. amortization of intangible assets and M&I and restructuring charges (recoveries))	40	(5)	(208)	(17)	74	35	79
Amortization of intangible assets	—	—	—	1	—	—	1
M&I and restructuring charges (recoveries)	3	(1)	(4)	(2)	8	2	4
Income (loss) before taxes	$37	$(4)	$(204)	$(16)	$66	$33	$74
Average loans and leases	$1,703	$1,917	$2,673	$2,656	$2,956	$1,810	$2,099

See page 20 of our first quarter 2016 Form 10-Q for a description of the Other segment.

Review of financial results

Total fee and other revenue decreased $8 million compared with the second quarter of 2015 and $34 million compared with the first quarter of 2016. Both decreases primarily reflect lower lease-related gains. The year-over-year decrease was partially offset by the positive impact of foreign currency hedging activities and higher fixed income trading.

Net interest revenue decreased $40 million compared with the second quarter of 2015 and $9 million compared with the first quarter of 2016. Both decreases reflect lower average loans and leases. The year-over-year decrease also reflects the negative impact of interest rate hedging and higher premium

amortization adjustments related to the decrease in interest rates.

Noninterest expense, excluding amortization of intangible assets, M&I and restructuring charges (recoveries), decreased $26 million compared with the second quarter of 2015 and $88 million compared with the first quarter of 2016. Both comparisons were impacted by lower staff expense and professional, legal and other purchased services.

Year-to-date 2016 compared with year-to-date 2015

Income before taxes in the Other segment was $33 million in the first six months of 2016 compared with $74 million in the first six months of 2015. Total revenue decreased $24 million primarily reflecting lower net interest revenue, the impact of the July 2015 sale of Meriten and lower other revenue,

partially offset by the positive impact of foreign currency hedging activities and higher fixed income trading revenue. Noninterest expense, excluding amortization of intangible assets, M&I and restructuring charges, increased $7 million, primarily reflecting higher staff expense partially offset by lower professional, legal and other purchased services and business development expense.

Critical accounting estimates

Our significant accounting policies are described in Note 1 of the Notes to Consolidated Financial Statements in our 2015 Annual Report. Our critical accounting estimates are those related to the allowance for loan losses and allowance for lending-related commitments, fair value of financial instruments and derivatives, other-than-temporary impairment ("OTTI"), goodwill and other intangibles, and pension accounting, as referenced below.

Critical policy	Reference
Allowance for loan losses and allowance for lending-related commitments	2015 Annual Report, pages 33 - 35.
Fair value of financial instruments and derivatives	2015 Annual Report, pages 35 - 37.
OTTI	2015 Annual Report, page 37.
Goodwill and other intangibles	2015 Annual Report, pages 37 - 38 and Note 5 beginning on page 76.
Pension accounting	2015 Annual Report, pages 38 - 40.

Consolidated balance sheet review

At June 30, 2016, total assets were $372 billion compared with $394 billion at Dec. 31, 2015. The decrease in total assets was primarily driven by lower customer deposits. Deposits totaled $260 billion at June 30, 2016 and $280 billion at Dec. 31, 2015. At June 30, 2016, total interest-bearing deposits were 51% of total interest-earning assets, compared with 54% at Dec. 31, 2015.

Total assets averaged $374 billion in the second quarter of 2016 compared with $378 billion in the second quarter of 2015 and $365 billion in the first quarter of 2016. The decrease in average total assets compared with the second quarter of 2015 was primarily driven by lower customer deposits. The increase in average total assets compared with the

first quarter of 2016 was primarily driven by higher customer deposits and commercial paper.

Total deposits averaged $249 billion in the second quarter of 2016 compared with $256 billion in the second quarter of 2015 and $245 billion in the first quarter of 2016. The year-over-year decrease in average total deposits primarily reflects a decrease in deposits located in foreign offices and demand deposits. The sequential increase primarily reflects higher levels of time deposits and noninterest-bearing deposits, partially offset by a decrease in deposits located in foreign offices.

At June 30, 2016, we had $41 billion of liquid funds (which include interest-bearing deposits with banks and federal funds sold and securities purchased under resale agreements) and $94 billion of cash (including $88 billion of overnight deposits with the Federal Reserve and other central banks) for a total of $135 billion of available funds. This compares with available funds of $159 billion at Dec. 31, 2015. The decrease in available funds primarily reflects the decrease of overnight deposits with the Federal Reserve and other central banks.

Total available funds as a percentage of total assets was 36% at June 30, 2016 compared with 40% at Dec. 31, 2015. Of the $41 billion in liquid funds held at June 30, 2016, $13 billion was placed in interest-bearing deposits with large,

highly-rated global financial institutions with a weighted-average life to maturity of approximately 40 days. Of the $13 billion, $4 billion was placed with banks in the Eurozone.

Investment securities were $117.6 billion, or 32% of total assets, at June 30, 2016, compared with $119.2 billion, or 30% of total assets, at Dec. 31, 2015. The decrease primarily reflects a decrease in sovereign debt/sovereign guaranteed, agency RMBS and other asset-backed securities, partially offset by an increase in agency commercial MBS.

Loans were $64.5 billion, or 17% of total assets, at June 30, 2016, compared with $63.7 billion, or 16% of total assets, at Dec. 31, 2015. The increase primarily reflects higher levels of overdrafts and wealth management loans and mortgages, partially offset by lower levels of loans to financial institutions.

Long-term debt totaled $23.6 billion at June 30, 2016 and $21.5 billion at Dec. 31, 2015. The increase reflects the issuance of $3.0 billion of senior debt and an increase in the fair value of hedged long-term debt, partially offset by the maturity of $1.45 billion of long-term debt. The Parent has $1.0 billion of long-term debt that will mature in the remainder of 2016.

The Bank of New York Mellon Corporation total shareholders' equity increased to $38.6 billion from $38.0 billion at Dec. 31, 2015. The increase primarily reflects earnings retention, approximately $308 million resulting from stock awards, the exercise of stock options and stock issued for employee benefit plans, and an increase in the unrealized gain on our investment securities portfolio. The increase was partially offset by share repurchases and foreign currency translation adjustments.

Country risk exposure

We have exposure to certain countries and territories that have had a heightened focus due to recent events. Where appropriate, we offset the credit risk associated with the exposure in these countries with collateral that has been pledged, which primarily consists of cash or marketable securities, or by transferring the risk to a third-party guarantor in another country or territory. Exposure described below reflects the country of operations and risk of the immediate counterparty. We continue to monitor our exposure to these and other countries as part of our Risk Management process. See "Risk management" in our 2015 Annual Report for additional information on how our exposures are managed.

BNY Mellon has a limited economic interest in the performance of assets of consolidated investment management funds, and therefore they are excluded from this disclosure.

Ireland, Italy, Spain, Portugal and Greece

Over the past several years, there have been concerns about European sovereign debt and its impact on the European banking system, as a number of European countries, including Ireland, Italy, Spain, Portugal and Greece, experienced credit deterioration. We had total net exposure to Ireland, Italy and Spain of $5.3 billion at June 30, 2016 including $1.7 billion to Ireland, $1.5 billion to Italy and $2.1 billion to Spain. The total net exposure was $4.9 billion at Dec. 31,

2015, including $1.3 billion to Ireland, $1.6 billion to Italy and $2.0 billion to Spain. Exposure to Ireland, Italy and Spain at both periods primarily consisted of investment grade sovereign debt and European Floating Rate notes. At June 30, 2016, investment securities exposure totaled $901 million in Ireland, $1.4 billion in Italy and $2.0 billion in Spain. At Dec. 31, 2015, investment securities exposure totaled $895 million in Ireland, $1.4 billion in Italy and $2.0 billion in Spain. At June 30, 2016, BNY Mellon had exposure of $3 million to Portugal and less than $1 million to Greece. At Dec. 31, 2015, we had exposure of less than $1 million to Portugal and Greece.

Brazil

Current conditions in Brazil have resulted in increased focus on its economic and political stability. We have operations in Brazil providing investment services and investment management services. In addition, at June 30, 2016 and Dec. 31, 2015, we had total net exposure to Brazil of $1.9 billion and $2.2 billion, respectively. This included $1.8 billion and $2.1 billion, respectively, in loans, which are primarily short-term trade finance loans extended to large financial institutions. At June 30, 2016, we held $76 million of noninvestment grade sovereign debt and at Dec. 31, 2015, we held $95 million of investment grade sovereign debt.

Russia

Events in Russia significantly increased geopolitical tensions in Central and Eastern Europe. We provide investment services for companies in Russia, including acting as depositary for a significant number of depositary receipt clients, and investment management services primarily through our noncontrolling interest in an asset manager. At June 30, 2016 and Dec. 31, 2015, our exposure to Russia was $34 million and $63 million, respectively. To date, our businesses with Russian exposure have not been materially impacted by the ongoing tensions, sanctions or impact of the volatility in oil prices.

Puerto Rico

Recent concerns regarding financial conditions in Puerto Rico have resulted in increased focus on its ability to repay its debt. At June 30, 2016 and Dec. 31, 2015, BNY Mellon had margin loan exposure of approximately $45 million and $50 million,

respectively, where the collateral received has a concentration of Puerto Rican securities. We have increased our margin requirements and believe the impact of potential negative outcomes in Puerto Rico would not be material.

Turkey

Recent political events have increased our scrutiny of exposures to Turkish institutions. We mainly provide treasury and issuer services, as well as foreign exchange products to the top-ten largest financial institutions in the country. As of June 30, 2016, our exposure totaled $818 million, consisting primarily of syndicated credit facilities and trade finance loans.

Investment securities

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

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

Investment securities portfolio	March 31, 2016	2Q16 change in unrealized gain (loss)	June 30, 2016				Ratings				
(dollars in millions)	Fair value		Amortized cost	Fair value	Fair value as a % of amortized cost (a)	Unrealized gain (loss)	AAA/ AA-	A+/ A-	BBB+ to BBB-	BB+ and lower	Not rated
Agency RMBS	$49,870	$157	$48,947	$49,506	101%	$559	100%	—%	—%	—%	—%
U.S. Treasury	23,870	110	23,716	23,893	101	177	100	—	—	—	—
Sovereign debt/sovereign guaranteed (b)	15,866	56	15,309	15,605	102	296	73	5	22	—	—
Non-agency RMBS (c)	1,685	(19)	1,237	1,529	80	292	—	1	1	90	8
Non-agency RMBS	862	4	789	797	93	8	8	3	17	71	1
European floating rate notes (d)	1,244	(2)	1,137	1,104	97	(33)	65	30	5	—	—
Commercial MBS	6,003	46	6,250	6,316	101	66	98	2	—	—	—
State and political subdivisions	3,740	19	3,657	3,765	103	108	80	17	—	—	3
Foreign covered bonds (e)	2,279	7	2,334	2,376	102	42	100	—	—	—	—
Corporate bonds	1,737	9	1,554	1,610	104	56	15	69	16	—	—
CLOs	2,424	5	2,494	2,482	100	(12)	100	—	—	—	—
U.S. Government agencies	1,881	(6)	1,904	1,889	99	(15)	100	—	—	—	—
Consumer ABS	2,408	6	2,460	2,454	100	(6)	100	—	—	—	—
Other (f)	3,893	—	3,949	4,002	101	53	54	—	43	—	3
Total investment securities	$117,762 (g)	$392	$115,737	$117,328 (g)	101%	$1,591 (g)(h)	91%	2%	5%	2%	—%

(a) Amortized cost before impairments.

(b) Primarily consists of exposure to UK, France, Germany, Spain and Italy.

(c) These RMBS were included in the former Grantor Trust and were marked-to-market in 2009. We believe these RMBS would receive higher credit ratings if these ratings incorporated, as additional credit enhancements, the difference between the written-down amortized cost and the current face amount of each of these securities.

(d) Includes RMBS and commercial MBS. Primarily consists of exposure to UK and Netherlands.

(e) Primarily consists of exposure to Canada, UK, Norway and Netherlands.

(f) Includes commercial paper with a fair value of $1.7 billion and $1.7 billion and money market funds with a fair value of $862 million and $865 million at March 31, 2016 and June 30, 2016, respectively.

(g) Includes net unrealized losses on derivatives hedging securities available-for-sale of $763 million at March 31, 2016 and $1,023 million at June 30, 2016.

(h) Unrealized gains of $840 million at June 30, 2016 related to available-for-sale securities.

The fair value of our investment securities portfolio was $117.3 billion at June 30, 2016 compared with $118.8 billion at Dec. 31, 2015. The decrease primarily reflects a decrease in sovereign debt/sovereign guaranteed, consumer ABS and state and

political subdivisions, partially offset by an increase in commercial MBS.

At June 30, 2016, the total investment securities portfolio had a net unrealized pre-tax gain of $1.6 billion compared with $357 million at Dec. 31, 2015,

including the impact of related hedges. The increase in the net unrealized pre-tax gain was primarily driven by a decline in market interest rates.
The unrealized gain net of tax on our available-for-sale investment securities portfolio included in accumulated other comprehensive income was $583 million at June 30, 2016, compared with $329 million at Dec. 31, 2015.

At June 30, 2016, 91% of the securities in our portfolio were rated AAA/AA- compared with 90% at Dec. 31, 2015.

We routinely test our investment securities for OTTI. See “Critical accounting estimates” for additional information regarding OTTI.

The following table presents the amortizable purchase premium (net of discount) related to the investment securities portfolio and accretable discount related to the 2009 restructuring of the investment securities portfolio.

Net premium amortization and discount accretion of investment securities (a)

(dollars in millions)	2Q16	1Q16	4Q15	3Q15	2Q15
Amortizable purchase premium (net of discount) relating to investment securities:					
Balance at period end	$2,251	$2,233	$2,319	$2,433	$2,492
Estimated average life remaining at period end (in years)	4.4	4.5	4.7	4.6	4.7
Amortization	$169	$163	$161	$176	$183
Accretable discount related to the prior restructuring of the investment securities portfolio:					
Balance at period end	$342	$325	$355	$401	$420
Estimated average life remaining at period end (in years)	5.9	6.0	6.1	6.0	6.0
Accretion	$26	$27	$29	$33	$32

(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.

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

Net securities gains (losses)

(in millions)	2Q16	1Q16	2Q15	YTD16	YTD15
Agency RMBS	$ 5	$ 8	$ 1	$ 13	$ 1
Foreign covered bonds	—	10	1	10	1
U.S. Treasury	4	1	11	5	34
Non-agency RMBS	4	(2)	(1)	2	(2)
Other	8	3	4	11	6
Total net securities gains	$ 21	$ 20	$ 16	$ 41	$ 40

On a quarterly basis, we perform our impairment analysis using several factors, including projected loss severities and default rates. In the second quarter of 2016, this analysis resulted in other-than-temporary credit losses of $2 million primarily in our non-agency RMBS portfolio. At June 30, 2016, if we were to increase or decrease each of our projected loss severities and default rates by 100 basis points on each of the positions in our non-agency RMBS portfolio, including the securities previously held by the Grantor Trust, credit-related impairment charges on these securities would have increased or decreased

by less than $1 million (pre-tax). See Note 3 of the Notes to Consolidated Financial Statements for the projected weighted-average default rates and loss severities.

The following table shows the fair value of the European floating rate notes by geographical location at June 30, 2016. The unrealized loss on these securities was $33 million at June 30, 2016, compared with $24 million at Dec. 31, 2015.

European floating rate notes at June 30, 2016 (a)

(in millions)	RMBS	Other	Total fair value
United Kingdom	$612	$ 62	$674
Netherlands	316	—	316
Ireland	113	—	113
Other	1	—	1
Total fair value	$1,042	$ 62	$1,104

(a) 65% of these securities are in the AAA to AA- ratings category.

See Note 14 of the Notes to Consolidated Financial Statements for details of securities by level in the fair value hierarchy.

Loans

Total exposure – consolidated	June 30, 2016			Dec. 31, 2015		
(in billions)	Loans	Unfunded commitments	Total exposure	Loans	Unfunded commitments	Total exposure
Non-margin loans:						
Financial institutions	$14.2	$ 34.6	$ 48.8	$15.9	$ 36.0	$ 51.9
Commercial	2.7	17.8	20.5	2.3	18.2	20.5
Subtotal institutional	16.9	52.4	69.3	18.2	54.2	72.4
Wealth management loans and mortgages	14.5	1.3	15.8	13.3	1.6	14.9
Commercial real estate	4.4	3.2	7.6	3.9	3.3	7.2
Lease financings	1.8	—	1.8	1.9	—	1.9
Other residential mortgages	1.0	0.1	1.1	1.1	—	1.1
Overdrafts	6.1	—	6.1	4.5	—	4.5
Other	1.2	—	1.2	1.2	—	1.2
Subtotal non-margin loans	45.9	57.0	102.9	44.1	59.1	103.2
Margin loans	18.6	0.5	19.1	19.6	0.6	20.2
Total	$64.5	$ 57.5	$ 122.0	$63.7	$ 59.7	$ 123.4

At June 30, 2016, total exposures were $122.0 billion, a decrease of 1% from $123.4 billion at Dec. 31, 2015. The decrease in total exposure primarily reflects lower exposure in the financial institutions and the margin loans portfolios, partially offset by increases in overdrafts and exposure in the wealth management loans and mortgages and the commercial real estate portfolios.

Our financial institutions and commercial portfolios comprise our largest concentrated risk. These portfolios comprised 57% of our total lending exposure at June 30, 2016 and 59% at Dec. 31, 2015. Additionally, a substantial portion of our overdrafts relate to financial institutions.

Financial institutions

The diversity of the financial institutions portfolio is shown in the following table.

Financial institutions portfolio exposure	June 30, 2016					Dec. 31, 2015		
(dollar amounts in billions)	Loans	Unfunded commitments	Total exposure	% Inv. grade	% due <1 yr	Loans	Unfunded commitments	Total exposure
Securities industry	$3.7	$ 20.2	$ 23.9	98 %	99 %	$3.1	$ 20.6	$ 23.7
Banks	7.4	2.1	9.5	67	89	9.4	2.1	11.5
Asset managers	1.6	5.8	7.4	99	83	2.0	5.6	7.6
Insurance	0.1	3.9	4.0	99	29	0.2	4.5	4.7
Government	0.1	1.2	1.3	93	41	0.1	1.9	2.0
Other	1.3	1.4	2.7	93	36	1.1	1.3	2.4
Total	$14.2	$ 34.6	$ 48.8	92 %	84 %	$15.9	$ 36.0	$ 51.9

The financial institutions portfolio exposure was $48.8 billion at June 30, 2016, compared with $51.9 billion at Dec. 31, 2015. The decrease primarily reflects lower loans in the banks portfolio and lower unfunded commitments in the

government and insurance portfolios.

Financial institution exposures are high-quality, with 92% of the exposures meeting the investment grade equivalent criteria of our internal credit rating classification at June 30, 2016. 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. The exposure to financial institutions is generally short-term. Of these exposures, 84% expire within one year and 19% expire within 90 days. In addition, 80% of the financial institutions exposure is secured. For example, securities industry clients and asset managers often borrow against marketable securities held in custody.

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.

Our bank exposure primarily relates to our global trade finance. These exposures are short-term in nature with 89% due in less than one year. The investment grade percentage of our bank exposure was 67% at June 30, 2016, compared with 86% at Dec. 31, 2015. The decrease in the investment grade

percentage reflects the impact of the downgrade in the sovereign rating of Brazil to noninvestment grade. Our exposure in Brazil includes $1.8 billion in loans, which are primarily short-term trade finance loans extended to large financial institutions.

The asset manager portfolio exposures are high-quality with 99% of the exposures meeting our investment grade equivalent ratings criteria as of June 30, 2016. These exposures are generally short-term liquidity facilities, with the vast majority to regulated mutual funds.

Commercial

The diversity of the commercial portfolio is presented in the following table.

Commercial portfolio exposure	June 30, 2016					Dec. 31, 2015		
(dollar amounts in billions)	Loans	Unfunded commitments	Total exposure	% Inv. grade	% due <1 yr	Loans	Unfunded commitments	Total exposure
Services and other	$1.0	$ 6.1	$ 7.1	95 %	22 %	$0.8	$ 5.5	$ 6.3
Manufacturing	0.8	5.7	6.5	92	13	0.6	6.3	6.9
Energy and utilities	0.6	4.7	5.3	94	10	0.6	4.9	5.5
Media and telecom	0.3	1.3	1.6	94	1	0.3	1.5	1.8
Total	$2.7	$ 17.8	$ 20.5	94 %	14 %	$2.3	$ 18.2	$ 20.5

The commercial portfolio exposure was $20.5 billion at June 30, 2016 and Dec. 31, 2015, reflecting an increase in exposure in the services and other portfolio, offset by decreases in exposure in the remaining portfolios.

Utilities-related exposure represents approximately three-quarters of the energy and utilities portfolio. The remaining exposure in the energy and utilities portfolio, which includes exposure to refining, integrated companies, exploration and production companies and pipelines, was 78% investment grade at June 30, 2016, compared with 94% at Dec. 31, 2015.

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	June 30, 2016	March 31, 2016	Dec. 31, 2015	Sept. 30, 2015	June 30, 2015
Financial institutions	92 %	93 %	96 %	96 %	96 %
Commercial	94 %	93 %	94 %	94 %	95 %

Our credit strategy is to focus on investment grade names to support cross-selling opportunities. The execution of our strategy has resulted in 92% of our financial institutions portfolio and 94% of our commercial portfolio rated as investment grade at June 30, 2016.

Wealth management loans and mortgages

Our wealth management exposure was $15.8 billion at June 30, 2016, compared with $14.9 billion at Dec. 31, 2015. 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 61% at origination. In the wealth management portfolio, less than 1% of the mortgages were past due at June 30, 2016.

At June 30, 2016, the wealth management mortgage portfolio consisted of the following geographic concentrations: California - 23%; New York - 21%; Massachusetts - 13%; Florida - 8%; and other - 35%.

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. 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. Our commercial real estate exposure totaled $7.6 billion at June 30, 2016, compared with $7.2 billion at Dec. 31, 2015.

At June 30, 2016, 63% of our commercial real estate portfolio was secured. The secured portfolio is diverse by project type, with 47% secured by residential buildings, 32% secured by office buildings, 13% secured by retail properties and 8% secured by other categories. Approximately 97% of the unsecured portfolio consists of real estate investment trusts (“REITs”), which are predominantly investment grade, and real estate operating companies.

At June 30, 2016, our commercial real estate portfolio consists of the following concentrations: New York metro - 42%; REITs and real estate operating companies - 36%; and other - 22%.

Lease financings

The leasing portfolio exposure totaled $1.8 billion at June 30, 2016, compared with $1.9 billion at Dec. 31, 2015. At June 30, 2016, approximately 90% of the leasing portfolio exposure was investment grade, or investment grade equivalent.

At June 30, 2016, the lease financing portfolio consisted of exposures backed by well-diversified assets, primarily large-ticket transportation equipment.

Other residential mortgages

The other residential mortgages portfolio primarily consists of 1-4 family residential mortgage loans and totaled $1.1 billion at June 30, 2016 and Dec. 31, 2015. Included in this portfolio at June 30, 2016 are

$252 million of mortgage loans purchased in 2005, 2006 and the first quarter of 2007 that are predominantly prime mortgage loans, with a small portion of Alt-A loans. As of June 30, 2016, the purchased loans in this portfolio had a weighted-average loan-to-value ratio of 76% at origination and 14% of the serviced loan balance was at least 60 days delinquent. The properties securing the prime and Alt-A mortgage loans were located (in order of concentration) in California, Florida, Virginia, the tri-state area (New York, New Jersey and Connecticut) and Maryland.

To determine the projected loss on the prime and Alt-A mortgage portfolios, we calculate the total estimated defaults of these mortgages and multiply that amount by an estimate of realizable value upon sale in the marketplace (severity).

Overdrafts

Overdrafts primarily relate to custody and securities clearance clients. Overdrafts occur on a daily basis in the custody and securities clearance business 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 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. Margin loans included $7.4 billion at June 30, 2016 and $7.8 billion at Dec. 31, 2015 of loans related to a term loan program that offers fully collateralized loans to broker-dealers.

Asset quality and allowance for credit losses

Over the past several years, we have improved our risk profile through greater focus on clients who are active users of our non-credit services, de-emphasizing broad-based loan growth. Our primary exposure to the credit risk of a customer consists of funded loans, unfunded formal contractual commitments to lend, standby letters of credit and overdrafts associated with our custody and securities clearance businesses.

The role of credit has shifted to one that complements our other services instead of as a lead product. We believe credit solidifies customer relationships and,

through a disciplined allocation of capital, can earn acceptable rates of return as part of an overall relationship.

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

Allowance for credit losses activity (dollar amounts in millions)	June 30, 2016	March 31, 2016	Dec. 31, 2015	June 30, 2015
Margin loans	$18,594	$18,818	$19,573	$20,449
Non-margin loans	45,601	42,421	43,708	42,425
Total loans	$64,195	$61,239	$63,281	$62,874
Beginning balance of allowance for credit losses	$287	$275	$280	$283
Provision for credit losses	(9)	10	163	(6)
Net recoveries (charge-offs):				
Other residential mortgages	1	2	2	—
Foreign	1	—	—	—
Financial institutions	—	—	(170)	1
Net recoveries (charge-offs)	2	2	(168)	1
Ending balance of allowance for credit losses	$280	$287	$275	$278
Allowance for loan losses	$158	$162	$157	$183
Allowance for lending-related commitments	122	125	118	95
Allowance for loan losses as a percentage of total loans	0.25%	0.26%	0.25%	0.29%
Allowance for loan losses as a percentage of non-margin loans	0.35	0.38	0.36	0.43
Total allowance for credit losses as a percentage of total loans	0.44	0.47	0.43	0.44
Total allowance for credit losses as a percentage of non-margin loans	0.61	0.68	0.63	0.66

Net recoveries of $2 million in the second quarter of 2016 were reflected in the other residential mortgage and foreign portfolios. Net recoveries were $2 million in the first quarter of 2016 and $1 million in the second quarter of 2015.

The provision for credit losses was a credit of $9 million in the second quarter of 2016 driven by improved quality of the credit portfolio. The provision for credit losses was $10 million in the first quarter of 2016 and a credit of $6 million in the second quarter of 2015.

The total allowance for credit losses was $280 million at June 30, 2016, $275 million at Dec. 31, 2015 and $278 million at June 30, 2015. The ratio of the total allowance for credit losses to non-margin loans was 0.61% at June 30, 2016, 0.63% at Dec. 31, 2015 and 0.66% at June 30, 2015. The ratio of the allowance for loan losses to non-margin loans was 0.35% at June 30, 2016 compared with 0.36% at Dec. 31, 2015 and 0.43% at June 30, 2015.

We had $18.6 billion of secured margin loans on our balance sheet at June 30, 2016 compared with $19.6 billion at Dec. 31, 2015 and $20.4 billion at June 30, 2015. We have rarely suffered a loss on these types of loans and do not allocate any of our allowance for credit losses to them. As a result, we believe that the ratio of total allowance for credit losses 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 probable losses inherent in our credit portfolio. This evaluation process is subject to numerous estimates and judgments. For additional information on this process, see “Critical accounting estimates” in our 2015 Annual Report.

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 1 of the Notes to Consolidated Financial Statements, both in our 2015 Annual Report, we have allocated our allowance for credit losses as follows.

Allocation of allowance	June 30, 2016	March 31, 2016	Dec. 31, 2015	June 30, 2015
Commercial	32 %	31 %	30 %	27 %
Commercial real estate	23	22	22	21
Foreign	13	13	13	13
Other residential mortgages	10	11	12	13
Financial institutions	10	11	11	11
Wealth management (a)	7	6	7	8
Lease financing	5	6	5	7
Total	100 %	100 %	100 %	100 %

(a) Includes the allowance for 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 loss.

The credit rating assigned to each credit is a significant variable in determining the allowance. If each credit were rated one grade better, the allowance would have decreased by $70 million, while if each credit were rated one grade worse, the allowance would have increased by $133 million. Similarly, if the loss given default were one rating worse, the allowance would have increased by $44 million, while if the loss given default were one rating better, the allowance would have decreased by $39 million. For impaired credits, if the net carrying value of the loans was 10% higher or lower, the allowance would have decreased or increased by less than $1 million, respectively.

Nonperforming assets

The following table shows the distribution of nonperforming assets.

Nonperforming assets (dollars in millions)	June 30, 2016	March 31, 2016	Dec. 31, 2015
Nonperforming loans:			
Financial institutions	$ 171	$ 171	$ 171
Other residential mortgages	97	99	102
Wealth management loans and mortgages	10	11	11
Lease financings	4	5	—
Commercial real estate	2	2	2
Total nonperforming loans	284	288	286
Other assets owned	5	4	6
Total nonperforming assets	$ 289	$ 292	$ 292
Nonperforming assets ratio	0.45 %	0.48 %	0.46 %
Nonperforming assets ratio, excluding margin loans	0.63	0.69	0.67
Allowance for loan losses/nonperforming loans	55.6	56.3	54.9
Allowance for loan losses/nonperforming assets	54.7	55.5	53.8
Total allowance for credit losses/nonperforming loans	98.6	99.7	96.2

Total allowance for credit losses/nonperforming assets	96.9	98.3	94.2

Nonperforming assets activity (in millions)	June 30, 2016	March 31, 2016	Dec. 31, 2015
Balance at beginning of period	$ 292	$ 292	$ 123
Additions	4	9	347
Return to accrual status	(1)	(1)	(1)
Charge-offs	—	—	(171)
Paydowns/sales	(6)	(8)	(6)
Balance at end of period	$ 289	$ 292	$ 292

Nonperforming assets were $289 million at June 30, 2016, a decrease of $3 million compared with $292 million at Dec. 31, 2015. Nonperforming loans include our claim in the bankruptcy proceedings of

Sentinel. On July 13, 2016, a settlement agreement between BNY Mellon and Sentinel's bankruptcy trustee was accepted by the bankruptcy court. The settlement is expected to result in the release of trust assets to BNY Mellon in the third quarter of 2016 in an amount that exceeds BNY Mellon's carrying value of $171 million.

Deposits

Total deposits were $259.7 billion at June 30, 2016, a decrease of 7% compared with $279.6 billion at Dec. 31, 2015. The decrease in deposits primarily reflects

lower interest-bearing deposits in non-U.S. offices. Noninterest-bearing deposits were $99.0 billion at June 30, 2016 compared with $96.3 billion at Dec. 31, 2015. Interest-bearing deposits were $160.7 billion at June 30, 2016 compared with $183.3 billion at Dec. 31, 2015.

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 other borrowings, for example, securities sold under repurchase agreements, require the delivery of securities as collateral.

See “Liquidity and dividends” for a discussion of long-term debt and liquidity metrics that we monitor.

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)	June 30, 2016	March 31, 2016	June 30, 2015
Maximum month-end balance during the quarter	$23,355	$25,995	$15,052
Average daily balance	$18,204	$18,689	$16,732
Weighted-average rate during the quarter	0.28 %	0.20 %	(0.02)%
Ending balance	$7,611	$14,803	$10,020
Weighted-average rate at period end	0.34 %	0.17 %	0.02 %

Fluctuations of federal funds purchased and securities sold under repurchase agreements between periods resulted from overnight borrowing opportunities. The increase in the weighted-average rates for the second quarter of 2016 compared with the second quarter of 2015 primarily reflects the December 2015 increase in the Fed Funds effective rate.

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

Payables to customers and broker-dealers

	Quarter ended		
(dollars in millions)	June 30, 2016	March 31, 2016	June 30, 2015
Maximum month-end balance during the quarter	$21,642	$22,327	$22,995
Average daily balance (a)	$21,144	$21,864	$22,062
Weighted-average rate during the quarter (a)	0.05 %	0.09 %	0.07 %
Ending balance	$21,172	$22,008	$22,050
Weighted-average rate at period end	0.06 %	0.09 %	0.07 %

(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 $16,935 million in the second quarter of 2016, $16,801 million in the first quarter of 2016 and $11,234 million in the second quarter of 2015.

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

Information related to commercial paper is presented below.

Commercial paper	Quarter ended		
(dollars in millions)	June 30, 2016	March 31, 2016	June 30, 2015
Maximum month-end balance during the quarter	$4,950	$ —	$4,849
Average daily balance	$3,781	$ 22	$2,892
Weighted-average rate during the quarter	0.37 %	0.33 %	0.10 %
Ending balance	$—	$ —	$—
Weighted-average rate at period end	— %	— %	— %

The Parent’s commercial paper program was discontinued in August 2015. In the first quarter of 2016, The Bank of New York Mellon, our largest bank subsidiary, began issuing commercial paper that matures within 364 days from date of issue and is not redeemable prior to maturity or subject to voluntary prepayment.

Information related to other borrowed funds is presented below.

Other borrowed funds	Quarter ended		
(dollars in millions)	June 30, 2016	March 31, 2016	June 30, 2015
Maximum month-end balance during the quarter	$1,098	$ 828	$1,095
Average daily balance	$847	$ 759	$903
Weighted-average rate during the quarter	0.97 %	0.97 %	1.26 %
Ending balance	$1,098	$ 828	$706
Weighted-average rate at period end	0.44 %	1.08 %	1.62 %

Other borrowed funds primarily include overdrafts of sub-custodian account balances in our Investment Services businesses and borrowings under lines of credit by our Pershing subsidiaries. Overdrafts typically relate to timing differences for settlements. Fluctuations in other borrowed funds balances primarily reflect changes in overdrafts of sub-custodian account balances in our Investment Services businesses.

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 rollover or issue new debt, especially during periods of market stress and in order to meet its short-term (up to one year) obligations. 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 flows, without adversely affecting daily operations or our financial condition. Liquidity risk can arise from cash flow mismatches, market constraints from the inability to convert assets to cash, inability to raise cash in the markets, deposit run-off, or contingent liquidity events. We also manage liquidity risks on an intra-day basis, in a manner designed to ensure that we can access required funds during the business day to make payments or settle immediate obligations, often in real time. Changes in economic conditions or exposure to credit, market, operational, legal, and reputational risks also can affect BNY Mellon’s liquidity risk profile and are considered in our liquidity risk framework.

For additional information on our liquidity policy, see “Risk Management - Liquidity risk” in our 2015 Annual Report.

Our overall approach to liquidity management is further described in “Liquidity and dividends” in our 2015 Annual Report.

U.S. regulators have established a liquidity coverage ratio (“LCR”) that requires certain banking organizations, including BNY Mellon, to maintain a minimum amount of unencumbered 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 the Company’s consolidated HQLA and LCR as of June 30, 2016.

Consolidated HQLA and LCR (in billions)	June 30, 2016
Securities (a)	$109
Cash (b)	82
Total consolidated HQLA (c)	$191
Liquidity coverage ratio (d)	106 %

(a) Primarily includes U.S. Treasury, U.S. agency, sovereign securities, securities of U.S. Government-sponsored enterprises, investment-grade corporate debt and publicly traded common equity.
(b) Primarily includes cash on deposit with central banks.
(c) Consolidated HQLA presented before haircuts. After haircuts, consolidated HQLA totaled $170 billion.
(d) Based on our interpretation of the final rule issued by the U.S. federal banking agencies to implement the LCR in the U.S. ("Final LCR Rule").

The U.S. LCR rules became effective on Jan. 1, 2015, and currently require BNY Mellon and our affected domestic bank subsidiaries to meet an LCR of 90%, increasing to 100% when fully phased-in on Jan. 1, 2017. As of June 30, 2016, based on our interpretation of the Final LCR Rule, we believe we and our domestic bank subsidiaries are in compliance with applicable LCR requirements on a fully phased-in basis. We are evaluating the FDIC's revised brokered deposits FAQ issued on June 30, 2016 to determine the implications, if any, on our deposit balances relative to the LCR and other requirements.

For additional information on the LCR, see "Supervision and Regulation - Liquidity Standards - Basel III and U.S. Proposals" in our 2015 Annual Report.

We also perform liquidity stress tests to ensure the Company maintains sufficient liquidity resources under multiple stress scenarios. Stress tests are based on scenarios that measure liquidity risks under

unlikely but plausible events. We perform these tests under various time horizons ranging from one day to one year in a base case, as well as supplemental tests to determine whether the Company's liquidity is sufficient for severe market events and firm-specific events. Under our scenario testing program, the results of the tests indicate that the Company has sufficient liquidity.

Beginning on Jan. 1, 2015, BHCs with total consolidated assets of $50 billion or more were subject to the Federal Reserve's Enhanced Prudential Standards, which include liquidity standards, described under "Supervision and Regulation - Enhanced Prudential Standards" in our 2015 Annual Report. BNY Mellon has taken actions to comply with these standards, including the adoption of various liquidity risk management standards and

maintenance of a liquidity buffer of unencumbered highly liquid assets based on the results of internal liquidity stress testing.

We define available funds for internal liquidity management purposes as liquid funds (which include interest-bearing deposits with banks and federal funds sold and securities purchased under resale agreements), cash and due from banks, and interest-bearing deposits with the Federal Reserve and other central banks. The table below presents our total available funds including liquid funds at period-end and on an average basis. The decrease in available funds at June 30, 2016 compared with Dec. 31, 2015 primarily reflects a decrease in overnight deposits with the Federal Reserve and other central banks, partially offset by an increase in federal funds sold and securities purchased under resale agreements.

Available and liquid funds (in millions)	June 30, 2016	Dec. 31, 2015	Average 2Q16	1Q16	2Q15
Available funds:					
Liquid funds:					
Interest-bearing deposits with banks	$13,303	$15,146	$14,394	$14,909	$20,235
Federal funds sold and securities purchased under resale agreements	28,060	24,373	25,813	23,623	23,545
Total liquid funds	41,363	39,519	40,207	38,532	43,780
Cash and due from banks	5,809	6,537	4,141	3,879	6,785
Interest-bearing deposits with the Federal Reserve and other central banks	88,080	113,203	97,788	89,092	81,846
Total available funds	$135,252	$159,259	$142,136	$131,503	$132,411
Total available funds as a percentage of total assets	36 %	40 %	38 %	36 %	35 %

On an average basis for the first six months of 2016 and the six months ended June 30, 2015, non-core sources of funds, such as money market rate accounts, federal funds purchased and securities sold under repurchase agreements, trading liabilities, commercial paper and other borrowings, were $29.1 billion and $26.0 billion, respectively. The increase primarily reflects an increase in federal funds purchased under repurchase agreements. Average foreign deposits, primarily from our European-based Investment Services business, were $109.1 billion for the first six months of 2016 compared with $108.6 billion for the first six months of 2015. Domestic savings, interest-bearing demand and time deposits averaged $47.2 billion for the first six months of 2016 and $49.6 billion for the first six months of 2015. The decrease primarily reflects lower demand deposits. Average payables to customers and broker-dealers were $16.9 billion for the first six months of 2016 and $11.1 billion for the first six months of 2015. Payables to customers and broker-dealers are driven by customer trading activity and market volatility.

Long-term debt averaged $22.2 billion for the first six months of 2016 and $20.4 billion for the first six months of 2015. Average noninterest-bearing deposits decreased to $83.5 billion for the first six months of 2016 from $87.2 billion for the first six months of 2015, reflecting a decrease in client deposits. 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.

The Parent has three major sources of liquidity:

- cash on hand;
- dividends from its subsidiaries; and
- access to the debt and equity markets.

Subsequent to June 30, 2016, our U.S. bank subsidiaries could declare dividends to the Parent of approximately $4.1 billion, without the need for a regulatory waiver. Currently, The Bank of New York

Mellon, our primary subsidiary, is no longer paying regular dividends to the Parent in order to increase its Tier 1 capital in advance of the SLR becoming effective. In addition, at June 30, 2016, non-bank subsidiaries of the Parent had liquid assets of approximately $1.3 billion.

The Parent's liquidity policy is to have sufficient unencumbered cash and cash equivalents on hand at each quarter-end to meet its forecasted debt redemptions, net interest payments and net tax payments over a minimum of the next 18 months without the need to receive dividends from its bank subsidiaries or issue debt. As of June 30, 2016, the Parent was in compliance with this policy.

In May 2016, BNY Mellon paid a quarterly cash dividend to common shareholders of $0.17 per common share. Our common stock dividend payout ratio was 23% for the first six months of 2016. The Federal Reserve's current guidance provides that, for large bank holding companies like us, dividend payout ratios exceeding 30% of after-tax net income will receive particularly close scrutiny.

In July 2016, BNY Mellon increased the quarterly cash dividend on common stock by approximately 12%, from $0.17 to $0.19 per share. This dividend increase was included in the 2016 capital plan. This increased quarterly cash dividend will be paid on Aug. 12, 2016.

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 of our 2015 Annual Report.

The Bank of New York Mellon, our largest bank subsidiary, began issuing commercial paper in the first quarter of 2016. The commercial paper matures within 364 days from date of issue and is not redeemable prior to maturity or subject to voluntary prepayment. The Parent's commercial paper program was discontinued in August 2015. The average commercial paper borrowings were $3.8 billion in the second quarter of 2016 and $2.9 billion in the second quarter of 2015. There was no commercial paper outstanding at June 30, 2016 and Dec. 31, 2015.

The Parent had cash of $8.7 billion at June 30, 2016, compared with $9.1 billion at Dec. 31, 2015, a decrease of $330 million primarily reflecting the maturities of long-term debt, common stock repurchases and a net decrease in loans from subsidiaries, partially offset by the issuance of long-term debt.

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

In second quarter of 2016, we repurchased 12.5 million common shares at an average price of $40.80 per common share for a total cost of $509 million.

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

Credit ratings at June 30, 2016

	Moody's	S&P	Fitch	DBRS
Parent:				
Long-term senior debt	A1	A	AA-	AA (low)
Subordinated debt	A2	A-	A+	A (high)
Preferred stock	Baa1	BBB	BBB	A (low)
Trust preferred securities	A3	BBB	BBB+	A (high)
Outlook - Parent:	Stable	Stable	Stable	Stable
The Bank of New York Mellon:				
Long-term senior debt	Aa2	AA-	AA	AA
Subordinated debt	Aa3	A	A+	NR
Long-term deposits	Aa1	AA-	AA+	AA
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	AA-	AA	(a) AA
Long-term deposits	Aa1	AA-	AA+	AA
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 $23.6 billion at June 30, 2016 and $21.5 billion at Dec. 31, 2015. The increase reflects the issuance of $3.0 billion of senior debt and an increase in the fair value of hedged long-term debt, partially offset by the maturity of $1.45 billion of long-term debt. The Parent has $1.0 billion of long-term debt that will mature in the remainder of 2016.

In conjunction with our 2016 comprehensive capital plan, on Aug. 1, 2016, we completed a $1 billion offering of preferred stock, $750 million of which satisfied the contingency for the repurchase of up to $560 million of common stock. We issued 10,000 shares of Series F preferred stock, which have a liquidation preference of $100,000 per share. Dividends on the Series F noncumulative perpetual preferred stock will be paid, if declared by our board of directors, at an annual rate equal to 4.625% on each March 20 and September 20, commencing March 20, 2017, through and including Sept. 20, 2026; and a floating rate equal to three-month LIBOR plus 3.131% on each March 20, June 20, September 20 and December 20, commencing Dec. 20, 2026.

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 plus

qualifying trust preferred securities. 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 both the high level of unencumbered available liquid assets held in its principal subsidiaries (such as central bank deposits and government securities), the Company's cash generating

fee-based business model, with fees representing approximately 80% of revenue, and dividend capacity of our banking subsidiaries. Our double leverage ratio was 119.1% at June 30, 2016 and 115.7% at Dec. 31, 2015, and within the range targeted by management.

Pershing LLC, an indirect subsidiary of BNY Mellon, has uncommitted lines of credit in place for liquidity purposes which are guaranteed by the Parent. Pershing LLC has eight separate uncommitted lines of credit amounting to $1.5 billion in aggregate. Average daily borrowing under these lines was $5 million, in aggregate, in the second quarter of 2016. Pershing Limited, an indirect UK-based subsidiary of BNY Mellon, has two separate uncommitted lines of credit amounting to $250 million in aggregate in

place for liquidity purposes, which are guaranteed by the Parent. Average borrowings under these lines were $105 million, in aggregate, in the second quarter of 2016.

Statement of cash flows

The following summarizes the activity reflected on the 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.

Cash provided by operating activities was $1.5 billion in the six months ended June 30, 2016 compared with $2.6 billion in the six months ended June 30, 2015. In both the first six months of 2016 and the first six months of 2015, cash flows from operations were principally the result of earnings and changes in trading activities. Cash flows from operations in the first six months of 2016 were partially offset by changes in accruals.

Cash provided by investing activities was $25.7 billion in the six months ended June 30, 2016 compared with cash used for investing activities of

$18.1 billion in the six months ended June 30, 2015. In the first six months of 2016, changes in interest-bearing deposits with the Federal Reserve and other central banks, and sales, paydowns, and maturities of securities were significant sources of funds, partially offset by purchases of securities, changes in federal funds sold and securities purchased under resale agreements and changes in loans. In the first six months of 2015, purchases of securities and changes in interest-bearing deposits with the Federal Reserve and other central banks, changes in loans and changes in federal funds sold and securities purchased under resale agreements were significant uses of funds, partially offset by sales, paydowns, and maturities of securities available-for-sale.

Cash used for financing activities was $27.7 billion in the six months ended June 30, 2016 compared with cash provided by financing activities of $16.8 billion in the six months ended June 30, 2015. In the first six months of 2016, changes in deposits, changes in federal funds purchased and securities sold under repurchase agreements, repayment of long-term debt and treasury stock repurchases were significant uses of funds, partially offset by the issuance of long-term debt. In the first six months of 2015, changes in deposits and the issuance of long-term debt were significant sources of funds, partially offset by the repayment of long-term debt, changes in federal funds purchased and securities sold under repurchase agreements and treasury stock repurchases.

Capital

Capital data (dollar amounts in millions except per share amounts; common shares in thousands)	June 30, 2016	March 31, 2016	Dec. 31, 2015
Average common equity to average assets	9.6 %	9.7 %	9.7 %
At period end:			
BNY Mellon shareholders' equity to total assets ratio – GAAP (a)	10.4 %	10.3 %	9.7 %
BNY Mellon common shareholders' equity to total assets ratio – GAAP (a)	9.7 %	9.6 %	9.0 %
BNY Mellon tangible common shareholders' equity to tangible assets of operations ratio – Non-GAAP (a)	6.6 %	6.7 %	6.5 %
Total BNY Mellon shareholders' equity – GAAP	$38,559	$38,459	$38,037
Total BNY Mellon common shareholders' equity – GAAP	$36,007	$35,907	$35,485
BNY Mellon tangible common shareholders' equity – Non-GAAP (a)	$17,349	$17,090	$16,574
Book value per common share – GAAP (a)	$33.72	$33.34	$32.69
Tangible book value per common share – Non-GAAP (a)	$16.25	$15.87	$15.27
Closing stock price per common share	$38.85	$36.83	$41.22
Market capitalization	$41,479	$39,669	$44,738
Common shares outstanding	1,067,674	1,077,083	1,085,343
Cash dividends per common share	$0.17	$0.17	$0.17
Common dividend payout ratio	23 %	23 %	30 %
Common dividend yield (annualized)	1.8 %	1.9 %	1.6 %

(a) See "Supplemental information – Explanation of GAAP and Non-GAAP financial measures" beginning on page 49 for a reconciliation of GAAP to Non-GAAP.

The Bank of New York Mellon Corporation total shareholders' equity increased to $38.6 billion at June 30, 2016 from $38.0 billion at Dec. 31, 2015. The increase primarily reflects earnings retention, approximately $308 million resulting from stock awards, the exercise of stock options and stock issued for employee benefit plans, and an increase in the unrealized gain on our investment securities portfolio. The increase was partially offset by share repurchases and foreign currency translation adjustments.

The unrealized gain net of tax on our investment securities portfolio recorded in accumulated other comprehensive income was $583 million at June 30, 2016 compared with $329 million at Dec. 31, 2015. The increase in the unrealized gain, net of tax, was primarily driven by a decline in market interest rates.

In the second quarter of 2016, we repurchased 12.5 million common shares at an average price of $40.80 per common share for a total cost of $509 million.

BNY Mellon's tangible common shareholders' equity to tangible assets of operations ratio (Non-GAAP) was 6.6% at June 30, 2016 and 6.5% at Dec. 31, 2015.

In June 2016, BNY Mellon received confirmation that the Federal Reserve did not object to its 2016 capital

plan submitted to the Federal Reserve in connection with its Comprehensive Capital Analysis and Review. The board of directors subsequently approved the repurchase of up to $2.14 billion worth of common stock over a four-quarter period beginning in the third quarter of 2016 and continuing through the second quarter of 2017. The board of directors also approved the additional repurchase of up to $560 million of common stock contingent on a prior issuance of $750 million of noncumulative perpetual preferred stock. This new share repurchase plan replaces all

previously authorized share repurchase plans.

In conjunction with our 2016 capital plan, in August 2016, BNY Mellon issued $1 billion of noncumulative perpetual preferred stock, $750 million of which satisfied the contingency for the repurchase of up to $560 million of common stock.

Additionally, the board of directors approved a 12% increase in quarterly cash dividend on common stock, which was also included in the 2016 capital plan, from $0.17 to $0.19 per share. This increased quarterly cash dividend was declared on July 21, 2016 and will be paid on Aug, 12, 2016 to shareholders of record as of the close of business on Aug. 2, 2016.

Capital adequacy

Regulators establish certain levels of capital for bank holding companies and banks, including BNY Mellon and our bank subsidiaries, in accordance with established quantitative measurements. For the Parent to maintain its status as a financial holding company, our bank subsidiaries and BNY Mellon must, among other things, qualify as "well capitalized."

As of June 30, 2016, BNY Mellon and our U.S. bank subsidiaries were "well capitalized." As of Dec. 31, 2015, BNY Mellon and our U.S. bank subsidiaries, with the exception of BNY Mellon, N.A., were "well capitalized." As of Dec. 31, 2015, BNY Mellon, N.A. was not "well capitalized" because its Total capital ratio was 9.89%, which was below the 10% "well capitalized" threshold. With the filing of its March 31, 2016 Call Report, BNY Mellon, N.A.'s Total capital ratio was 10.94%, which is above the 10% "well capitalized" threshold.

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 and Business 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." in our 2015 Annual Report.

The "well capitalized" and other capital categories, as established by applicable regulations for bank holding companies and depository institutions, have been established by those regulations solely for purposes of implementing their requirements (for example, eligibility for financial holding company status in the case of bank holding companies and prompt corrective action measures in the case of depository institutions). A bank holding company's or depository institution's qualification for a capital category may not constitute an accurate representation of the entity's overall financial condition or prospects.

The U.S. banking agencies' capital rules have been based on the framework adopted by the Basel Committee on Banking Supervision, as amended from time to time. For additional information on these capital requirements, see "Supervision and Regulation" in our 2015 Annual Report. BNY Mellon is subject to U.S. capital rules, which are being gradually phased-in over a multi-year period through 2018.

Our estimated CET1 ratios on a fully phased-in basis are based on our current interpretation of the U.S. capital rules. Our risk-based capital adequacy is determined using the higher of risk-weighted assets ("RWA") determined using the Advanced Approach and Standardized Approach.

The transitional capital ratios for June 30, 2016 and March 31, 2016 included in the table below were negatively impacted by the additional phase-in requirements that became effective on Jan. 1, 2016.

Consolidated and largest bank subsidiary regulatory capital ratios	June 30, 2016 Well capitalized		Minimum required		Capital ratios (a)		March 31, 2016		Dec. 31, 2015	
Consolidated regulatory capital ratios: (b)										
Standardized:										
CET1 ratio	N/A		(c) 5.5	%	11.8	%	11.8	%	11.5	%
Tier 1 capital ratio	6	%	7	%	13.4	%	13.5	%	13.1	%
Total (Tier 1 plus Tier 2) capital ratio	10	%	9	%	13.8	%	13.9	%	13.5	%
Advanced:										
CET1 ratio	N/A		(c) 5.5	%	10.2	%	10.6	%	10.8	%
Tier 1 capital ratio	6	%	7	%	11.5	%	12.0	%	12.3	%
Total (Tier 1 plus Tier 2) capital ratio	10	%	9	%	11.7	%	12.3	%	12.5	%
Leverage capital ratio	N/A		(c) 4	%	5.8	%	5.9	%	6.0	%
SLR (d)	5	%	(e) 3	%	5.3	%	5.4	%	5.4	%
Selected regulatory capital ratios – fully phased-in – Non-GAAP:										
Estimated CET1 ratio:										
Standardized Approach	8.5	%	(e) 5.5	%	11.0	%	11.0	%	10.2	%
Advanced Approach	8.5	%	(e) 5.5	%	9.5	%	9.8	%	9.5	%
Estimated SLR	5	%	(e) 3	%	5.0	%	5.1	%	4.9	%
The Bank of New York Mellon regulatory capital ratios:										
Advanced:										
CET1 ratio	6.5	%	5.125	%	12.0	%	12.2	%	11.8	%
Tier 1 capital ratio	8	%	6.625	%	12.3	%	12.5	%	12.3	%
Total (Tier 1 plus Tier 2) capital ratio	10	%	8.625	%	12.6	%	12.8	%	12.5	%
Leverage capital ratio	5	%	4	%	6.1	%	6.1	%	5.9	%
Selected regulatory capital ratios – fully phased-in – Non-GAAP:										
Estimated SLR (d)	6	%	3	%	5.3	%	5.2	%	4.8	%

(a) Minimum requirements for June 30, 2016 and March 31, 2016 include Basel III minimum thresholds plus currently applicable buffers.

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

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

(d) The SLR does not become a binding measure until the first quarter of 2018.

(e) Fully phased-in Basel III minimum with expected buffers. See page 42 for the capital ratios with the phase-in of the capital conservation buffer and the estimated U.S. G-SIB surcharge.

Our CET1 ratio determined under the Advanced Approach was 10.2% at June 30, 2016 and 10.8% at Dec. 31, 2015. The decrease primarily reflects higher risk-weighted assets driven by higher operational risk RWA, partially offset by an increase in capital.

Our estimated CET1 ratio (Non-GAAP) calculated under the Advanced Approach on a fully phased-in basis was 9.5% at both June 30, 2016 and Dec. 31, 2015. Our estimated CET1 ratio (Non-GAAP) calculated under the Standardized Approach on a fully phased-in basis was 11.0% at June 30, 2016 and 10.2% at Dec. 31, 2015.

The estimated fully phased-in SLR (Non-GAAP) of 5.0% at June 30, 2016 and 4.9% at Dec. 31, 2015 was based on our interpretation of the U.S. capital rules, as supplemented by the Federal Reserve's final rules

on the SLR. BNY Mellon will be subjected to an enhanced SLR, which will require a buffer in excess of 2% over the minimum SLR of 3%. The insured depository institution subsidiaries of the U.S. G-SIBs, including those of BNY Mellon, must maintain a 6% SLR to be considered "well capitalized." We expect our depository institutions to be compliant with the SLR as we move closer to implementation in 2018.

For additional information on the U.S. capital rules, see "Supervision and Regulation - Capital Requirements - Generally" in our 2015 Annual Report.

The Basel III Advanced Approach capital ratios are significantly impacted by RWA for operational risk. 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.

Management views the estimated fully phased-in CET1 and other risk-based capital ratios and SLR as key measures in monitoring BNY Mellon's capital position and progress against future regulatory capital standards. Additionally, the presentation of the estimated fully phased-in CET1 and other risk-based capital ratios and SLR are intended to allow investors to compare these ratios with estimates presented by other companies.

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, 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.

Minimum capital ratios and capital buffers

The U.S. capital rules include a series of buffers and surcharges over required minimums that apply to bank holding companies, including BNY Mellon, which are being phased-in over time. Banking organizations with a risk-based ratio or SLR above the minimum required level, but with a risk-based ratio or SLR below the minimum level with buffers, will face constraints on dividends, equity repurchases and discretionary executive compensation based on the amount of the shortfall. Different regulatory capital minimums, buffers and surcharges apply to our banking subsidiaries.

The U.S. capital rules introduced a capital conservation buffer and countercyclical capital buffer that add to the minimum regulatory capital ratios. The capital conservation buffer - 0.625% for 2016 and 2.5% when fully phased-in on Jan. 1, 2019 - is designed to absorb losses during periods of economic stress and applies to all banking organizations. During periods of excessive growth, the capital conservation buffer may be expanded through the

imposition of a countercyclical capital buffer that may be as high as 2.5%. The countercyclical capital buffer, when applicable, applies only to Advanced Approach banking organizations. The countercyclical capital buffer is currently set to zero with respect to U.S. exposures, but it could increase if the banking agencies determine that excessive credit in the broader markets could result in systemic disruption. According to the U.S. capital rules, the countercyclical capital buffer applicable to a banking organization may be affected by whether it has exposures in non-U.S. jurisdictions that have set a countercyclical capital buffer amount that is different from the countercyclical capital buffer set by U.S. regulators. In March 2016, the UK announced that it has set a countercyclical capital buffer of 0.50%, and that this buffer will become effective in March 2017. However on July 5, 2016, the UK announced that it had set its countercyclical capital buffer at 0.0% effective immediately and announced its intention to maintain such buffer at that level until at least June 2017. Any countercyclical capital buffer set by a non-U.S. jurisdiction will only affect BNY Mellon to the extent that U.S. regulators affirmatively implement the application of such UK countercyclical buffer to BNY Mellon's exposures in such jurisdiction.

BNY Mellon is subject to an additional G-SIB surcharge, which will be implemented as an extension of the capital conservation buffer and must be satisfied with CET1 capital. For 2016, the G-SIB surcharge applicable to BNY Mellon is 0.375% and, when fully phased-in on Jan. 1, 2019 as calculated applying metrics as currently applicable to BNY Mellon, would be 1.5%.

These buffers, other than the SLR buffer, and surcharge began to phase-in on Jan. 1, 2016 and will be fully implemented on Jan. 1, 2019. The following table presents the minimum capital ratio requirements with buffers and surcharges, as phased-in, applicable to the Parent. This table does not include the imposition of a countercyclical

capital buffer. The U.S. capital rules also provide for transitional arrangements for qualifying instruments, deductions, and adjustments, which are not reflected in this table. Buffers and surcharges are not applicable to the leverage capital ratio.

Consolidated capital ratio requirements	Well capitalized	Minimum ratios	Minimum ratios with buffers, as phased-in (a)			
			2016	2017	2018	2019
Capital conservation buffer (CET1)			0.625%	1.25 %	1.875%	2.5 %
U.S. G-SIB surcharge (CET1) (b)(c)			0.375%	0.75 %	1.125%	1.5 %
Consolidated:						
CET1 ratio	N/A	4.5 %	5.5 %	6.5 %	7.5 %	8.5 %
Tier 1 capital ratio	6.0 %	6.0 %	7.0 %	8.0 %	9.0 %	10.0 %
Total capital ratio	10.0 %	8.0 %	9.0 %	10.0 %	11.0 %	12.0 %
Enhanced SLR buffer (Tier 1 capital)	N/A		N/A	N/A	2.0 %	2.0 %
SLR	N/A	3.0 %	N/A	N/A	5.0 %	5.0 %
Bank subsidiaries: (c)						
CET1 ratio	6.5 %	4.5 %	5.125%	5.75 %	6.375%	7.0 %
Tier 1 capital ratio	8.0 %	6.0 %	6.625%	7.25 %	7.875%	8.5 %
Total capital ratio	10.0 %	8.0 %	8.625%	9.25 %	9.875%	10.5 %
SLR	6.0 %	3.0 %	N/A	N/A	6.0 %(d)	6.0 %(d)

(a) Countercyclical capital buffer currently set to 0%.
(b) The U.S. G-SIB surcharge of 1.5% is subject to change.
(c) The U.S. G-SIB surcharge is not applicable to the regulatory capital ratios of the bank subsidiaries.
(d) Well capitalized threshold.

The table below presents the factors that impacted the transitional and fully phased-in CET1 (Non-GAAP).

Estimated CET1 generation presented on a transitional and fully phased-in basis – Non-GAAP	Quarter ended June 30, 2016	
(in millions)	Transitional basis (b)	Fully phased-in Non-GAAP (c)
CET1 – Beginning of period	$18,069	$ 16,607
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	825	825
Goodwill and intangible assets, net of related deferred tax liabilities	146	159
Gross CET1 generated	971	984
Capital deployed:		
Dividends	(185)	(185)
Common stock repurchased	(509)	(509)
Total capital deployed	(694)	(694)
Other comprehensive income:		
Foreign currency translation	(271)	(271)
Unrealized gain on assets available-for-sale	62	104
Pension liabilities	10	15
Unrealized gain on cash flow hedges	(10)	(10)
Total other comprehensive income	(209)	(162)
Additional paid-in capital (a)	131	131

Other additions (deductions):		
Net pension fund assets	(2)	(5)
Embedded goodwill	2	3
Other	7	9
Total other additions	7	7
Net CET1 generated	206	266
CET1 – End of period	$18,275	$ 16,873

(a) Primarily related to stock awards, the exercise of stock options and stock issued for employee benefit plans.
(b) Reflects transitional adjustments to CET1 required under U.S. capital rules.
(c) Estimated.

The following table presents the components of our transitional and fully phased-in CET1, Tier 1 and Tier 2 capital, the RWA determined under both the Standardized and Advanced Approaches, the average assets used for leverage capital purposes and the total leverage exposure for estimated SLR purposes.

Capital components and ratios	June 30, 2016		March 31, 2016		Dec. 31, 2015	
(dollars in millions)	Transitional Approach (a)	Fully phased-in - Non-GAAP (b)	Transitional Approach (a)	Fully phased-in - Non-GAAP (b)	Transitional Approach (a)	Fully phased-in - Non-GAAP (b)
CET1:						
Common shareholders' equity	$36,282	$ 36,007	$36,229	$35,907	$36,067	$35,485
Goodwill and intangible assets	(17,614)	(18,658)	(17,760)	(18,817)	(17,295)	(18,911)
Net pension fund assets	(56)	(94)	(54)	(89)	(46)	(116)
Equity method investments	(322)	(356)	(324)	(359)	(296)	(347)
Deferred tax assets	(14)	(23)	(14)	(23)	(8)	(20)
Other	(1)	(3)	(8)	(12)	(5)	(9)
Total CET1	18,275	16,873	18,069	16,607	18,417	16,082
Other Tier 1 capital:						
Preferred stock	2,552	2,552	2,552	2,552	2,552	2,552
Trust preferred securities	—	—	—	—	74	—
Deferred tax assets	(9)	—	(9)	—	(12)	—
Net pension fund assets	(38)	—	(36)	—	(70)	—
Other	(112)	(110)	(11)	(8)	(25)	(22)
Total Tier 1 capital	20,668	19,315	20,565	19,151	20,936	18,612
Tier 2 capital:						
Trust preferred securities	161	—	173	—	222	—
Subordinated debt	149	149	149	149	149	149
Allowance for credit losses	280	280	287	287	275	275
Other	(6)	(7)	(2)	(1)	(12)	(12)
Total Tier 2 capital - Standardized Approach	584	422	607	435	634	412
Excess of expected credit losses	36	36	46	46	37	37
Less: Allowance for credit losses	280	280	287	287	275	275
Total Tier 2 capital - Advanced Approach	$340	$ 178	$366	$194	$396	$174
Total capital:						
Standardized Approach	$21,252	$ 19,737	$21,172	$19,586	$21,570	$19,024
Advanced Approach	$21,008	$ 19,493	$20,931	$19,345	$21,332	$18,786
Risk-weighted assets:						
Standardized Approach	$154,464	$ 153,198	$152,673	$151,388	$159,893	$158,015
Advanced Approach:						
Credit Risk	$104,367	$ 103,024	$102,691	$101,329	$106,974	$105,099
Market Risk	2,080	2,080	2,131	2,131	2,148	2,148
Operational Risk	72,725	72,725	65,887	65,887	61,262	61,262
Total Advanced Approach	$179,172	$ 177,829	$170,709	$169,347	$170,384	$168,509
Standardized Approach:						
CET1 ratio	11.8%	11.0%	11.8%	11.0%	11.5%	10.2%

Tier 1 capital ratio	13.4	%12.6	% 13.5	%12.7	% 13.1	%11.8	%
Total (Tier 1 plus Tier 2) capital ratio	13.8	%12.9	% 13.9	%12.9	% 13.5	%12.0	%
Advanced Approach:							
CET1 ratio	10.2	%9.5	% 10.6	%9.8	% 10.8	%9.5	%
Tier 1 capital ratio	11.5	%10.9	% 12.0	%11.3	% 12.3	%11.0	%
Total (Tier 1 plus Tier 2) capital ratio	11.7	%11.0	% 12.3	%11.4	% 12.5	%11.1	%
Average assets for leverage capital purposes	$356,344		$346,669		$351,435		
Total leverage exposure for SLR purposes		$ 385,670		$376,445		$382,810	

(a) Reflects transitional adjustments to CET1, Tier 1 capital and Tier 2 capital required in 2016 and 2015 under the U.S. capital rules.

(b) Estimated.

The following table presents the amount of capital by which BNY Mellon and our largest bank subsidiary, The Bank of New York Mellon, exceeded the capital thresholds determined under the transitional rules at June 30, 2016.

Capital above thresholds at June 30, 2016

(in millions)	Consolidated		The Bank of New York Mellon (b)
CET1	$ 8,421	(a)	$ 8,030
Tier 1 capital	8,126	(a)	6,327
Total capital	3,091	(b)	3,771
Leverage capital	6,414	(a)	3,320

(a) Based on minimum required standards, with applicable buffers.
(b) Based on well capitalized standards.

The following table shows the impact on the consolidated capital ratios at June 30, 2016 of a $100 million increase or decrease in common equity, or a $1 billion increase or decrease in RWA, quarterly average assets or total leverage exposure.

Sensitivity of consolidated capital ratios at June 30, 2016

(in basis points)	Increase or decrease of $100 million in common equity	Increase or decrease of $1 billion in RWA, quarterly average assets, or total leverage exposure
CET1:		
Standardized Approach	6 bps	8 bps
Advanced Approach	6	6
Tier 1 capital:		
Standardized Approach	6	9
Advanced Approach	6	6
Total capital:		
Standardized Approach	6	9
Advanced Approach	6	7
Leverage capital	3	2
SLR	3	1
Estimated CET1 ratio, fully phased-in – Non-GAAP:		
Standardized Approach	7	7
Advanced Approach	6	5

Estimated SLR, fully phased-in – Non-GAAP	3	1

At June 30, 2016, we had $269 million of outstanding trust preferred securities, of which 25% qualified as Tier 1 capital in 2015 and none of which qualifies as Tier 1 capital in 2016, although a portion of the trust preferred securities is eligible for inclusion in Tier 2 capital. Any decision to take action with respect to these trust preferred securities will be based on several considerations including interest rates and the availability of cash and capital.

Capital ratios vary depending on the size of the balance sheet at quarter-end and the level and types of investments in assets. The balance sheet size fluctuates from quarter to quarter 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.

Supplementary Leverage Ratio

BNY Mellon has presented its consolidated and largest bank subsidiary estimated fully phased-in SLR based on its interpretation of the U.S. capital rules, which are being gradually phased-in over a multi-year period and on the application of such rules to BNY Mellon’s businesses as currently conducted.

The following table presents the components of our SLR on both the transitional and fully phased-in Basel III basis.

SLR	June 30, 2016		March 31, 2016		Dec. 31, 2015	
(dollars in millions)	Transitional basis	Fully phased-in Non-GAAP (a)	Transitional basis	Fully phased-in Non-GAAP (a)	Transitional basis	Fully phased-in Non-GAAP (a)
Consolidated:						
Total Tier 1 capital	$20,668	$19,315	$20,565	$19,151	$20,936	$18,612
Total leverage exposure:						
Quarterly average total assets	$374,220	$374,220	$364,554	$364,554	$368,590	$368,590
Less: Amounts deducted from Tier 1 capital	17,876	19,234	18,160	19,300	17,650	19,403
Total on-balance sheet assets, as adjusted	356,344	354,986	346,394	345,254	350,940	349,187
Off-balance sheet exposures:						
Potential future exposure for derivatives contracts (plus certain other items)	6,125	6,125	5,838	5,838	7,158	7,158
Repo-style transaction exposures	402	402	403	403	440	440
Credit-equivalent amount of other off-balance sheet exposures (less SLR exclusions)	24,157	24,157	24,950	24,950	26,025	26,025
Total off-balance sheet exposures	30,684	30,684	31,191	31,191	33,623	33,623
Total leverage exposure	$387,028	$385,670	$377,585	$376,445	$384,563	$382,810
SLR - Consolidated	5.3%	5.0%	5.4%	5.1%	5.4%	4.9%
The Bank of New York Mellon, our largest bank subsidiary:						
Tier 1 capital	$18,049	$16,948	$17,322	$16,167	$16,814	$15,142
Total leverage exposure	$322,978	$322,588	$313,331	$312,988	$316,812	$316,270
SLR - The Bank of New York Mellon (b)	5.6%	5.3%	5.5%	5.2%	5.3%	4.8%

(a) Estimated.
(b) We expect our depository institutions to be compliant with the SLR as we move closer to implementation in 2018.

Trading activities and risk management

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 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 based on a Monte Carlo simulation and other market sensitivity measures. The calculation of our VaR used by management and presented below assumes a one-day holding period, utilizes a 99% confidence level, and incorporates the non-linear characteristics of options. See Note 16 of the Notes to Consolidated Financial Statements for additional information on the VaR methodology.

The following tables indicate the calculated VaR amounts for the trading portfolio for the designated periods.

VaR (a) (in millions)	2Q16 Average	Minimum	Maximum	June 30, 2016
Interest rate	$6.2	$ 5.5	$ 7.1	$ 6.4
Foreign exchange	2.5	1.9	11.1	2.8
Equity	0.6	0.4	0.7	0.6
Credit	0.3	0.2	0.4	0.3
Diversification	(3.7)	N/M	N/M	(3.6)
Overall portfolio	$5.9	$ 5.0	$ 6.9	$ 6.5

VaR (a) (in millions)	1Q16 Average	Minimum	Maximum	March 31, 2016
Interest rate	$5.4	$ 4.3	$ 6.8	$ 6.1
Foreign exchange	1.6	1.2	2.5	2.5
Equity	0.5	0.4	0.8	0.5
Credit	0.3	0.2	0.3	0.3
Diversification	(2.4)	N/M	N/M	(3.7)
Overall portfolio	$5.4	$ 4.3	$ 6.6	$ 5.7

VaR (a)	2Q15			June 30,
(in millions)	Average	Minimum	Maximum	2015
Interest rate	$5.3	$ 4.1	$ 7.8	$ 4.1
Foreign exchange	0.8	0.5	1.4	0.7
Equity	1.1	0.9	1.4	1.1
Diversification	(1.8)	N/M	N/M	(1.5)
Overall portfolio	$5.4	$ 4.1	$ 8.1	$ 4.4

VaR (a)	YTD16		
(in millions)	Average	Minimum	Maximum
Interest rate	$5.8	$ 4.3	$ 7.1
Foreign exchange	2.0	1.2	11.1
Equity	0.6	0.4	0.8
Credit	0.3	0.2	0.4
Diversification	(3.1)	N/M	N/M
Overall portfolio	$5.6	$ 4.3	$ 6.9

VaR (a)	YTD15		
(in millions)	Average	Minimum	Maximum
Interest rate	$5.2	$ 3.6	$ 8.0
Foreign exchange	0.8	0.5	1.4
Equity	1.3	0.8	1.9
Diversification	(1.9)	N/M	N/M
Overall portfolio	$5.4	$ 3.9	$ 8.5

(a) VaR figures do not reflect the impact of the credit valuation adjustment ("CVA") guidance in Accounting Standards Codification ("ASC") 820. This is consistent with the regulatory treatment. 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 predominantly vary with the level or volatility of interest rates. These instruments include, but are not limited to: debt securities, mortgage-backed 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, exchange-traded futures and 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, Depositary Receipts, 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 predominantly vary with the credit worthiness of counterparties. These instruments include, but are not limited to, credit derivatives (credit default swaps and exchange traded credit index instruments). Credit derivatives are used to hedge various credit exposures.

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

During the second quarter of 2016, interest rate risk generated 65% of average gross VaR, foreign exchange risk generated 26% of average gross VaR, equity risk accounted for 6% of average gross VaR and credit risk generated 3% of average gross VaR. During the second quarter of 2016, our daily trading loss exceeded our calculated VaR amount of the overall portfolio on one occasion.

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. The year-over-year and sequential variances are driven by lower market volatility.

Distribution of trading revenue (loss) (a)

(dollar amounts in millions)	Quarter ended June 30, 2016	March 31, 2016	Dec. 31, 2015	Sept. 30, 2015	June 30, 2015
Revenue range:	Number of days				
Less than $(2.5)	1	—	—	—	—
$(2.5) - $0	2	3	4	7	3
$0 - $2.5	20	29	23	27	27
$2.5 - $5.0	38	21	29	21	26
More than $5.0	3	9	6	10	8

(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 $7 billion at both June 30, 2016 and Dec. 31, 2015.

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 billion at June 30, 2016 and $5 billion at Dec. 31, 2015.

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 as well as our counterparties when measuring the fair value of our derivative positions. Accordingly, the valuation of our derivative positions is sensitive to the current changes in our own credit spreads, as well as those of our counterparties.

At June 30, 2016, our OTC derivative assets of $6.8 billion included a CVA deduction of $63 million. Our OTC derivative liabilities of $6.7 billion included a debit valuation adjustment (“DVA”) of $7 million related to our own credit spread. Net of hedges, the CVA decreased by $4 million and the DVA was unchanged in the second quarter of 2016. The net impact of these adjustments increased foreign exchange and other trading revenue by $4 million in the second quarter of 2016.

In the first quarter of 2016, net of hedges, the CVA decreased $5 million and the DVA decreased $1 million. The net impact of these adjustments increased foreign exchange and other trading revenue by $4 million in the first quarter of 2016.

In the second quarter of 2015, net of hedges, the CVA and DVA were unchanged. Foreign exchange and other trading revenue was not impacted by the CVA and DVA in the second quarter of 2015.

The table below summarizes the risk ratings for our foreign exchange and interest rate derivative counterparty credit exposure. This information indicates the degree of risk to which we are exposed. Significant changes in ratings classifications for our foreign exchange and other trading activity could result in increased risk for us.

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

	Quarter ended					
	June 30, 2016	March 31, 2016	Dec. 31, 2015	Sept. 30, 2015	June 30, 2015	
Rating:						
AAA to AA-	38	%44	%43	%46	%41	%
A+ to A-	40	37	42	38	42	
BBB+ to BBB-	18	14	13	14	13	
Non-investment grade (BB+ and lower)	4	5	2	2	4	
Total	100	%100	%100	%100	%100	%

(a) Represents credit rating agency equivalent of internal credit ratings.

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 are 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, balance changes on core deposits, 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. As a result, the earnings simulation model cannot precisely estimate net interest revenue or the impact of higher or lower interest rates on net interest revenue. Actual results may differ 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.

As of June 30, 2016, these scenarios reflect strategies that management could employ as interest rate expectations change. The table below relies on certain critical assumptions regarding the balance sheet and depositors' behavior related to interest rate fluctuations and the prepayment and extension risk in certain of our assets. Generally, there has been an inverse relationship between interest rates and client

deposit levels. To the extent that actual behavior is different from that assumed in the models, there could be a change in interest rate sensitivity.

We evaluate the effect on earnings by running various interest rate ramp scenarios from a baseline scenario. The interest rate ramp scenarios are reviewed to examine the impact of large interest rate movements. 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 following table shows net interest revenue sensitivity for BNY Mellon.

Estimated changes in net interest revenue (dollars in millions)	June 30, 2016	March 31, 2016	Dec. 31, 2015	Sept. 30, 2015	June 30, 2015
up 200 bps parallel rate ramp vs. baseline (a)	$ 91	$ 103	$ 179	$ 275	$ 224
up 100 bps parallel rate ramp vs. baseline (a)	158	189	191	290	245
Long-term up 50 bps, short-term unchanged (b)	130	104	33	20	28
Long-term down 50 bps, short-term unchanged (b)	(96)	(93)	(91)	(81)	(73)

(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.
bps - basis points.

The June 30, 2016 calculations in the estimated changes in net interest revenue table above are based on a forecast that uses our quarter-end balance sheet and forward yield curves. The 100 basis point ramp scenario assumes rates increase 25 basis points above the forward yield curve in each of the next four quarters and the 200 basis point ramp scenario assumes a 50 basis point per quarter increase.

Our net interest revenue sensitivity table above incorporates assumptions about the impact of changes in interest rates on depositor behavior based on historical experience. Given the current historically low interest rate environment and the potential change to implementation of monetary policy, the impact of depositor behavior is highly uncertain. The lower sensitivity in the ramp up 200 basis point scenario compared with the 100 basis point scenario is driven by the assumption of increased deposit runoff at those higher interest rates and a reduction in corresponding investments.

Growth or contraction of deposits could also be affected by the following factors:

- Monetary policy;
- Global economic uncertainty;
- Our ratings relative to other financial institutions' ratings; and
- Money market mutual fund and other regulatory reform.

Any of these events could change our assumptions about depositor behavior and have a significant impact on our balance sheet and net interest revenue.

Off-balance sheet arrangements

Off-balance sheet arrangements discussed in this section are limited to guarantees, retained or contingent interests and obligations arising out of unconsolidated variable interest entities ("VIEs"). For BNY Mellon, these items include certain credit guarantees and securitizations. Guarantees include lending-related guarantees issued as part of our corporate banking business and securities lending indemnifications issued as part of our Investment Services business. See Note 17 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 based on fully phased-in Basel III CET1 and other risk-based capital ratios, the fully phased-in SLR and tangible common shareholders' equity. BNY Mellon believes that the CET1 and other risk-based capital ratios on a fully phased-in basis, the SLR on a fully phased-in basis and the ratio of tangible common shareholders' equity to tangible assets of operations are measures of capital strength that provide additional useful information to investors, supplementing the capital ratios which are, or were, required by regulatory authorities. The tangible common shareholders' equity ratio, which excludes goodwill and intangible assets, net of deferred tax liabilities, includes changes in investment securities valuations which are reflected in total shareholders' equity. In addition, this ratio is expressed as a percentage of the actual book value of assets, as opposed to a percentage of a risk-based reduced value established in accordance with regulatory requirements, although BNY Mellon in its reconciliation has excluded certain assets which are given a zero percent risk-weighting for regulatory purposes and the assets of consolidated investment management funds to which BNY Mellon has limited economic exposure. Further, BNY Mellon believes that the return on tangible common equity measure, which excludes goodwill and intangible assets, net of deferred tax liabilities, is a useful additional measure for investors because it presents a measure of those assets that can generate income. BNY Mellon has provided a measure of tangible book value per common share, which it believes provides additional useful information as to the level of tangible assets in relation to shares of common stock outstanding.

BNY Mellon has presented revenue measures, which exclude the effect of noncontrolling interests related to consolidated investment management funds, and expense measures, which exclude M&I, litigation and restructuring charges, and amortization of intangible assets. Earnings per share, return on equity, operating leverage and operating margin measures, which exclude some or all of these items, are also presented. Operating margin measures may also exclude the provision for credit losses and the net negative impact of money market fee waivers, net of distribution and servicing expense. BNY Mellon believes that these

measures are useful to investors because they permit a focus on period-to-period comparisons, which relate to the ability of BNY Mellon to enhance revenues and limit expenses in circumstances where such matters are within BNY Mellon's control. M&I expenses primarily relate to acquisitions and generally continue for approximately three years after the transaction. Litigation charges represent accruals for loss contingencies that are both probable and reasonably estimable, but exclude standard business-related legal fees. Restructuring charges relate to our streamlining actions, Operational Excellence Initiatives and migrating positions to Global Delivery Centers. Excluding these charges mentioned above permits investors to view expenses on a basis consistent with how management views the business.

The presentation of revenue growth 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. BNY Mellon believes 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.

The presentation of income (loss) from consolidated investment management funds, net of net income (loss) attributable to noncontrolling interests related to the consolidation of certain investment management funds permits investors to view revenue on a basis consistent with how management views the business. BNY Mellon believes that these presentations, as a supplement to GAAP information, give investors a clearer picture of the results of its primary businesses.

In this Form 10-Q, the net interest revenue and net interest margin are presented on an FTE basis. We believe that this presentation provides comparability 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. Each of these measures as described above is used by management to monitor financial performance, both on a company-wide and on a

business-level basis.

The following table presents the reconciliation of net income applicable to common shareholders of The Bank of New York Mellon Corporation and diluted earnings per common share.

Reconciliation of net income and diluted EPS – GAAP to Non-GAAP (in millions, except per common share amounts)	2Q16 Net income	 Diluted EPS	2Q15 Net income	 Diluted EPS
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	$825	$ 0.75	$830	$ 0.73
Add: M&I, litigation and restructuring charges	7		59	
Less: Tax impact of M&I, litigation and restructuring charges	2		21	
M&I, litigation and restructuring charges, after-tax	5	—	38	0.03
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – Non-GAAP	$830	$ 0.76 (a)	$868	$ 0.77 (a)

(a) Does not foot due to rounding.

The following table presents the reconciliation of the pre-tax operating margin ratio.

Reconciliation of income before income taxes – pre-tax operating margin (dollars in millions)	2Q16	1Q16	2Q15	YTD16	YTD15
Income before income taxes – GAAP	$1,165	$1,091	$1,165	$2,256	$2,255
Less: Net income (loss) attributable to noncontrolling interests of consolidated investment management funds	4	(7)	37	(3)	68
Add: Amortization of intangible assets	59	57	65	116	131
M&I, litigation and restructuring charges	7	17	59	24	56
Income before income taxes, as adjusted – Non-GAAP (a)	$1,227	$1,172	$1,252	$2,399	$2,374
Fee and other revenue – GAAP	$2,999	$2,970	$3,067	$5,969	$6,079
Income (loss) from consolidated investment management funds – GAAP	10	(6)	40	4	92
Net interest revenue – GAAP	767	766	779	1,533	1,507
Total revenue – GAAP	3,776	3,730	3,886	7,506	7,678
Less: Net income (loss) attributable to noncontrolling interests of consolidated investment management funds	4	(7)	37	(3)	68
Total revenue, as adjusted – Non-GAAP (a)	$3,772	$3,737	$3,849	$7,509	$7,610
Pre-tax operating margin (b)(c)	31%	29%	30%	30%	29%
Pre-tax operating margin – Non-GAAP (a)(b)(c)	33%	31%	33%	32%	31%

(a) Non-GAAP information for all periods presented excludes the net income (loss) attributable to noncontrolling interests of consolidated investment management funds, amortization of intangible assets and M&I, litigation and restructuring charges.

(b) Income before taxes divided by total revenue.

(c) Our GAAP earnings include tax-advantaged investments such as low income housing, renewable energy, bank-owned life insurance and tax-exempt securities. The benefits of these investments are primarily reflected in tax expense. If reported on a tax-equivalent basis, these investments would increase revenue and income before taxes by $74 million for the second quarter of 2016, $77 million for the first quarter of 2016, $52 million for the second quarter of 2015, $151 million for the first six months of 2016 and $116 million for the first six months of 2015 and would increase our pre-tax operating margin by approximately 1.3% for the second quarter of 2016, 1.4% for the first quarter of 2016, 0.9% for the second quarter of 2015, 1.4% for the first six months of 2016 and 1.0%

for the first six months of 2015.

The following table presents the reconciliation of operating leverage.

Operating leverage (dollars in millions)	2Q16	1Q16	2Q15	2Q16 vs. 1Q16	2Q15
Total revenue – GAAP	$3,776	$3,730	$3,886	1.23%	(2.83)%
Less: Net income (loss) attributable to noncontrolling interests of consolidated investment management funds	4	(7)	37		
Total revenue, as adjusted – Non-GAAP	$3,772	$3,737	$3,849	0.94%	(2.00)%
Total noninterest expense – GAAP	$2,620	$2,629	$2,727	(0.34)%	(3.92)%
Less: Amortization of intangible assets	59	57	65		
M&I, litigation and restructuring charges	7	17	59		
Total noninterest expense, as adjusted – Non-GAAP	$2,554	$2,555	$2,603	(0.04)%	(1.88)%
Operating leverage – GAAP (a)				157 bps	109 bps
Operating leverage, as adjusted – Non-GAAP (a)(b)				98 bps	(12) bps

(a) Operating leverage is the rate of increase (decrease) in total revenue less the rate of increase (decrease) in total noninterest expense.

(b) Non-GAAP operating leverage for all periods presented excludes the net income (loss) attributable to noncontrolling interests of consolidated investment management funds, amortization of intangible assets and M&I, litigation and restructuring charges.

bps - basis points.

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

Return on common equity and tangible common equity (dollars in millions)	2Q16	1Q16	2Q15	YTD16	YTD15
Net income applicable to common shareholders of The Bank of New York Mellon Corporation – GAAP	$825	$804	$830	$1,629	$1,596
Add: Amortization of intangible assets	59	57	65	116	131
Less: Tax impact of amortization of intangible assets	21	20	21	41	44
Net income applicable to common shareholders of The Bank of New York Mellon Corporation excluding amortization of intangible assets – Non-GAAP	863	841	874	1,704	1,683
Add: M&I, litigation and restructuring charges	7	17	59	24	56
Less: Tax impact of M&I, litigation and restructuring charges	2	6	21	8	20
Net income applicable to common shareholders of The Bank of New York Mellon Corporation, as adjusted – Non-GAAP (a)	$868	$852	$912	$1,720	$1,719
Average common shareholders' equity	$35,827	$35,252	$35,516	$35,539	$35,501
Less: Average goodwill	17,622	17,562	17,752	17,592	17,754
Average intangible assets	3,789	3,812	4,031	3,801	4,059
Add: Deferred tax liability – tax deductible goodwill (b)	1,452	1,428	1,351	1,452	1,351
Deferred tax liability – intangible assets (b)	1,129	1,140	1,179	1,129	1,179
Average tangible common shareholders' equity – Non-GAAP	$16,997	$16,446	$16,263	$16,727	$16,218
Return on common equity – GAAP (c)	9.3 %	9.2 %	9.4 %	9.2 %	9.1 %

Return on common equity – Non-GAAP (a)(c)	9.7	%9.7	%10.3	%9.7	%9.8	%
Return on tangible common equity – Non-GAAP (c)	20.4	%20.6	%21.5	%20.5	%20.9	%
Return on tangible common equity – Non-GAAP adjusted (a)(c)	20.5	%20.8	%22.5	%20.7	%21.4	%

(a) Non-GAAP information for all periods presented excludes the amortization of intangible assets and M&I, litigation and restructuring charges.
(b) Deferred tax liabilities are based on fully phased-in Basel III rules.
(c) Annualized.

The following table presents the reconciliation of the equity to assets ratio and book value per common share.

Equity to assets and book value per common share (dollars in millions, unless otherwise noted)	June 30, 2016	March 31, 2016	Dec. 31, 2015	June 30, 2015
BNY Mellon shareholders' equity at period end – GAAP	$38,559	$38,459	$38,037	$38,270
Less: Preferred stock	2,552	2,552	2,552	2,552
BNY Mellon common shareholders' equity at period end – GAAP	36,007	35,907	35,485	35,718
Less: Goodwill	17,501	17,604	17,618	17,807
Intangible assets	3,738	3,781	3,842	4,000
Add: Deferred tax liability – tax deductible goodwill (a)	1,452	1,428	1,401	1,351
Deferred tax liability – intangible assets (a)	1,129	1,140	1,148	1,179
BNY Mellon tangible common shareholders' equity at period end – Non-GAAP	$17,349	$17,090	$16,574	$16,441
Total assets at period end – GAAP	$372,351	$372,870	$393,780	$395,254
Less: Assets of consolidated investment management funds	1,083	1,300	1,401	2,231
Subtotal assets of operations – Non-GAAP	371,268	371,570	392,379	393,023
Less: Goodwill	17,501	17,604	17,618	17,807
Intangible assets	3,738	3,781	3,842	4,000
Cash on deposit with the Federal Reserve and other central banks (b)	88,080	96,421	116,211	106,628
Tangible total assets of operations at period end – Non-GAAP	$261,949	$253,764	$254,708	$264,588
BNY Mellon shareholders' equity to total assets ratio – GAAP	10.4 %	10.3 %	9.7 %	9.7 %
BNY Mellon common shareholders' equity to total assets ratio – GAAP	9.7 %	9.6 %	9.0 %	9.0 %
BNY Mellon tangible common shareholders' equity to tangible assets of operations ratio – Non-GAAP	6.6 %	6.7 %	6.5 %	6.2 %
Period-end common shares outstanding (in thousands)	1,067,674	1,077,083	1,085,343	1,106,518
Book value per common share – GAAP	$33.72	$33.34	$32.69	$32.28
Tangible book value per common share – Non-GAAP	$16.25	$15.87	$15.27	$14.86

(a) Deferred tax liabilities are based on fully phased-in Basel III rules.
(b) Assigned a zero percentage risk-weighting by the regulators.

The following table presents income from consolidated investment management funds, net of noncontrolling interests.

Income (loss) from consolidated investment management funds, net of noncontrolling interests (in millions)	2Q16	1Q16	2Q15	YTD16	YTD15
Income (loss) from consolidated investment management funds	$ 10	$ (6)	$ 40	$ 4	$ 92
Less: Net income (loss) attributable to noncontrolling interests of consolidated investment management funds	4	(7)	37	(3)	68
Income (loss) from consolidated investment management funds, net of noncontrolling interests	$ 6	$ 1	$ 3	$ 7	$ 24

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

Impact of changes in foreign currency rates on consolidated investment management and performance fees (dollars in millions)	2Q16	2Q15	2Q16 vs. 2Q15
Investment management and performance fees – GAAP	$830	$878	(5)%
Impact of changes in foreign currency exchange rates	—	(14)	
Investment management and performance fees, as adjusted – Non-GAAP	$830	$864	(4)%

The following table presents the revenue line items in the Investment Management business impacted by the consolidated investment management funds.

Income (loss) from consolidated investment management funds, net of noncontrolling interests - Investment Management business (in millions)	2Q16	1Q16	4Q15	3Q15	2Q15	YTD16	YTD15
Investment management fees	$ 3	$ 2	$ 7	$ 3	$ 4	$ 5	$ 5
Other (Investment income (loss))	3	(1)	4	(20)	(1)	2	19
Income (loss) from consolidated investment management funds, net of noncontrolling interests	$ 6	$ 1	$ 11	$ (17)	$ 3	$ 7	$ 24

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

Impact of changes in foreign currency rates on investment management fees reported in the Investment Management business (dollars in millions)	2Q16	2Q15	2Q16 vs. 2Q15
Investment management fees – GAAP	$808	$835	(3)%
Impact of changes in foreign currency exchange rates	—	(14)	
Investment management fees, as adjusted – Non-GAAP	$808	$821	(2)%

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

Pre-tax operating margin - Investment Management business (dollars in millions)	2Q16	1Q16	4Q15	3Q15	2Q15	YTD16	YTD15
Income before income taxes – GAAP	$234	$217	$290	$236	$259	$451	$522
Add: Amortization of intangible assets	19	19	24	24	25	38	49
Provision for credit losses	1	(1)	(4)	1	3	—	2
Money market fee waivers	11	9	23	28	29	20	62
Income before income taxes excluding amortization of intangible assets, provision for credit losses and money market fee waivers – Non-GAAP	$265	$244	$333	$289	$316	$509	$635
Total revenue – GAAP	$938	$895	$999	$926	$987	$1,833	$1,981
Less: Distribution and servicing expense	102	100	92	94	95	202	192
Money market fee waivers benefiting distribution and servicing expense	15	23	27	35	37	38	75
Add: Money market fee waivers impacting total revenue	26	32	50	63	66	58	137
Total revenue net of distribution and servicing expense and excluding money market fee waivers – Non-GAAP	$847	$804	$930	$860	$921	$1,651	$1,851
Pre-tax operating margin (a)	25%	24%	29%	25%	26%	25%	26%
Pre-tax operating margin, excluding amortization of intangible assets, provision for credit losses, money market fee waivers and net of distribution and servicing expense –	31%	30%	36%	34%	34%	31%	34%

Non-GAAP (a)

(a) Income before taxes divided by total revenue.

Recent accounting and regulatory developments

Recently Issued Accounting Standards

ASU 2016-13, Financial Instruments - Credit Losses

In June 2016, the Financial Accounting Standards Board ("FASB") issued an Accounting Standards Update ("ASU"), "Financial Instruments - Credit Losses." This ASU introduces a new current expected credit losses model, which will apply to financial assets subject to credit losses and measured at amortized cost and certain off-balance sheet credit exposures. The guidance would also change current practice for the impairment model for AFS debt securities. The AFS debt securities model will require the use of an allowance to record estimated credit losses and subsequent recoveries. This ASU is effective for fiscal years beginning after Dec. 15, 2019. Earlier application is permitted after Dec. 15, 2018.

ASU 2016-09, Compensation – Stock Compensation

In March 2016, the FASB issued an ASU, "Compensation-Stock Compensation." This standard simplifies several aspects of the accounting for share-based payment transactions, including income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after Dec. 15, 2016. The adoption of the ASU will result in increased volatility to the Company's income tax expense but is not expected to have a material impact on the Company's balance sheet or equity.

ASU 2014-09, ASU 2016-08, ASU 2016-10 and ASU 2016-12, Revenue from Contracts with Customers

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers," which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The ASU will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. In March 2016, the FASB issued ASU 2016-08, "Principal versus Agent Considerations (Reporting Revenue Gross versus Net)," which clarifies the guidance in determining revenue recognition as

principal versus agent. In April 2016, the FASB issued ASU 2016-10, "Identifying Performance Obligations and Licensing," which provides guidance in accounting for immaterial performance obligations and shipping and handling. In May 2016, the FASB issued ASU 2016-12, "Narrow-Scope Improvements and Practical Expedients," which provides clarification on assessing the collectability criterion, presentation of sales taxes, measurement date for noncash consideration and completed contracts at transition. This ASU also provides a practical expedient for contract modifications.

The new standards are effective for the Company on Jan. 1, 2018 with early adoption permitted no earlier than Jan. 1, 2017. The standards permit the use of either the retrospective or cumulative effect transition method. The Company is evaluating the effect that these ASUs will have on its consolidated financial statements and related disclosures. The Company has not yet selected a transition method nor has it determined the effect of these standards on its ongoing financial reporting.

ASU 2016-07, Investments – Equity Method and Joint Ventures

In March 2016, the FASB issued an ASU, "Investments – Equity Method and Joint Ventures," which eliminates the requirement to retrospectively apply the equity method when an increase in ownership interest in the investee prompts a change from the cost method to the equity method. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after Dec. 15, 2016. Earlier application is permitted. The Company will apply this ASU

prospectively beginning in 2017.

ASU 2016-02, Leases

In February 2016, the FASB issued ASU 2016-02, “Leases.” The standard introduces a new accounting model for lessees and was issued primarily to address concerns related to off-balance sheet financing arrangements available to lessees under current guidance. The standard requires lessees to account for all leases on the balance sheet, except for certain short-term leases that have a maximum possible lease term of 12 months. A lessee will recognize on its balance sheet (1) an asset for its right to use the underlying asset over the lease term, including optional payment periods only if the lessee is reasonably certain to exercise the option and (2) a

liability representing its obligation to make lease payments over the lease term. The classification of leases and the income statement impact for lessees will depend on whether the leases meet certain criterion, including when the lessee is deemed to obtain effective control of the underlying asset. The accounting for lessors is largely unchanged from the previous accounting guidance, except for leverage lease accounting which is not permitted for leases entered into or modified after the effective date of the new standard. The FASB requires a modified retrospective method of adoption. The final guidance is effective for reporting periods beginning after Dec. 15, 2018. BNY Mellon is assessing the impacts of the new standard.

ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, the FASB issued ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities." The new ASU requires investments in equity securities that do not result in consolidation and are not accounted for under the equity method to be measured at fair value with changes in the fair value recognized through net income, unless one of two available exceptions apply. The first exception, a scope exception, allows Federal Reserve Bank Stock, Federal Home Loan Bank stock and other exchange memberships held by broker dealers to remain accounted for at cost, less impairment. It also does not apply to derivative instruments that are subject to the requirements of ASC 815, Derivatives and Hedging. The second exception, a practicability exception, will be available for equity investments that do not have readily determinable fair values and do not qualify for the practical expedient to estimate fair value under ASC 820, Fair Value Measurement.

The amendments also require an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from the entity's "own credit risk" when the entity has elected to measure the liability at fair value. The amendments also eliminate the requirement to disclose the methods and significant assumptions used to estimate the fair values of financial instruments measured at amortized cost that are on the balance sheet.

This ASU is effective for fiscal years beginning after Dec. 15, 2017, including interim periods within those fiscal years. If certain requirements are met, early adoption of the "own credit risk" provision is permitted; early adoption of the other provisions is not permitted. BNY Mellon is assessing the impacts of the new standard.

Proposed Accounting Standards

Proposed ASU - Income Taxes - Disclosure Framework - Changes to the Disclosure Requirements for Income Taxes
In July 2016, the FASB issued a proposed ASU, "Income Taxes - Disclosure Framework - Changes to the Disclosure Requirements for Income Taxes." This proposed ASU would enhance disclosure requirements and add new disclosures for income taxes. These enhancements and additions include describing an enacted change in tax law in future periods, disaggregating certain income tax information between foreign and domestic taxes, and explaining the circumstances that caused a change in assertion about the indefinite reinvestment of undistributed foreign earnings and the corresponding amount of those earnings. In addition, the proposed ASU would add disclosure on settlements using existing deferred tax assets, valuation allowance recognized and/or released, and more detail on carryforwards. The proposed ASU would also require disclosing the aggregate cash, cash equivalents and marketable securities held by foreign subsidiaries. Comments on this proposed ASU are due by Sept. 30, 2016.

IFRS

IFRS are a set of standards and interpretations adopted by the IASB. Commencing with the issuance of the "roadmap" in November 2008, the SEC has considered potential methods of incorporation of IFRS in the United States. The use of IFRS for U.S. companies with global operations would allow for streamlined reporting, easier access to foreign capital markets and investments, and facilitate cross-border acquisitions, ventures or spin-offs.

In July 2012, the SEC staff released its final report on IFRS. This Final Report will be used by the SEC Commissioners to decide whether, and if so, when and how to incorporate IFRS into the financial

reporting system for U.S. companies. It is not known when the SEC will make a final decision on the adoption of IFRS in the United States.

While the SEC decides whether IFRS will be required to be used in the preparation of our consolidated financial statements, a number of countries have mandated the use of IFRS by BNY Mellon's subsidiaries in their statutory reports filed in those countries. Such countries include Belgium, Brazil, the Netherlands, Australia, Hong Kong, Canada and South Korea.

Recent regulatory developments

For a summary of additional regulatory matters relevant to our operations, see "Supervision and regulation" in our 2015 Annual Report.

Resolution plan

In April 2016, the FDIC and the Federal Reserve jointly announced determinations and provided firm specific feedback on the 2015 resolution plans of eight systemically important, domestic banking institutions, including BNY Mellon. The agencies determined that the Company's 2015 resolution plan was not credible or would not facilitate an orderly resolution under the U.S. Bankruptcy Code, the statutory standard established in the Dodd-Frank Act, and issued a joint notice of deficiencies and shortcomings regarding the Company's plan and the actions that must be taken to address them. Deficiencies must be remedied by Oct. 1, 2016, and shortcomings must be addressed in our 2017 resolution plan, which is due on July 1, 2017.

If the Federal Reserve and FDIC jointly determine that we fail to address the deficiencies in our Oct. 1, 2016 submission or if they jointly determine that our 2017 resolution plan does not adequately address identified shortcomings, they may find that our 2017 resolution plan is not credible or will not facilitate an orderly resolution under the U.S. Bankruptcy Code. In such an event, they may jointly impose more stringent capital, leverage or liquidity requirements or restrictions on our growth, activities or operations. If we continue to fail to adequately remedy those deficiencies, we could be required to divest assets or operations that the regulators determine necessary to facilitate an orderly resolution.

Capital Planning and Stress Testing

BNY Mellon's capital distributions are subject to supervision and regulation by the Federal Reserve. The Comprehensive Capital Analysis and Review ("CCAR") and the Dodd-Frank Act Stress Tests ("DFAST") are a major component of the Federal Reserve's oversight.

CCAR and the Federal Reserve's capital planning rules require BHCs with $50 billion or more in total consolidated assets, including BNY Mellon, to submit annual capital plans to their Federal Reserve Bank. BNY Mellon and other covered BHCs may pay dividends, repurchase stock, and make other capital distributions only in accordance with a capital plan that has been reviewed by the Federal Reserve and to which the Federal Reserve has not objected. The Federal Reserve may object to a capital plan for quantitative or qualitative reasons, including if the covered BHC will not meet all minimum regulatory capital ratios for each quarter throughout the nine-quarter planning horizon under stressed scenarios. We submitted our 2016 capital plan to the Federal Reserve in April 2016. On June 29, 2016, the Federal Reserve announced that it did not object to BNY Mellon's 2016 capital plan.

DFAST substantially overlaps with CCAR stress testing requirements. Under DFAST, BNY Mellon is required to undergo supervisory stress tests conducted by the Federal Reserve annually, and to conduct our own internal stress tests pursuant to regulatory requirements twice annually. The Federal Reserve published the results of its annual 2016

DFAST stress-test on June 23, 2016.

Brokered Deposits

In November 2015, the FDIC released for comment proposed updates to brokered deposit guidance originally issued in January 2015. On June 30, 2016, the FDIC finalized the updates to its January 2015 guidance regarding brokered deposits. The updated guidance answers frequently asked questions regarding identifying, accepting, and reporting brokered deposits. It could have implications for regulatory reporting, the LCR, the net stable funding ratio, the GSIB surcharge, and other regulatory requirements. BNY Mellon will continue to review its depository relationships in light of the revised guidance.

New York Department of Financial Services ("NYDFS") anti-money laundering and anti-terrorism regulations

In December 2015, the NYDFS proposed regulations requiring regulated institutions, including The Bank of New York Mellon, to maintain anti-money laundering and anti-terrorism financing monitoring and filtering programs.

On July 30, 2016, the NYDFS finalized its regulations. The final regulations require a regulated institution to maintain a "Transaction Monitoring Program" and a "Watch List Filtering Program." To ensure compliance, the final regulations also require each regulated institution to adopt and submit to the Superintendent of the NYDFS a board resolution or senior officer compliance finding by April 15 of each year. The regulation will be enforced pursuant to the Superintendent's authority under applicable laws. The final regulation will become effective Jan. 1, 2017, with the first certification due April 15, 2018.

UK exit from the European Union ("Brexit")

In June 2016, the United Kingdom ("UK") voted on referendum to leave the European Union ("EU"). The result of the referendum means that the long-term nature of the UK's relationship with the EU is unclear (including with respect to the laws and regulations that will apply to companies with operations in the UK as the UK determines which EU laws to replicate or replace), and there is considerable uncertainty as to when the framework for any such relationship governing both the access of the UK to European markets and the access of EU Member States to the UK's markets will be determined and implemented. We continue to evaluate the potential effects of the referendum.

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 SEC filings, 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, SEC Forms 3, 4 and 5 and any proxy statement mailed by us in connection with the solicitation of proxies;
- 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); 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 and Nominating, Corporate Social Responsibility, Human Resources and Compensation, Risk and Technology Committees of our Board of Directors.

The contents of the website listed above or any other websites referenced herein are not incorporated into this Quarterly Report on Form 10-Q.

Item 1. Financial Statements

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

Consolidated Income Statement (unaudited)

	Quarter ended			Year-to-date	
(in millions)	June 30, 2016	March 31, 2016	June 30, 2015	June 30, 2016	June 30, 2015
Fee and other revenue					
Investment services fees:					
Asset servicing	$1,069	$ 1,040	$1,060	$2,109	$2,098
Clearing services	350	350	347	700	691
Issuer services	234	244	234	478	466
Treasury services	139	131	144	270	281
Total investment services fees	1,792	1,765	1,785	3,557	3,536
Investment management and performance fees	830	812	878	1,642	1,745
Foreign exchange and other trading revenue	182	175	187	357	416
Financing-related fees	57	54	58	111	98
Distribution and servicing	43	39	39	82	80
Investment and other income	74	105	104	179	164
Total fee revenue	2,978	2,950	3,051	5,928	6,039
Net securities gains — including other-than-temporary impairment	21	19	17	40	43
Noncredit-related portion of other-than-temporary impairment (recognized in other comprehensive income)	—	(1)	1	(1)	3
Net securities gains	21	20	16	41	40
Total fee and other revenue	2,999	2,970	3,067	5,969	6,079
Operations of consolidated investment management funds					
Investment income (loss)	10	(3)	46	7	102
Interest of investment management fund note holders	—	3	6	3	10
Income (loss) from consolidated investment management funds	10	(6)	40	4	92
Net interest revenue					
Interest revenue	890	883	847	1,773	1,654
Interest expense	123	117	68	240	147
Net interest revenue	767	766	779	1,533	1,507
Provision for credit losses	(9)	10	(6)	1	(4)
Net interest revenue after provision for credit losses	776	756	785	1,532	1,511
Noninterest expense					
Staff	1,412	1,459	1,434	2,871	2,919
Professional, legal and other purchased services	290	278	299	568	601
Software	160	154	158	314	316
Net occupancy	152	142	149	294	300
Distribution and servicing	102	100	96	202	194
Sub-custodian	70	59	75	129	145
Furniture and equipment	63	65	70	128	140
Business development	65	57	72	122	133
Other	240	241	250	481	492
Amortization of intangible assets	59	57	65	116	131
Merger and integration, litigation and restructuring charges	7	17	59	24	56

Total noninterest expense	2,620	2,629	2,727	5,249	5,427
Income					
Income before income taxes	1,165	1,091	1,165	2,256	2,255
Provision for income taxes	290	283	276	573	556
Net income	875	808	889	1,683	1,699
Net (income) loss attributable to noncontrolling interests (includes $(4), $7, $(37), $3 and $(68) related to consolidated investment management funds, respectively)	(2)	9	(36)	7	(67)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	873	817	853	1,690	1,632
Preferred stock dividends	(48)	(13)	(23)	(61)	(36)
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	$825	$804	$830	$1,629	$1,596

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

Consolidated Income Statement (unaudited) (continued)

Net income applicable to common shareholders of The Bank of New York Mellon Corporation used for the earnings per share calculation (in millions)	Quarter ended June 30, 2016	March 31, 2016	June 30, 2015	Year-to-date June 30, 2016	June 30, 2015
Net income applicable to common shareholders of The Bank of New York Mellon Corporation	$825	$ 804	$ 830	$1,629	$1,596
Less: Earnings allocated to participating securities	13	11	9	24	24
Net income applicable to the common shareholders of The Bank of New York Mellon Corporation after required adjustment for the calculation of basic and diluted earnings per common share	$812	$ 793	$ 821	$1,605	$1,572

Average common shares and equivalents outstanding of The Bank of New York Mellon Corporation (in thousands)	Quarter ended June 30, 2016	March 31, 2016	June 30, 2015	Year-to-date June 30, 2016	June 30, 2015
Basic	1,072,583	1,079,641	1,113,790	1,076,112	1,116,183
Common stock equivalents	14,551	14,963	16,718	14,714	17,771
Less: Participating securities	(8,863)	(9,320)	(8,373)	(8,979)	(9,800)
Diluted	1,078,271	1,085,284	1,122,135	1,081,847	1,124,154
Anti-dilutive securities (a)	32,974	33,720	26,061	32,929	30,007

Earnings per share applicable to the common shareholders of The Bank of New York Mellon Corporation (b) (in dollars)	Quarter ended June 30, 2016	March 31, 2016	June 30, 2015	Year-to-date June 30, 2016	June 30, 2015
Basic	$0.76	$ 0.73	$ 0.74	$1.49	$ 1.41
Diluted	$0.75	$ 0.73	$ 0.73	$1.48	$ 1.40

(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.

(b) Basic and diluted earnings per share under the two-class method are determined on the net income applicable to common shareholders of The Bank of New York Mellon Corporation reported on the income statement less earnings allocated to participating securities, and the change in the excess of redeemable value over the fair value of noncontrolling interests, if applicable.

See accompanying Notes to Consolidated Financial Statements.

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

Consolidated Comprehensive Income Statement (unaudited)

	Quarter ended			Year-to-date	
(in millions)	June 30, 2016	March 31, 2016	June 30, 2015	June 30, 2016	June 30, 2015
Net income	$875	$ 808	$ 889	$1,683	$1,699
Other comprehensive income (loss), net of tax:					
Foreign currency translation adjustments	(284)	37	329	(247)	(272)
Unrealized gain (loss) on assets available-for-sale:					
Unrealized gain (loss) arising during the period	117	163	(358)	280	(224)
Reclassification adjustment	(13)	(15)	(10)	(28)	(25)
Total unrealized gain (loss) on assets available-for-sale	104	148	(368)	252	(249)
Defined benefit plans:					
Net gain (loss) arising during the period	—	2	—	2	(109)
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost	14	15	21	29	26
Total defined benefit plans	14	17	21	31	(83)
Net unrealized gain (loss) on cash flow hedges	(9)	3	9	(6)	8
Total other comprehensive income (loss), net of tax (a)	(175)	205	(9)	30	(596)
Total comprehensive income	700	1,013	880	1,713	1,103
Net loss (income) attributable to noncontrolling interests	(2)	9	(36)	7	(67)
Other comprehensive loss (income) attributable to noncontrolling interests	13	5	(34)	18	5
Comprehensive income applicable to The Bank of New York Mellon Corporation	$711	$ 1,027	$ 810	$1,738	$1,041

(a) Other comprehensive income (loss) attributable to The Bank of New York Mellon Corporation shareholders was $(162) million for the quarter ended June 30, 2016, $210 million for the quarter ended March 31, 2016, $(43) million for the quarter ended June 30, 2015, $48 million for the six months ended June 30, 2016 and $(591) million for the six months ended June 30, 2015.

See accompanying Notes to Consolidated Financial Statements.

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

Consolidated Balance Sheet (unaudited)

(dollars in millions, except per share amounts)	June 30, 2016	Dec. 31, 2015
Assets		
Cash and due from:		
Banks	$5,809	$6,537
Interest-bearing deposits with the Federal Reserve and other central banks	88,080	113,203
Interest-bearing deposits with banks	13,303	15,146
Federal funds sold and securities purchased under resale agreements	28,060	24,373
Securities:		
Held-to-maturity (fair value of $41,804 and $43,204)	41,053	43,312
Available-for-sale	76,547	75,867
Total securities	117,600	119,179
Trading assets	7,148	7,368
Loans (includes $318 and $422, at fair value)	64,513	63,703
Allowance for loan losses	(158)	(157)
Net loans	64,355	63,546
Premises and equipment	1,399	1,379
Accrued interest receivable	540	562
Goodwill	17,501	17,618
Intangible assets	3,738	3,842
Other assets (includes $2,042 and $1,087, at fair value)	23,735	19,626
Subtotal assets of operations	371,268	392,379
Assets of consolidated investment management funds, at fair value:		
Trading assets	959	1,228
Other assets	124	173
Subtotal assets of consolidated investment management funds, at fair value	1,083	1,401
Total assets	$372,351	$393,780
Liabilities		
Deposits:		
Noninterest-bearing (principally U.S. offices)	$99,035	$96,277
Interest-bearing deposits in U.S. offices	58,519	51,704
Interest-bearing deposits in Non-U.S. offices	102,124	131,629
Total deposits	259,678	279,610
Federal funds purchased and securities sold under repurchase agreements	7,611	15,002
Trading liabilities	6,195	4,501
Payables to customers and broker-dealers	21,172	21,900
Other borrowed funds	1,098	523
Accrued taxes and other expenses	5,385	5,986
Other liabilities (including allowance for lending-related commitments of $122 and $118, also includes $1,189 and $392, at fair value)	8,105	5,490
Long-term debt (includes $378 and $359, at fair value)	23,573	21,547
Subtotal liabilities of operations	332,817	354,559
Liabilities of consolidated investment management funds, at fair value:		
Trading liabilities	214	229
Other liabilities	23	17
Subtotal liabilities of consolidated investment management funds, at fair value	237	246
Total liabilities	333,054	354,805

Temporary equity		
Redeemable noncontrolling interests	172	200
Permanent equity		
Preferred stock – par value $0.01 per share; authorized 100,000,000 shares; issued 25,826 and 25,826 shares	2,552	2,552
Common stock – par value $0.01 per share; authorized 3,500,000,000 shares; issued 1,323,941,399 and 1,312,941,113 shares	13	13
Additional paid-in capital	25,563	25,262
Retained earnings	21,233	19,974
Accumulated other comprehensive loss, net of tax	(2,552)	(2,600)
Less: Treasury stock of 256,266,980 and 227,598,128 common shares, at cost	(8,250)	(7,164)
Total The Bank of New York Mellon Corporation shareholders' equity	38,559	38,037
Nonredeemable noncontrolling interests of consolidated investment management funds	566	738
Total permanent equity	39,125	38,775
Total liabilities, temporary equity and permanent equity	$372,351	$393,780

See accompanying Notes to Consolidated Financial Statements.

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

Consolidated Statement of Cash Flows (unaudited)

	Six months ended June 30,	
(in millions)	2016	2015
Operating activities		
Net income	$1,683	$1,699
Net loss (income) attributable to noncontrolling interests	7	(67)
Net income applicable to shareholders of The Bank of New York Mellon Corporation	1,690	1,632
Adjustments to reconcile net income to net cash provided by (used for) operating activities:		
Provision for credit losses	1	(4)
Pension plan contributions	(13)	(25)
Depreciation and amortization	748	708
Deferred tax (benefit)	(299)	(13)
Net securities (gains) and venture capital (income)	(43)	(40)
Change in trading activities	1,914	295
Originations of loans held-for-sale	(171)	—
Proceeds from the sales of loans originated for sale	280	—
Change in accruals and other, net	(2,645)	81
Net cash provided by operating activities	1,462	2,634
Investing activities		
Change in interest-bearing deposits with banks	1,979	470
Change in interest-bearing deposits with the Federal Reserve and other central banks	25,717	(6,455)
Purchases of securities held-to-maturity	(2,165)	(12,813)
Paydowns of securities held-to-maturity	2,209	1,499
Maturities of securities held-to-maturity	2,471	306
Purchases of securities available-for-sale	(14,524)	(21,009)
Sales of securities available-for-sale	4,624	14,684
Paydowns of securities available-for-sale	4,155	4,245
Maturities of securities available-for-sale	6,086	7,982
Net change in loans	(1,080)	(4,020)
Sales of loans and other real estate	170	316
Change in federal funds sold and securities purchased under resale agreements	(3,665)	(3,628)
Change in seed capital investments	(49)	237
Purchases of premises and equipment/capitalized software	(349)	(312)
Proceeds from the sale of premises and equipment	—	13
Acquisitions, net of cash	(38)	(9)
Other, net	155	444
Net cash provided by (used for) investing activities	25,696	(18,050)
Financing activities		
Change in deposits	(20,265)	17,721
Change in federal funds purchased and securities sold under repurchase agreements	(7,391)	(1,449)
Change in payables to customers and broker-dealers	(730)	869
Change in other borrowed funds	551	(124)
Net proceeds from the issuance of long-term debt	2,990	2,792
Repayments of long-term debt	(1,450)	(2,659)
Proceeds from the exercise of stock options	106	206
Issuance of common stock	13	13
Issuance of preferred stock	—	990

Treasury stock acquired	(1,086)	(1,234)
Common cash dividends paid	(370)	(383)
Preferred cash dividends paid	(61)	(36)
Other, net	(13)	123
Net cash (used for) provided by financing activities	(27,706)	16,829
Effect of exchange rate changes on cash	(180)	(30)
Change in cash and due from banks		
Change in cash and due from banks	(728)	1,383
Cash and due from banks at beginning of period	6,537	6,970
Cash and due from banks at end of period	$5,809	$8,353
Supplemental disclosures		
Interest paid	$241	$159
Income taxes paid	223	648
Income taxes refunded	26	892

See accompanying Notes to Consolidated Financial Statements.

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

Consolidated Statement of Changes in Equity (unaudited)

	The Bank of New York Mellon Corporation shareholders						Non-redeemable noncontrolling interests of consolidated investment management funds		Redeemable non-controlling interests/ temporary equity
(in millions, except per share amounts)	Preferred stock	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive (loss) income, net of tax	Treasury stock		Total permanent equity	
Balance at Dec. 31, 2015	$2,552	$ 13	$25,262	$19,974	$ (2,600)	$(7,164)	$ 738	$38,775 (a)	$ 200
Shares issued to shareholders of noncontrolling interests	—	—	—	—	—	—	—	—	28
Redemption of subsidiary shares from noncontrolling interests	—	—	—	—	—	—	—	—	(44)
Other net changes in noncontrolling interests	—	—	(7)	—	—	—	(169)	(176)	10
Net income (loss)	—	—	—	1,690	—	—	(3)	1,687	(4)
Other comprehensive income (loss)	—	—	—	—	48	—	—	48	(18)
Dividends:									
Common stock at $0.34 per share	—	—	—	(370)	—	—	—	(370)	—
Preferred stock	—	—	—	(61)	—	—	—	(61)	—
Repurchase of common stock	—	—	—	—	—	(1,086)	—	(1,086)	—
Common stock issued under:									
Employee benefit plans	—	—	15	—	—	—	—	15	—
Direct stock purchase and dividend reinvestment plan	—	—	10	—	—	—	—	10	—
Stock awards and options exercised	—	—	283	—	—	—	—	283	—
Balance at June 30, 2016	$2,552	$ 13	$25,563	$21,233	$ (2,552)	$(8,250)	$ 566	$39,125 (a)	$ 172

(a) Includes total The Bank of New York Mellon Corporation common shareholders' equity of $35,485 million at Dec. 31, 2015 and $36,007 million at June 30, 2016.

See accompanying Notes to Consolidated Financial Statements.

Notes to Consolidated Financial Statements

Note 1 - Basis of presentation

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.

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 BNY Mellon's Annual Report on Form 10-K for the year ended Dec. 31, 2015.

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. Amounts subject to estimates are items such as the allowance for loan losses and lending-related commitments, the fair value of financial instruments and derivatives, other-than-temporary impairment, goodwill and other intangibles and pension accounting. Among other effects, such changes in estimates could result in future impairments of investment securities, goodwill and intangible assets and establishment of allowances for loan losses and lending-related commitments as well as changes in pension and post-retirement expense.

Note 2 - Acquisitions and dispositions

We sometimes structure our acquisitions with both an initial payment and later contingent payments tied to post-closing revenue or income growth. Contingent payments totaled $4 million in the second quarter of 2016 and $4 million in the first six months of 2016.

At June 30, 2016, we are potentially obligated to pay additional consideration that could amount to $29 million over the next three years for our acquired companies, based on contractual agreements. The acquisitions and disposition described below did not have a material impact on BNY Mellon's results of operations.

Acquisition in 2016

On April 1, 2016, BNY Mellon acquired the assets of Atherton Lane Advisers, LLC, a U.S.-based investment manager with approximately $2.45 billion in assets under management and servicer for approximately 700 high net worth clients, for cash of $38 million, plus contingent payments measured at $22 million. Goodwill related to this acquisition totaled $29 million and is included in the Investment Management business. The customer relationship intangible assets related to this acquisition is included in the Investment Management business, with an estimated life of 14 years, and totaled $30 million at acquisition.

Acquisition in 2015

On Jan. 2, 2015, BNY Mellon acquired Cutwater Asset Management, a U.S.-based, fixed income and solutions specialist with approximately $23 billion in assets under management.

Disposition in 2015

On July 31, 2015, BNY Mellon sold Meriten Investment Management GmbH ("Meriten"), a German-based investment management boutique, for $40 million. As a result of this sale, we recorded an after-tax loss of $12 million. Goodwill of $22 million and customer relationship intangible assets of $9 million were removed from the balance sheet as a result of this sale.

Notes to Consolidated Financial Statements (continued)

Note 3 - Securities

The following tables present the amortized cost, the gross unrealized gains and losses and the fair value of securities at June 30, 2016 and Dec. 31, 2015.

Securities at June 30, 2016		Gross		
(in millions)	Amortized cost	unrealized Gains	Losses	Fair value
Available-for-sale:				
U.S. Treasury	$12,753	$766	$ 1	$13,518
U.S. Government agencies	297	12	—	309
State and political subdivisions	3,637	119	11	3,745
Agency RMBS	23,472	328	243	23,557
Non-agency RMBS	702	25	19	708
Other RMBS	888	4	21	871
Commercial MBS	1,090	28	7	1,111
Agency commercial MBS	4,659	119	8	4,770
CLOs	2,494	2	13	2,483
Other asset-backed securities	2,460	6	12	2,454
Foreign covered bonds	2,256	46	—	2,302
Corporate bonds	1,554	57	1	1,610
Sovereign debt/sovereign guaranteed	13,264	339	—	13,603
Other debt securities	3,054	56	1	3,109
Equity securities	2	1	—	3
Money market funds	865	—	—	865
Non-agency RMBS (a)	1,237	303	11	1,529
Total securities available-for-sale (b)	$74,684	$2,211	$ 348	$76,547
Held-to-maturity:				
U.S. Treasury	$10,963	$203	$ —	$11,166
U.S. Government agencies	1,607	2	—	1,609
State and political subdivisions	20	1	1	20
Agency RMBS	25,475	476	2	25,949
Non-agency RMBS	87	4	2	89
Other RMBS	183	—	12	171
Commercial MBS	9	—	—	9
Agency commercial MBS	559	20	—	579
Foreign covered bonds	78	2	—	80
Sovereign debt/sovereign guaranteed	2,045	60	—	2,105
Other debt securities	27	—	—	27
Total securities held-to-maturity	$41,053	$768	$ 17	$41,804
Total securities	$115,737	$2,979	$ 365	$118,351

(a) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(b) Includes gross unrealized gains of $73 million and gross unrealized losses of $220 million recorded in accumulated other comprehensive income related to investment securities that were transferred from available-for-sale to held-to-maturity. The unrealized gains and losses primarily are related to Agency RMBS and will be amortized into net interest revenue over the estimated lives of the securities.

Securities at Dec. 31, 2015		Gross		
	Amortized	unrealized		Fair
(in millions)	cost	Gains	Losses	value
Available-for-sale:				
U.S. Treasury	$12,693	$175	$ 36	$12,832
U.S. Government agencies	386	2	1	387
State and political subdivisions	3,968	91	13	4,046
Agency RMBS	23,549	239	287	23,501
Non-agency RMBS	782	31	20	793
Other RMBS	1,072	10	21	1,061
Commercial MBS	1,400	8	16	1,392
Agency commercial MBS	4,031	24	35	4,020
CLOs	2,363	1	13	2,351
Other asset-backed securities	2,909	1	17	2,893
Foreign covered bonds	2,125	46	3	2,168
Corporate bonds	1,740	26	14	1,752
Sovereign debt/sovereign guaranteed	13,036	211	30	13,217
Other debt securities	2,732	46	3	2,775
Equity securities	3	1	—	4
Money market funds	886	—	—	886
Non-agency RMBS (a)	1,435	362	8	1,789
Total securities available-for-sale (b)	$75,110	$1,274	$ 517	$75,867
Held-to-maturity:				
U.S. Treasury	$11,326	$25	$ 51	$11,300
U.S. Government agencies	1,431	—	6	1,425
State and political subdivisions	20	—	1	19
Agency RMBS	26,036	134	205	25,965
Non-agency RMBS	118	5	2	121
Other RMBS	224	1	10	215
Commercial MBS	9	—	—	9
Agency commercial MBS	503	—	9	494
Foreign covered bonds	76	—	—	76
Sovereign debt/sovereign guaranteed	3,538	22	11	3,549
Other debt securities	31	—	—	31
Total securities held-to-maturity	$43,312	$187	$ 295	$43,204
Total securities	$118,422	$1,461	$ 812	$119,071

(a) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(b) Includes gross unrealized gains of $84 million and gross unrealized losses of $248 million recorded in accumulated other comprehensive income related to investment 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 estimated lives of the securities.

Notes to Consolidated Financial Statements (continued)

The following table presents the gross securities gains, losses and impairments.

Net securities gains (losses) (in millions)	2Q16	1Q16	2Q15	YTD16	YTD15
Realized gross gains	$ 23	$ 22	$ 18	$ 45	$ 43
Realized gross losses	—	—	(1)	—	(1)
Recognized gross impairments	(2)	(2)	(1)	(4)	(2)
Total net securities gains	$ 21	$ 20	$ 16	$ 41	$ 40

Temporarily impaired securities

At June 30, 2016, the unrealized losses on the investment securities portfolio were primarily attributable to an increase in interest rates from 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, $220 million of the unrealized losses at June 30, 2016 and $248 million at Dec. 31, 2015 reflected in the available-for-sale sections of the tables below relate to certain securities (primarily Agency RMBS) that were transferred from available-for-sale to held-to-maturity. The unrealized losses will be amortized into net interest revenue over the estimated 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 tables show the aggregate related fair value of investments 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 at June 30, 2016 and Dec. 31, 2015.

Temporarily impaired securities at June 30, 2016	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:						
U.S. Treasury	$100	$ 1	$—	$ —	$100	$ 1
State and political subdivisions	15	—	133	11	148	11
Agency RMBS	7,154	28	703	215	7,857	243
Non-agency RMBS	115	1	344	18	459	19
Other RMBS	89	2	269	19	358	21
Commercial MBS	113	—	232	7	345	7
Agency commercial MBS	846	7	229	1	1,075	8
CLOs	1,082	6	841	7	1,923	13
Other asset-backed securities	721	6	347	6	1,068	12
Corporate bonds	27	1	5	—	32	1
Sovereign debt/sovereign guaranteed	34	—	129	—	163	—
Non-agency RMBS (a)	49	2	54	9	103	11
Other debt securities	618	1	—	—	618	1

Foreign covered bonds	119	—	66	—	185	—
Total securities available-for-sale (b)	$11,082	$ 55	$3,352	$ 293	$14,434	$ 348
Held-to-maturity:						
State and political subdivisions	$—	$ —	$4	$ 1	$4	$ 1
Agency RMBS	233	1	1,888	1	2,121	2
Non-agency RMBS	5	—	56	2	61	2
Other RMBS	24	2	149	10	173	12
Total securities held-to-maturity	$262	$ 3	$2,097	$ 14	$2,359	$ 17
Total temporarily impaired securities	$11,344	$ 58	$5,449	$ 307	$16,793	$ 365

(a) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(b) Gross unrealized losses for 12 months or more of $220 million were recorded in accumulated other comprehensive income and related to investment securities that were transferred from available-for-sale to held-to-maturity. The unrealized losses primarily related to Agency RMBS and will be amortized into net interest revenue over the estimated lives of the securities. There were no gross unrealized losses for less than 12 months.

Notes to Consolidated Financial Statements (continued)

Temporarily impaired securities at Dec. 31, 2015	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:						
U.S. Treasury	$6,343	$ 36	$—	$ —	$6,343	$ 36
U.S. Government agencies	148	1	10	—	158	1
State and political subdivisions	143	2	117	11	260	13
Agency RMBS	8,500	44	1,316	243	9,816	287
Non-agency RMBS	72	—	417	20	489	20
Other RMBS	2	—	298	21	300	21
Commercial MBS	567	9	224	7	791	16
Agency commercial MBS	2,551	31	172	4	2,723	35
CLOs	1,599	10	455	3	2,054	13
Other asset-backed securities	2,001	10	546	7	2,547	17
Corporate bonds	338	10	128	4	466	14
Sovereign debt/sovereign guaranteed	2,063	30	43	—	2,106	30
Non-agency RMBS (a)	45	1	52	7	97	8
Other debt securities	505	3	—	—	505	3
Foreign covered bonds	515	3	—	—	515	3
Total securities available-for-sale (b)	$25,392	$ 190	$3,778	$ 327	$29,170	$ 517
Held-to-maturity:						
U.S. Treasury	$9,121	$ 51	$—	$ —	$9,121	$ 51
U.S. Government agencies	1,122	6	—	—	1,122	6
State and political subdivisions	4	1	—	—	4	1
Agency RMBS	16,491	171	1,917	34	18,408	205
Non-agency RMBS	40	—	29	2	69	2
Other RMBS	9	—	166	10	175	10
Agency commercial MBS	494	9	—	—	494	9
Sovereign debt/sovereign guaranteed	2,161	11	—	—	2,161	11
Total securities held-to-maturity	$29,442	$ 249	$2,112	$ 46	$31,554	$ 295
Total temporarily impaired securities	$54,834	$ 439	$5,890	$ 373	$60,724	$ 812

(a) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(b) Includes gross unrealized losses for less than 12 months of $8 million and gross unrealized losses for 12 months or more of $240 million recorded in accumulated other comprehensive income related to investment securities that were transferred from available-for-sale to held-to-maturity. The unrealized losses primarily related to Agency RMBS and will be amortized into net interest revenue over the estimated lives of the securities.

The following table shows the maturity distribution by carrying amount and yield (on a tax equivalent basis) of our investment securities portfolio at June 30, 2016.

Maturity distribution and yield on investment securities at June 30, 2016	U.S. Treasury		U.S. Government agencies		State and political subdivisions		Other bonds, notes and debentures		Mortgage/ asset-backed and equity securities		
(dollars in millions)	Amount	Yield (a)	Amount	Yield (a)	Amount	Yield (a)	Amount	Yield (a)	Amount	Yield (a)	Tota

Securities available-for-sale:																				
One year or less	$2,190	0.66	%	$—	—	%	$238	2.29	%	$5,979	0.92	%	$—	—	%	$8,4				
Over 1 through 5 years	5,879	1.41		97	0.95		1,826	2.80		12,241	1.08		—	—		20,0				
Over 5 through 10 years	1,557	1.91		212	2.43		1,459	3.58		2,192	1.26		—	—		5,42				
Over 10 years	3,892	3.11		—	—		222	1.63		212	1.69		—	—		4,32				
Mortgage-backed securities	—	—		—	—		—	—		—	—		32,546	2.65		32,5				
Asset-backed securities	—	—		—	—		—	—		—	—		4,937	1.54		4,93				
Equity securities (b)	—	—		—	—		—	—		—	—		868	—		868				
Total	$13,518	1.83	%	$309	1.96	%	$3,745	3.00	%	$20,624	1.06	%	$38,351	2.45	%	$76				
Securities held-to-maturity:																				
One year or less	$1,386	0.76	%	$25	0.64	%	$—	—	%	$286	0.40	%	$—	—	%	$1,6				
Over 1 through 5 years	7,165	1.13		1,582	1.10		1	7.12		1,131	0.65		—	—		9,87				
Over 5 through 10 years	2,412	1.99		—	—		4	6.78		733	0.70		—	—		3,14				
Over 10 years	—	—		—	—		15	5.32		—	—		—	—		15				
Mortgage-backed securities	—	—		—	—		—	—		—	—		26,313	2.71		26,3				
Total	$10,963	1.28	%	$1,607	1.09	%	$20	5.71	%	$2,150	0.63	%	$26,313	2.71	%	$41				

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

(b) Includes money market funds.

Notes to Consolidated Financial Statements (continued)

Other-than-temporary impairment

We routinely conduct periodic reviews of all securities to determine whether OTTI has occurred. Such reviews may incorporate the use of economic models. Various inputs to the economic models are used to determine if an unrealized loss on securities is other-than-temporary. For example, the most significant inputs related to non-agency RMBS are:

- Default rate - the number of mortgage loans expected to go into default over the life of the transaction, which is driven by the roll rate of loans in each performance bucket that will ultimately migrate to default; and
- Severity - the loss expected to be realized when a loan defaults.

To determine if an unrealized loss is other-than-temporary, we project total estimated defaults of the underlying assets (mortgages) and multiply that calculated amount by an estimate of realizable value upon sale of these assets in the marketplace (severity) in order to determine the projected collateral loss. In determining estimated default rate and severity assumptions, we review the performance of the underlying securities, industry studies, market forecasts, as well as our view of the economic outlook affecting collateral. We also evaluate the current credit enhancement underlying the bond to determine the impact on cash flows. If we determine that a given security will be subject to a write-down or loss, we record the expected credit loss as a charge to earnings.

The table below shows the projected weighted-average default rates and loss severities for the 2007, 2006 and late 2005 non-agency RMBS and the securities previously held in the Grantor Trust that we established in connection with the restructuring of our investment securities portfolio in 2009, at June 30, 2016 and Dec. 31, 2015.

Projected weighted-average default rates and loss severities

	June 30, 2016		Dec. 31, 2015	
	Default rate	Severity	Default rate	Severity
Alt-A	31%	56%	33%	57%
Subprime	50%	70%	52%	75%
Prime	18%	39%	18%	40%

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

Net securities gains (losses)

(in millions)	2Q16	1Q16	2Q15	YTD16	YTD15
Agency RMBS	$ 5	$ 8	$ 1	$ 13	$ 1
Foreign covered bonds	—	10	1	10	1
U.S. Treasury	4	1	11	5	34
Non-agency RMBS	4	(2)	(1)	2	(2)
Other	8	3	4	11	6
Total net securities gains	$ 21	$ 20	$ 16	$ 41	$ 40

The following table reflects investment securities credit losses recorded in earnings. The beginning balance represents the credit loss component for which OTTI occurred on debt securities in prior periods. The additions represent the first time a debt security was credit impaired or when subsequent credit impairments have occurred. The deductions represent credit losses on securities that have been sold, are required to be sold, or for which it is our intention to sell.

Debt securities credit loss roll forward (in millions)	2Q16	2Q15
Beginning balance as of March 31	$ 93	$ 92
Add: Initial OTTI credit losses	—	—
Subsequent OTTI credit losses	2	1
Less: Realized losses for securities sold	4	2
Ending balance as of June 30	$ 91	$ 91

Debt securities credit loss roll forward (in millions)	Year-to-date 2016	2015
Beginning balance as of Jan. 1	$ 91	$ 93
Add: Initial OTTI credit losses	—	—
Subsequent OTTI credit losses	4	1
Less: Realized losses for securities sold	4	3
Ending balance as of June 30	$ 91	$ 91

Pledged assets

At June 30, 2016, BNY Mellon had pledged assets of $102 billion, including $83 billion pledged as collateral for potential borrowings at the Federal Reserve Discount Window. The components of the assets pledged at June 30, 2016 included $88 billion of securities, $8 billion of loans, $4 billion of interest-bearing deposits with banks and $2 billion of trading assets.

Notes to Consolidated Financial Statements (continued)

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, 2015, BNY Mellon had pledged assets of $101 billion, including $84 billion pledged as collateral for potential borrowing at the Federal Reserve Discount Window. The components of the assets pledged at Dec. 31, 2015 included $88 billion of securities, $8 billion of loans, $3 billion of trading assets and $2 billion of interest-bearing deposits with banks.

At June 30, 2016 and Dec. 31, 2015, pledged assets included $7 billion and $7 billion, respectively, for which the recipients were permitted to sell or repledge the assets delivered.

We also obtain securities as collateral including receipts under resale agreements, securities borrowed, derivative contracts and custody agreements on terms which permit us to sell or repledge the securities to others. At June 30, 2016 and Dec. 31, 2015, the market value of the securities received that can be sold or repledged was $55 billion and $52 billion, respectively. We routinely sell or repledge these securities through delivery to third parties. As of June 30, 2016 and Dec. 31, 2015, the market value of securities collateral sold or repledged was $19 billion and $17 billion, respectively.

Restricted cash and securities

Cash and securities may also be segregated under federal and other regulations or requirements. At June 30, 2016 and Dec. 31, 2015, cash segregated under federal and other regulations or requirements was $2 billion and $4 billion, respectively. Segregated cash is included in interest-bearing deposits with banks on the consolidated balance sheet. Securities segregated for these purposes were $2 billion at June 30, 2016 and $1 billion at Dec. 31, 2015. Segregated securities were sourced from securities purchased under resale agreements at June 30, 2016 and are included in federal funds sold and securities purchased under resale agreements on the consolidated balance sheet. Segregated securities are included in trading assets on the consolidated balance sheet at Dec. 31, 2015.

Note 4 - Loans and asset quality

Loans

The table below provides the details of our loan portfolio and industry concentrations of credit risk at June 30, 2016 and Dec. 31, 2015.

Loans (in millions)	June 30, 2016	Dec. 31, 2015
Domestic:		
Financial institutions	$6,861	$6,640
Commercial	2,377	2,115
Wealth management loans and mortgages	14,445	13,247
Commercial real estate	4,441	3,899
Lease financings	1,027	1,007
Other residential mortgages	1,046	1,055
Overdrafts	1,331	911
Other	1,123	1,137
Margin loans	18,388	19,340

Total domestic	51,039	49,351
Foreign:		
Financial institutions	7,334	9,259
Commercial	295	227
Wealth management loans and mortgages	91	100
Commercial real estate	13	46
Lease financings	751	850
Other (primarily overdrafts)	4,784	3,637
Margin loans	206	233
Total foreign	13,474	14,352
Total loans (a)	$64,513	$63,703

(a) Net of unearned income of $578 million at June 30, 2016 and $674 million at Dec. 31, 2015 primarily on 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.

Notes to Consolidated Financial Statements (continued)

The following tables are presented for each class of financing receivable, and provide additional information about our credit risks and the adequacy of our allowance for credit losses.

Allowance for credit losses

Transactions in the allowance for credit losses are summarized as follows:

Allowance for credit losses activity for the quarter ended June 30, 2016

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All Other	Foreign	Total
Beginning balance	$ 88	$ 62	$ 32	$ 16	$ 18	$ 32	$—	$39	$287
Charge-offs	—	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	1	—	1	2
Net recoveries	—	—	—	—	—	1	—	1	2
Provision	2	1	(3)	(2)	—	(4)	—	(3)	(9)
Ending balance	$ 90	$ 63	$ 29	$ 14	$ 18	$ 29	$—	$37	$280
Allowance for:									
Loan losses	$ 25	$ 43	$ 9	$ 14	$ 15	$ 29	$—	$23	$158
Lending-related commitments	65	20	20	—	3	—	—	14	122
Individually evaluated for impairment:									
Loan balance	$ —	$ 2	$ 171	$ 4	$ 8	$ —	$—	$—	$185
Allowance for loan losses	—	1	—	2	1	—	—	—	4
Collectively evaluated for impairment:									
Loan balance	$ 2,377	$ 4,222	$ 6,690	$ 1,023	$ 14,437	$ 945	$20,842 (a)	$13,474	$64,010
Allowance for loan losses	25	42	9	12	14	29	—	23	154

(a) Includes $1,331 million of domestic overdrafts, $18,388 million of margin loans and $1,123 million of other loans at June 30, 2016.

Allowance for credit losses activity for the quarter ended March 31, 2016

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All Other	Foreign	Total
Beginning balance	$ 82	$ 59	$ 31	$ 15	$ 19	$ 34	$—	$35	$275
Charge-offs	—	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	2	—	—	2
Net recoveries	—	—	—	—	—	2	—	—	2
Provision	6	3	1	1	(1)	(4)	—	4	10
Ending balance	$ 88	$ 62	$ 32	$ 16	$ 18	$ 32	$—	$39	$287
Allowance for:									
Loan losses	$ 25	$ 40	$ 11	$ 16	$ 15	$ 32	$—	$23	$162
	63	22	21	—	3	—	—	16	125

Lending-related commitments									
Individually evaluated for impairment:									
Loan balance	$ —	$ 2	$ 171	$ 5	$ 8	$ —	$—	$—	$186
Allowance for loan losses	—	1	—	2	1	—	—	—	4
Collectively evaluated for impairment:									
Loan balance	$ 2,130	$ 3,927	$ 5,415	$ 973	$ 13,874	$ 993	$20,697	(a) $13,044	$61,053
Allowance for loan losses	25	39	11	14	14	32	—	23	158

(a) Includes $917 million of domestic overdrafts, $18,674 million of margin loans and $1,106 million of other loans at March 31, 2016.

Notes to Consolidated Financial Statements (continued)

Allowance for credit losses activity for the quarter ended June 30, 2015

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All Other	Foreign	Total
Beginning balance	$ 65	$ 53	$ 33	$ 31	$ 21	$ 40	$—	$40	$283
Charge-offs	—	—	—	—	—	(1)	—	—	(1)
Recoveries	—	—	1	—	—	1	—	—	2
Net recoveries	—	—	1	—	—	—	—	—	1
Provision	10	5	(4)	(11)	1	(3)	—	(4)	(6)
Ending balance	$ 75	$ 58	$ 30	$ 20	$ 22	$ 37	$—	$36	$278
Allowance for:									
Loan losses	$ 31	$ 36	$ 13	$ 20	$ 17	$ 37	$—	$29	$183
Lending-related commitments	44	22	17	—	5	—	—	7	95
Individually evaluated for impairment:									
Loan balance	$ —	$ —	$ —	$ —	$ 8	$ —	$—	$—	$8
Allowance for loan losses	—	—	—	—	1	—	—	—	1
Collectively evaluated for impairment:									
Loan balance	$ 1,601	$ 3,117	$ 6,927	$ 1,077	$ 12,121	$ 1,134	$22,422(a)	$14,467	$62,866
Allowance for loan losses	31	36	13	20	16	37	—	29	182

(a) Includes $1,013 million of domestic overdrafts, $20,247 million of margin loans and $1,162 million of other loans at June 30, 2015.

Allowance for credit losses activity for the six months ended June 30, 2016

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All Other	Foreign	Total
Beginning balance	$ 82	$ 59	$ 31	$ 15	$ 19	$ 34	$ —	$ 35	$275
Charge-offs	—	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	3	—	1	4
Net recoveries	—	—	—	—	—	3	—	1	4
Provision	8	4	(2)	(1)	(1)	(8)	—	1	1
Ending balance	$ 90	$ 63	$ 29	$ 14	$ 18	$ 29	$ —	$ 37	$280

Allowance for credit losses activity for the six months ended June 30, 2015

(in millions)	Commercial	Commercial real estate	Financial institutions	Lease financings	Wealth management loans and mortgages	Other residential mortgages	All Other	Foreign	Total
Beginning balance	$ 60	$ 50	$ 31	$ 32	$ 22	$ 41	$ —	$ 44	$280
Charge-offs	—	—	—	—	—	(1)	—	—	(1)
Recoveries	—	—	1	—	—	2	—	—	3
Net recoveries	—	—	1	—	—	1	—	—	2
Provision	15	8	(2)	(12)	—	(5)	—	(8)	(4)

Ending balance	$ 75	$ 58	$ 30	$ 20	$ 22	$ 37	$ ~~$~~ 36	$278

Notes to Consolidated Financial Statements (continued)

Nonperforming assets

The table below presents the distribution of our nonperforming assets.

Nonperforming assets (in millions)	June 30, 2016	Dec. 31, 2015
Nonperforming loans:		
Financial institutions	$ 171	$ 171
Other residential mortgages	97	102
Wealth management loans and mortgages	10	11
Lease financings	4	—
Commercial real estate	2	2
Total nonperforming loans	284	286
Other assets owned	5	6
Total nonperforming assets	$ 289	$ 292

At June 30, 2016, undrawn commitments to borrowers whose loans were classified as nonaccrual or reduced rate were not material. Nonperforming loans include our claim in the bankruptcy proceedings of Sentinel. On July 13, 2016, a settlement agreement between BNY Mellon and

Sentinel's bankruptcy trustee was accepted by the bankruptcy court. The settlement is expected to result in the release of trust assets to BNY Mellon in the third quarter of 2016 in an amount that exceeds BNY Mellon's carrying value of $171 million.

Lost interest

The table below presents the amount of lost interest income.

Lost interest (in millions)	2Q16	1Q16	2Q15	YTD16	YTD15
Amount by which interest income recognized on nonperforming loans exceeded reversals	$ —	$ —	$ —	$ —	$ —
Amount by which interest income would have increased if nonperforming loans at period-end had been performing for the entire period	$ 1	$ 1	$ 1	$ 3	$ 3

Impaired loans

The tables below provide information about our impaired loans. We use the discounted cash flow method as the primary method for valuing impaired loans.

Impaired loans	Quarter ended						Year-to-date	
	June 30, 2016		March 31, 2016		June 30, 2015		June 30, 2016	June 30, 2015
(in millions)	Average	Interest	Average	Interest	Average	Interest	Average	Interest

	recorded investment	Interest income recognized	recorded investment	Interest income recognized	recorded investment	Interest income recognized	Average recorded investment	Interest income recognized	recorded investment	Interest income recognized
Impaired loans with an allowance:										
Commercial real estate	$1	$ —	$ 1	$ —	$ —	$ —	$1	$ —	$ —	$ —
Wealth management loans and mortgages	6	—	6	—	6	—	6	—	6	—
Lease financings	4	—	2	—	—	—	3	—	—	—
Total impaired loans with an allowance	11	—	9	—	6	—	10	—	6	—
Impaired loans without an allowance:										
Commercial real estate	1	—	1	—	—	—	1	—	—	—
Financial institutions	171	—	171	—	—	—	171	—	—	—
Wealth management loans and mortgages	2	—	2	—	2	—	2	—	2	—
Total impaired loans without an allowance (a)	174	—	174	—	2	—	174	—	2	—
Total impaired loans	$185	$ —	$ 183	$ —	$ 8	$ —	$184	$ —	$ 8	$ —

(a) When the discounted cash flows, collateral value or market price equals or exceeds the carrying value of the loan, then the loan does not require an allowance under the accounting standard related to impaired loans.

Notes to Consolidated Financial Statements (continued)

Impaired loans	June 30, 2016			Dec. 31, 2015		
(in millions)	Recorded investment	Unpaid principal balance	Related allowance (a)	Recorded investment	Unpaid principal balance	Related allowance (a)
Impaired loans with an allowance:						
Commercial real estate	$1	$ 4	$ 1	$1	$ 3	$ 1
Wealth management loans and mortgages	6	6	1	6	7	1
Lease financings	4	4	2	—	—	—
Total impaired loans with an allowance	11	14	4	7	10	2
Impaired loans without an allowance:						
Commercial real estate	1	1	N/A	—	—	N/A
Financial institutions	171	312	N/A	171	312	N/A
Wealth management loans and mortgages	2	2	N/A	2	2	N/A
Total impaired loans without an allowance (b)	174	315	N/A	173	314	N/A
Total impaired loans (c)	$185	$ 329	$ 4	$180	$ 324	$ 2

(a) The allowance for impaired loans is included in the allowance for loan losses.

(b) When the discounted cash flows, collateral value or market price equals or exceeds the carrying value of the loan, then the loan does not require an allowance under the accounting standard related to impaired loans.

(c) Excludes less than $1 million and an aggregate of $2 million of impaired loans in amounts individually less than $1 million at June 30, 2016 and Dec. 31, 2015, respectively. The allowance for loan loss associated with these loans totaled less than $1 million at both June 30, 2016 and Dec. 31, 2015, respectively.

Past due loans

The table below sets forth information about our past due loans.

Past due loans and still accruing interest	June 30, 2016				Dec. 31, 2015			
	Days past due			Total	Days past due			Total
(in millions)	30-59	60-89	>90	past due	30-59	60-89	>90	past due
Commercial	$50	$ —	$ —	$ 50	$—	$ —	$ —	$ —
Wealth management loans and mortgages	30	—	—	30	69	2	1	72
Financial institutions	18	3	5	26	—	—	—	—
Other residential mortgages	18	2	4	24	22	5	4	31
Commercial real estate	7	—	—	7	57	11	—	68
Total past due loans	$123	$ 5	$ 9	$ 137	$148	$ 18	$ 5	$ 171

Troubled debt restructurings (“TDRs”)

A modified loan is considered a TDR if the debtor is experiencing financial difficulties and the creditor grants a concession to the debtor that would not otherwise be considered. A TDR may include a

transfer of real estate or other assets from the debtor to the creditor, or a modification of the term of the loan. Not all modified loans are considered TDRs.

The following table presents TDRs that occurred in the second quarter of 2016, first quarter of 2016 and second quarter of 2015.

TDRs	2Q16			1Q16			2Q15		
(dollars in millions)	Number of contracts	Outstanding recorded investment Pre-modification	Outstanding recorded investment Post-modification	Number of contracts	Outstanding recorded investment Pre-modification	Outstanding recorded investment Post-modification	Number of contracts	Outstanding recorded investment Pre-modification	Outstanding recorded investment Post-modification
Other residential mortgages	23	$ 4	$ 5	13	$ 3	$ 3	20	$ 4	$ 5
Wealth management loans and mortgages	—	—	—	2	—	—	—	—	—
Total TDRs	23	$ 4	$ 5	15	$ 3	$ 3	20	$ 4	$ 5

Notes to Consolidated Financial Statements (continued)

Other residential mortgages

The modifications of the other residential mortgage loans in the second quarter of 2016, first quarter of 2016 and second quarter of 2015 consisted of reducing the stated interest rates and, in certain cases, a forbearance of default and extending the maturity dates. The modified loans are primarily collateral dependent for which the value is based on the fair value of the collateral.

TDRs that subsequently defaulted

There were two residential mortgage loans and one wealth management loan that had been restructured in

a TDR during the previous 12 months and have subsequently defaulted in the second quarter of 2016. The total recorded investment of these loans was less than $1 million.

Credit quality indicators

Our credit strategy is to focus on investment grade names to support cross-selling opportunities. 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 following tables set forth information about credit quality indicators.

Commercial loan portfolio

Commercial loan portfolio – Credit risk profile by creditworthiness category

	Commercial		Commercial real estate		Financial institutions	
(in millions)	June 30, 2016	Dec. 31, 2015	June 30, 2016	Dec. 31, 2015	June 30, 2016	Dec. 31, 2015
Investment grade	$2,401	$2,026	$ 3,495	$ 2,678	$ 10,521	$ 13,965
Non-investment grade	271	316	959	1,267	3,674	1,934
Total	$2,672	$2,342	$ 4,454	$ 3,945	$ 14,195	$ 15,899

The commercial loan portfolio is divided into investment grade and non-investment grade categories based on rating criteria largely consistent with those of the public rating agencies. Each customer in the portfolio is assigned an internal credit rating. These internal credit ratings are generally consistent with the ratings categories 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.

Wealth management loans and mortgages

Wealth management loans and mortgages – Credit risk profile by internally assigned grade

(in millions)	June 30, 2016	Dec. 31, 2015

Wealth management loans:		
Investment grade	$6,978	$6,529
Non-investment grade	141	171
Wealth management mortgages	7,417	6,647
Total	$14,536	$13,347

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 61% at origination. In the wealth management portfolio, less

than 1% of the mortgages were past due at June 30, 2016.

At June 30, 2016, the wealth management mortgage portfolio consisted of the following geographic concentrations: California - 23%; New York - 21%; Massachusetts - 13%; Florida - 8%; and other - 35%.

Other residential mortgages

The other residential mortgage portfolio primarily consists of 1-4 family residential mortgage loans and totaled $1,046 million at June 30, 2016 and $1,055 million at Dec. 31, 2015. These loans are not typically correlated to external ratings. Included in this portfolio at June 30, 2016 are $252 million of mortgage loans purchased in 2005, 2006 and the first quarter of 2007 that are predominantly prime mortgage loans, with a small portion of Alt-A loans. As of June 30, 2016, the purchased loans in this portfolio had a weighted-average loan-to-value ratio of 76% at origination and 14% of the serviced loan balance was at least 60 days delinquent. The properties securing the prime and Alt-A mortgage loans were located (in order of concentration) in California, Florida, Virginia, the tri-state area (New York, New Jersey and Connecticut) and Maryland.

Overdrafts

Overdrafts primarily relate to custody and securities clearance clients and totaled $6,065 million at June 30, 2016 and $4,483 million at Dec. 31, 2015. Overdrafts occur on a daily basis in the custody and securities clearance business 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 $18,594 million of secured margin loans on our balance sheet at June 30, 2016 compared with $19,573 million at Dec. 31, 2015. 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 and do not allocate any of our allowance for credit losses to margin loans.

Reverse repurchase agreements

Reverse repurchase agreements are transactions fully collateralized with high-quality liquid securities. These transactions carry minimal credit risk and therefore are not allocated an allowance for credit losses.

Note 5 - Goodwill and intangible assets

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 eight reporting units for which goodwill impairment testing is performed on an annual basis. In the second quarter of 2016, BNY Mellon conducted an annual goodwill impairment test on all eight reporting units. The estimated fair value of the eight reporting units exceeded the carrying value and no goodwill impairment was recognized.

Goodwill

The tables below provide a breakdown of goodwill by business.

Goodwill by business (in millions)	Investment Management	Investment Services	(a) Other	(a) Consolidated
Balance at Dec. 31, 2015	$ 9,207	$ 8,366	$ 45	$ 17,618
Acquisition	29	—	—	29
Foreign currency translation	(121)	(25)	—	(146)
Other (c)	2	(4)	2	—
Balance at June 30, 2016	$ 9,117	$ 8,337	$ 47	$ 17,501

Notes to Consolidated Financial Statements (continued)

Goodwill by business (in millions)	Investment Management	(b)	Investment Services	(a)	Other	(a)(b)	Consolidated
Balance at Dec. 31, 2014	$ 9,328		$ 8,471		$ 70		$ 17,869
Acquisitions	10		—		—		10
Foreign currency translation	(10)		(57)		(2)		(69)
Other (c)	(3)		—		—		(3)
Balance at June 30, 2015	$ 9,325		$ 8,414		$ 68		$ 17,807

(a) Includes the reclassification of goodwill associated with credit-related activities from the Other segment to Investment Services.

(b) Includes the reclassification of goodwill associated with Meriten Investment Management GmbH from Investment Management to the Other segment.

(c) Other changes in goodwill include purchase price adjustments and certain other reclassifications.

Intangible assets

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

Intangible assets – net carrying amount by business (in millions)	Investment Management	Investment Services	Other	Consolidated
Balance at Dec. 31, 2015	$ 1,807	$ 1,186	$ 849	$ 3,842
Acquisition	30	2	—	32
Amortization	(38)	(78)	—	(116)
Foreign currency translation	(21)	1	—	(20)
Balance at June 30, 2016	$ 1,778	$ 1,111	$ 849	$ 3,738

Intangible assets – net carrying amount by business (in millions)	Investment Management	(a)	Investment Services	Other	(a)	Consolidated
Balance at Dec. 31, 2014	$ 1,911		$ 1,355	$ 861		$ 4,127
Acquisitions	9		—	—		9
Amortization	(49)		(81)	(1)		(131)
Foreign currency translation	1		(5)	(1)		(5)
Balance at June 30, 2015	$ 1,872		$ 1,269	$ 859		$ 4,000

(a) Includes the reclassification of intangible assets associated with Meriten from Investment Management to the Other segment.

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

Intangible assets (in millions)	June 30, 2016 Gross carrying amount	Accumulated amortization	Net carrying amount	Remaining weighted-average amortization period	Dec. 31, 2015 Gross carrying amount	Accumulated amortization	Net carrying amount
Subject to amortization: (a)							
Customer relationships—Investment Management	$1,561	$ (1,215)	$ 346	11 years	$1,593	$ (1,235)	$ 358

Customer contracts—Investment Services	2,264	(1,527	) 737	10 years	2,260	(1,450	) 810
Other	38	(31	) 7	2 years	40	(31	) 9
Total subject to amortization	3,863	(2,773	) 1,090	10 years	3,893	(2,716	) 1,177
Not subject to amortization: (b)							
Trade name	1,354	N/A	1,354	N/A	1,358	N/A	1,358
Customer relationships	1,294	N/A	1,294	N/A	1,307	N/A	1,307
Total not subject to amortization	2,648	N/A	2,648	N/A	2,665	N/A	2,665
Total intangible assets	$6,511	$ (2,773	) $ 3,738	N/A	$6,558	$ (2,716	) $ 3,842

(a) Excludes fully amortized intangible assets.

(b) Intangible assets not subject to amortization have an indefinite life.

Notes to Consolidated Financial Statements (continued)

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)
2016	$ 230
2017	209
2018	178
2019	107
2020	97

Note 6 - Other assets

Other assets	June 30,	Dec. 31,
(in millions)	2016	2015
Accounts receivable	$5,027	$3,535
Corporate/bank-owned life insurance	4,742	4,704
Fails to deliver	4,007	1,494
Equity in joint venture and other investments (a)	3,553	3,329
Fair value of hedging derivatives	1,441	716
Software	1,385	1,355
Income taxes receivable	1,076	1,554
Prepaid pension assets	808	727
Prepaid expenses	456	464
Due from customers on acceptances	205	258
Other	1,035	1,490
Total other assets	$23,735	$19,626

(a) Includes Federal Reserve Bank stock of $464 million and $453 million, respectively, at cost.

Certain seed capital and private equity investments valued using net asset value per share

In our Investment Management business, we manage investment assets, including equities, fixed income, money market and alternative investment funds for institutions and other investors. As part of that activity, we make seed capital investments in certain funds. BNY Mellon also holds private equity investments, specifically in small business investment companies (“SBICs”), which are compliant with the Volcker Rule. Seed capital and private equity investments are included in other assets.

The fair value of certain of these investments has been estimated using the net asset value (“NAV”) per share of BNY Mellon’s ownership interest in the funds. The table below presents information about BNY Mellon’s investments in seed capital and private equity investments that have been valued using NAV.

Seed capital and private equity investments valued using NAV

	June 30, 2016				Dec. 31, 2015			
	Fair	Unfunded	Redemption	Redemption	Fair	Unfunded	Redemption	Redemption

(dollar amounts in millions)	value	commitments	frequency	notice period	value	commitments	frequency	notice period
Seed capital and other funds (a)	$171	$ 1	Daily-quarterly	0-180 days	$83	$ 1	Daily-quarterly	1-180 days
Private equity investments (SBICs) (b)	42	54	N/A	N/A	34	58	N/A	N/A
Total	$213	$ 55			$117	$ 59		

(a) Other funds include various leveraged loans, structured credit funds and hedge funds. Redemption notice periods vary by fund.

(b) Private equity funds primarily include Volcker Rule-compliant investments in SBICs that invest in various sectors of the economy. Private equity funds do not have redemption rights. Distributions from such funds will be received as the underlying investments in the funds are liquidated.

N/A - Not applicable.

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 $918 million at June 30, 2016 and $918 million at Dec. 31, 2015. Commitments to fund future investments in

qualified affordable housing projects totaled $383 million at June 30, 2016 and $393 million at Dec. 31, 2015. A summary of the commitments to fund future investments is as follows: 2016—$163 million; 2017—$57 million; 2018—$113 million; 2019—$33 million; 2020—$5 million and 2021 and thereafter—$12 million.

Notes to Consolidated Financial Statements (continued)

Tax credits and other tax benefits recognized were $38 million in the second quarter of 2016, $32 million in the second quarter of 2015, $38 million in the first quarter of 2016, $76 million in the first six months of 2016 and $65 million in the first six months of 2015.

Amortization expense included in the provision for income taxes was $28 million in the second quarter of 2016, $27 million in the second quarter of 2015, $28 million in the first quarter of 2016, $56 million in the first six months of 2016 and $51 million in the first six months of 2015.

Note 7 - Net interest revenue

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

Net interest revenue	Quarter ended			Year-to-date	
(in millions)	June 30, 2016	March 31, 2016	June 30, 2015	June 30, 2016	June 30, 2015
Interest revenue					
Non-margin loans	$214	$205	$179	$419	$352
Margin loans	64	63	51	127	101
Securities:					
Taxable	429	444	468	873	907
Exempt from federal income taxes	18	18	21	36	43
Total securities	447	462	489	909	950
Deposits with banks	24	26	28	50	58
Deposits with the Federal Reserve and other central banks	72	61	43	133	88
Federal funds sold and securities purchased under resale agreements	56	49	36	105	66
Trading assets	13	17	21	30	39
Total interest revenue	890	883	847	1,773	1,654
Interest expense					
Deposits	12	15	8	27	23
Federal funds purchased and securities sold under repurchase agreements	13	9	(1)	22	(4)
Trading liabilities	1	2	3	3	5
Other borrowed funds	2	2	3	4	5
Customer payables	2	4	2	6	4
Commercial paper	4	—	1	4	1
Long-term debt	89	85	52	174	113
Total interest expense	123	117	68	240	147
Net interest revenue	$767	$766	$779	$1,533	$1,507

Note 8 - Employee benefit plans

The components of net periodic benefit (credit) cost are as follows.

Net periodic benefit (credit) cost Quarter ended

(in millions)	June 30, 2016			March 31, 2016			June 30, 2015		
	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	$—	$ 8	$ 1	$—	$ 8	$ 1	$15	$ 8	$ 1
Interest cost	45	9	2	45	9	2	42	10	2
Expected return on assets	(82)	(13)	(2)	(82)	(13)	(2)	(83)	(13)	(2)
Other	17	5	(1)	18	4	(1)	26	6	—
Net periodic benefit (credit) cost	$(20)	$ 9	$ —	$(19)	$ 8	$ —	$—	$ 11	$ 1

Notes to Consolidated Financial Statements (continued)

Net periodic benefit (credit) cost

	Year-to-date					
	June 30, 2016			June 30, 2015		
(in millions)	Domestic pension benefits	Foreign pension benefits	Health care benefits	Domestic pension benefits	Foreign pension benefits	Health care benefits
Service cost	$—	$ 16	$ 2	$ 30	$ 16	$ 2
Interest cost	90	18	4	85	20	4
Expected return on assets	(164)	(26)	(4)	(166)	(26)	(4)
Curtailment (gain)	—	—	—	(30)	—	—
Other	35	9	(2)	57	12	—
Net periodic benefit (credit) cost	$(39)	$ 17	$ —	$ (24)	$ 22	$ 2

Note 9 - Restructuring charges

BNY Mellon initiated two restructuring programs, Streamlining actions in 2014 and Operational Excellence Initiatives in 2011. Additional details regarding these programs are presented in Note 9, Restructuring charges, in our 2015 Annual Report. Aggregate charges are included in M&I, litigation and restructuring charges on the consolidated income statement. Restructuring charges related to corporate-level initiatives and were therefore recorded in the Other segment. Severance payments are primarily paid over the salary continuance period in accordance with the separation plan.

The following summarizes the restructuring activity for the second quarter of 2016. We recorded total restructuring charges of $2 million, primarily related to severance. For the Streamlining actions program, we recorded net additional charges of $3 million and utilization of $6 million. The remaining reserve balance for the Streamlining actions program was $11 million at June 30, 2016. For the Operational Excellence Initiatives program, we recorded net additional recoveries of $1 million and utilization of $2 million. The remaining reserve balance for the Operational Excellence Initiatives program was $4 million at June 30, 2016.

Note 10 - Income taxes

BNY Mellon recorded an income tax provision of $290 million (24.9% effective tax rate) in the second quarter of 2016 and $276 million (23.7% effective tax rate) in the second quarter of 2015. Both effective tax rates primarily reflect tax benefits from foreign operations, tax-exempt income and tax credits. The effective tax rate in the second quarter of 2015 also reflects the impact of litigation expense.

Our total tax reserves as of June 30, 2016 were $178 million compared with $175 million at March 31, 2016. If these tax reserves were unnecessary, $178 million would affect the effective tax rate in future periods. We recognize accrued interest and penalties, if applicable, related to income taxes in income tax expense. Included in the balance sheet at June 30, 2016 is accrued interest, where applicable, of $20 million. The additional tax expense related to interest for the six months ended June 30, 2016 was $4 million compared with $2 million for the six months ended June 30, 2015.

It is reasonably possible the total reserve for uncertain tax positions could decrease within the next 12 months by approximately $63 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 2010. Our New York State tax returns are closed to examination through 2012. Our New York City income tax returns are closed to examination through 2010. Our UK income tax returns are closed to examination through 2012.

Note 11 - Securitizations and variable interest entities

BNY Mellon's VIEs generally include retail, institutional and alternative investment funds, including collateralized loan obligation structures in which we provide asset management services. The funds are offered to our retail and institutional clients to provide them with access to investment vehicles with specific investment objectives and strategies that address the client's investment needs.

BNY Mellon earns management fees from these funds as well as performance fees in certain funds and may also provide start-up capital for its new

Notes to Consolidated Financial Statements (continued)

funds. The VIEs are primarily financed by our customers' investments in the funds' equity or debt. These VIEs are included in the scope of ASU 2015-02 and are reviewed for consolidation based on the guidance in ASC 810.

We reconsider and reassess whether or not we are the primary beneficiary of a VIE when governing documents or contractual arrangements are changed which would reallocate the obligation to absorb expected losses or receive expected residual returns between BNY Mellon and the other investors, when BNY Mellon disposes of its variable interests in the fund or when additional variable interests are issued to other investors and when we acquire additional variable interests in the VIE.

The following tables present the incremental assets and liabilities included in BNY Mellon's consolidated financial statements, after applying intercompany eliminations, as of June 30, 2016 and Dec. 31, 2015, based on the assessments performed in accordance with ASC 810, as amended by ASU 2015-02. 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 invested in the VIE by BNY Mellon.

Investments consolidated at June 30, 2016

(in millions)	Investment Management funds		Securitizations	Total consolidated investments
Available-for-sale securities	$ —		$ 400	$ 400
Trading assets	959		—	959
Other assets	124		—	124
Total assets	$ 1,083	(a)	$ 400	$ 1,483
Trading liabilities	$ 214		$ —	$ 214
Other liabilities	23		378	401
Total liabilities	$ 237	(a)	$ 378	$ 615
Nonredeemable noncontrolling interests	$ 566	(a)	$ —	$ 566

(a) Includes VMEs with assets of $103 million, liabilities of $1 million and nonredeemable noncontrolling interests of $16 million.

Investments consolidated at Dec. 31, 2015

(in millions)	Investment Management funds		Securitizations	Total consolidated investments
Available-for-sale securities	$ —		$ 400	$ 400
Trading assets	1,228		—	1,228
Other assets	173		—	173
Total assets	$ 1,401	(a)	$ 400	$ 1,801
Trading liabilities	$ 229		$ —	$ 229
Other liabilities	17		359	376
Total liabilities	$ 246	(a)	$ 359	$ 605
Nonredeemable noncontrolling interests	$ 738	(a)	$ —	$ 738

(a) Includes VMEs with assets of $190 million, liabilities of $1 million and nonredeemable noncontrolling interests of $5 million.

BNY Mellon is not contractually required to provide financial or any other support to any of our VIEs. Additionally, creditors of any consolidated VIEs do not have any recourse to the general credit of BNY Mellon.

Non-consolidated VIEs

As of June 30, 2016 and Dec. 31, 2015, the following assets related to the VIEs where BNY Mellon is not the primary beneficiary are included in our consolidated financial statements.

Non-consolidated VIEs at June 30, 2016

(in millions)	Assets	Liabilities	Maximum loss exposure
Other	$ 195	$ —	$ 195

Non-consolidated VIEs at Dec. 31, 2015

(in millions)	Assets	Liabilities	Maximum loss exposure
Other	$ 189	$ —	$ 189

The maximum loss exposure indicated in the above tables relates solely to BNY Mellon’s seed capital or residual interests invested in the VIEs.

Notes to Consolidated Financial Statements (continued)

Note 12 - Preferred stock

BNY Mellon has 100 million authorized shares of preferred stock with a par value of $0.01. The following table summarizes BNY Mellon's preferred stock issued and outstanding at June 30, 2016 and Dec. 31, 2015.

Preferred stock summary					Total shares issued and outstanding		Carrying value (a)	
(dollars in millions, unless otherwise noted)		Per annum dividend rate	Liquidation preference per share (in dollars)		June 30, 2016	Dec. 31, 2015	June 30, 2016	Dec. 31, 2015
Series A	Noncumulative Perpetual Preferred Stock	Greater of (i) three-month LIBOR plus 0.565% for the related distribution period; or (ii) 4.000%	$	100,000	5,001	5,001	$500	$500
Series C	Noncumulative Perpetual Preferred Stock	5.2 %	$	100,000	5,825	5,825	568	568
Series D	Noncumulative Perpetual Preferred Stock	4.50% commencing Dec. 20, 2013 to but excluding June 20, 2023, then a floating rate equal to the three-month LIBOR plus 2.46%	$	100,000	5,000	5,000	494	494
Series E	Noncumulative Perpetual Preferred Stock	4.95% commencing Dec. 20, 2015 to and including June 20, 2020, then a floating rate equal to the three-month LIBOR plus 3.42%	$	100,000	10,000	10,000	990	990
Total					25,826	25,826	$2,552	$2,552

(a) The carrying value of the Series C, Series D and Series E preferred stock is recorded net of issuance costs.

Holders of both the Series A and Series C preferred stock are entitled to receive dividends on each dividend payment date (March 20, June 20, September 20 and December 20 of each year), if declared by BNY Mellon's Board of Directors. Holders of the Series D preferred stock are entitled to receive dividends, if declared by our board of directors, on each June 20 and December 20, to but excluding June 20, 2023; and on each March 20, June 20, September 20 and December 20, from and including June 20, 2023. Holders of the Series E preferred stock are entitled to receive dividends, if declared by our board of directors, on each June 20 and December 20, to and including June 20, 2020; and on each March 20, June 20, September 20 and December 20, from and including September 20, 2020. BNY Mellon's ability to declare or pay dividends on, or purchase, redeem or otherwise acquire, shares of our common stock or any of our shares that rank junior to the preferred stock as to the payment of dividends and/or the distribution of any assets on any liquidation, dissolution or winding-up of BNY Mellon will be prohibited, subject to certain restrictions, in the event that we do not declare and pay in full preferred dividends for the then current dividend period of the Series A preferred stock or the last preceding dividend period of the Series C, Series D and Series E preferred stock.

All of the outstanding shares of the Series A preferred stock are owned by Mellon Capital IV, which will pass through any dividend on the Series A preferred stock to the holders of its Normal Preferred Capital Securities. All of the outstanding shares of the Series C, Series D and Series E preferred stock are held by the depositary of the depositary

shares, which will pass through the applicable portion of any dividend on the Series C, Series D and Series E preferred stock to the holders of record of their respective depositary shares.

On June 20, 2016, The Bank of New York Mellon Corporation paid the following dividends for the noncumulative perpetual preferred stock for the dividend period ending in June 2016 to holders of record as of the close of business on June 5, 2016:

- $1,011.11 per share on the Series A Preferred Stock (equivalent to $10.1111 per Normal Preferred Capital Security of Mellon Capital IV, each representing a 1/100th interest in a share of the Series A Preferred Stock);
- $1,300.00 per share on the Series C Preferred Stock (equivalent to $0.3250 per depositary share, each representing a 1/4,000th interest in a share of the Series C Preferred Stock);
- $2,250.00 per share on the Series D Preferred Stock (equivalent to $22.50 per depositary share,

Notes to Consolidated Financial Statements (continued)

each representing a 1/100th interest in a share of the Series D Preferred Stock); and
- $2,475.00 per share on the Series E Preferred Stock (equivalent to $24.75 per depositary share, each representing a 1/100th interest in a share of the Series E Preferred Stock).

The preferred stock is not subject to the operation of a sinking fund and is not convertible into, or exchangeable for, shares of our common stock or any other class or series of our other securities. Subject to the restrictions in BNY Mellon's 2007 replacement capital covenant, subsequently amended on May 8 and Sept. 11, 2012, we may redeem the Series A preferred stock, in whole or in part, at our option. We may also, at our option, redeem the shares of the Series C preferred stock, in whole or in part, on or after the dividend payment date in September 2017, the Series D preferred stock, in whole or in part, on or after the dividend payment date in June 2023 and the Series E preferred stock, in whole or in part, on or after the dividend payment date in June 2020. The Series C, Series D or Series E preferred stock can be redeemed, in whole but not in part, at any time within 90 days following a regulatory capital treatment event

(as defined in each of the Series C, Series D and Series E's Certificates of Designation).

On Aug. 1, 2016, we issued 10,000 shares of Series F preferred stock, which have a liquidation preference of $100,000 per share. Dividends on the Series F noncumulative perpetual preferred stock will be paid, if declared by our board of directors, at an annual rate equal to 4.625% on each March 20 and September 20, commencing March 20, 2017, through and including Sept. 20, 2026; and a floating rate equal to three-month LIBOR plus 3.131% on each March 20, June 20, September 20 and December 20, commencing Dec. 20, 2026. The Series F preferred stock may be redeemed at our option, in whole or in part, on or after the dividend payment date in September 2026, or in whole but not in part, at any time within 90 days following a regulatory capital treatment event (as defined in the Series F Certificates of Designations).

Terms of the Series A, Series C, Series D, Series E and Series F preferred stock are more fully described in each of their Certificate of Designations, each of which is filed as an Exhibit to this Form 10-Q.

Note 13 - Other comprehensive income (loss)

Components of other comprehensive income (loss)	Quarter ended June 30, 2016			March 31, 2016			June 30, 2015		
(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)	$(164)	$ (120)	$ (284)	$45	$ (8)	$ 37	$239	$ 90	$ 329
Total foreign currency translation	(164)	(120)	(284)	45	(8)	37	239	90	329
Unrealized gain (loss) on assets available-for-sale:									
Unrealized gain (loss) arising during period	182	(65)	117	243	(80)	163	(499)	141	(358)
Reclassification adjustment (b)	(21)	8	(13)	(20)	5	(15)	(16)	6	(10)
Net unrealized gain (loss) on assets available-for-sale	161	(57)	104	223	(75)	148	(515)	147	(368)
Defined benefit plans:									
Net gain (loss) arising during the period	—	—	—	3	(1)	2	—	—	—

Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost (b)	21	(7)	14	22	(7)	15	32	(11)	21
Total defined benefit plans	21	(7)	14	25	(8)	17	32	(11)	21
Unrealized gain (loss) on cash flow hedges:									
Unrealized hedge gain (loss) arising during period	(10)	4	(6)	(81)	27	(54)	1	1	2
Reclassification adjustment (b)	(4)	1	(3)	86	(29)	57	11	(4)	7
Net unrealized gain (loss) on cash flow hedges	(14)	5	(9)	5	(2)	3	12	(3)	9
Total other comprehensive income (loss)	$4	$ (179)	$ (175)	$298	$ (93)	$ 205	$(232)	$ 223	$ (9)

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

(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains on the Consolidated Income Statement. The amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost is recorded as staff expense on the Consolidated Income Statement. See Note 16 of the Notes to Consolidated Financial Statements for the location of the reclassification adjustment related to cash flow hedges on the Consolidated Income Statement.

Notes to Consolidated Financial Statements (continued)

Components of other comprehensive income (loss)	Year-to-date					
	June 30, 2016			June 30, 2015		
(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)	$(119)	$ (128)	$ (247)	$(264)	$ (8)	$ (272)
Total foreign currency translation	(119)	(128)	(247)	(264)	(8)	(272)
Unrealized gain (loss) on assets available-for-sale:						
Unrealized gain (loss) arising during period	425	(145)	280	(297)	73	(224)
Reclassification adjustment (b)	(41)	13	(28)	(40)	15	(25)
Net unrealized gain (loss) on assets available-for-sale	384	(132)	252	(337)	88	(249)
Defined benefit plans:						
Net gain (loss) arising during the period	3	(1)	2	(185)	76	(109)
Amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost (b)	43	(14)	29	39	(13)	26
Total defined benefit plans	46	(15)	31	(146)	63	(83)
Unrealized gain (loss) on cash flow hedges:						
Unrealized hedge gain (loss) arising during period	(91)	31	(60)	3	6	9
Reclassification adjustment (b)	82	(28)	54	8	(9)	(1)
Net unrealized gain (loss) on cash flow hedges	(9)	3	(6)	11	(3)	8
Total other comprehensive income (loss)	$302	$ (272)	$ 30	$(736)	$ 140	$ (596)

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

(b) The reclassification adjustment related to the unrealized gain (loss) on assets available-for-sale is recorded as net securities gains on the Consolidated Income Statement. The amortization of prior service credit, net loss and initial obligation included in net periodic benefit cost is recorded as staff expense on the Consolidated Income Statement. See Note 16 of the Notes to Consolidated Financial Statements for the location of the reclassification adjustment related to cash flow hedges on the Consolidated Income Statement.

Note 14 - Fair value measurement

Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. A three-level hierarchy for fair value measurements is utilized based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. BNY Mellon's own creditworthiness is considered when valuing liabilities. See Note 20 of the Notes to Consolidated Financial Statements in our 2015 Annual Report for information on how we determine fair value and the fair value hierarchy.

The following tables present the financial instruments carried at fair value at June 30, 2016 and Dec. 31, 2015, by caption on the consolidated balance sheet and by valuation hierarchy (as described above). 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. There were no material transfers between Level 1 and Level 2 during the second quarter of 2016.

Notes to Consolidated Financial Statements (continued)

Assets measured at fair value on a recurring basis at June 30, 2016

(dollar amounts in millions)	Level 1	Level 2	Level 3	Netting (a)	Total carrying value
Available-for-sale securities:					
U.S. Treasury	$13,518	$—	$—	$—	$ 13,518
U.S. Government agencies	—	309	—	—	309
Sovereign debt/sovereign guaranteed	34	13,569	—	—	13,603
State and political subdivisions (b)	—	3,745	—	—	3,745
Agency RMBS	—	23,557	—	—	23,557
Non-agency RMBS	—	708	—	—	708
Other RMBS	—	871	—	—	871
Commercial MBS	—	1,111	—	—	1,111
Agency commercial MBS	—	4,770	—	—	4,770
CLOs	—	2,483	—	—	2,483
Other asset-backed securities	—	2,454	—	—	2,454
Equity securities	3	—	—	—	3
Money market funds (b)	865	—	—	—	865
Corporate bonds	—	1,610	—	—	1,610
Other debt securities	—	3,109	—	—	3,109
Foreign covered bonds	2,057	245	—	—	2,302
Non-agency RMBS (c)	—	1,529	—	—	1,529
Total available-for-sale securities	16,477	60,070	—	—	76,547
Trading assets:					
Debt and equity instruments (b)	486	1,329	—	—	1,815
Derivative assets not designated as hedging:					
Interest rate	18	13,607	—	(11,724)	1,901
Foreign exchange	—	8,045	—	(4,626)	3,419
Equity and other contracts	—	67	—	(54)	13
Total derivative assets not designated as hedging	18	21,719	—	(16,404)	5,333
Total trading assets	504	23,048	—	(16,404)	7,148
Loans	—	217	101	—	318
Other assets:					
Derivative assets designated as hedging:					
Interest rate	—	971	—	—	971
Foreign exchange	—	470	—	—	470
Total derivative assets designated as hedging	—	1,441	—	—	1,441
Other assets (d)	294	94	—	—	388
Other assets measured at net asset value (d)					213
Total other assets	294	1,535	—	—	2,042
Subtotal assets of operations at fair value	17,275	84,870	101	(16,404)	86,055
Percentage of assets prior to netting	17%	83%	—%		
Assets of consolidated investment management funds:					
Trading assets	293	666	—	—	959
Other assets	103	21	—	—	124
Total assets of consolidated investment management funds	396	687	—	—	1,083
Total assets	$17,671	$85,557	$101	$(16,404)	$ 87,138
Percentage of assets prior to netting	17%	83%	—%		

Notes to Consolidated Financial Statements (continued)

Liabilities measured at fair value on a recurring basis at June 30, 2016

(dollar amounts in millions)	Level 1	Level 2	Level 3	Netting (a)	Total carrying value
Trading liabilities:					
Debt and equity instruments	$449	$151	$ —	$—	$ 600
Derivative liabilities not designated as hedging:					
Interest rate	37	13,530	—	(11,548)	2,019
Foreign exchange	—	7,942	—	(4,434)	3,508
Equity and other contracts	—	119	—	(51)	68
Total derivative liabilities not designated as hedging	37	21,591	—	(16,033)	5,595
Total trading liabilities	486	21,742	—	(16,033)	6,195
Long-term debt (b)	—	378	—	—	378
Other liabilities:					
Derivative liabilities designated as hedging:					
Interest rate	—	1,105	—	—	1,105
Foreign exchange	—	73	—	—	73
Total derivative liabilities designated as hedging	—	1,178	—	—	1,178
Other liabilities	—	11	—	—	11
Total other liabilities	—	1,189	—	—	1,189
Subtotal liabilities of operations at fair value	486	23,309	—	(16,033)	7,762
Percentage of liabilities prior to netting	2 %	98 %	—%		
Liabilities of consolidated investment management funds:					
Trading liabilities	—	214	—	—	214
Other liabilities	1	22	—	—	23
Total liabilities of consolidated investment management funds	1	236	—	—	237
Total liabilities	$487	$23,545	$ —	$(16,033)	$ 7,999
Percentage of liabilities prior to netting	2 %	98 %	—%		

(a) ASC 815 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 certain interests in securitizations.

(c) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(d) Includes private equity investments and seed capital.

Notes to Consolidated Financial Statements (continued)

Assets measured at fair value on a recurring basis at Dec. 31, 2015

(dollar amounts in millions)	Level 1	Level 2	Level 3	Netting (a)	Total carrying value
Available-for-sale securities:					
U.S. Treasury	$12,832	$—	$ —	$—	$ 12,832
U.S. Government agencies	—	387	—	—	387
Sovereign debt/sovereign guaranteed	35	13,182	—	—	13,217
State and political subdivisions (b)	—	4,046	—	—	4,046
Agency RMBS	—	23,501	—	—	23,501
Non-agency RMBS	—	793	—	—	793
Other RMBS	—	1,061	—	—	1,061
Commercial MBS	—	1,392	—	—	1,392
Agency commercial MBS	—	4,020	—	—	4,020
CLOs	—	2,351	—	—	2,351
Other asset-backed securities	—	2,893	—	—	2,893
Equity securities	4	—	—	—	4
Money market funds (b)	886	—	—	—	886
Corporate bonds	—	1,752	—	—	1,752
Other debt securities	—	2,775	—	—	2,775
Foreign covered bonds	1,966	202	—	—	2,168
Non-agency RMBS (c)	—	1,789	—	—	1,789
Total available-for-sale securities	15,723	60,144	—	—	75,867
Trading assets:					
Debt and equity instruments (b)	1,232	2,167	—	—	3,399
Derivative assets not designated as hedging:					
Interest rate	10	10,034	—	(8,071)	1,973
Foreign exchange	—	4,905	—	(2,981)	1,924
Equity and other contracts	15	120	—	(63)	72
Total derivative assets not designated as hedging	25	15,059	—	(11,115)	3,969
Total trading assets	1,257	17,226	—	(11,115)	7,368
Loans	—	422	—	—	422
Other assets:					
Derivative assets designated as hedging:					
Interest rate	—	497	—	—	497
Foreign exchange	—	219	—	—	219
Total derivative assets designated as hedging	—	716	—	—	716
Other assets (d)	192	62	—	—	254
Other assets measured at net asset value (d)					117
Total other assets	192	778	—	—	1,087
Subtotal assets of operations at fair value	17,172	78,570	—	(11,115)	84,744
Percentage of assets prior to netting	18 %	82 %	— %		
Assets of consolidated investment management funds:					
Trading assets	455	773	—	—	1,228
Other assets	157	16	—	—	173
Total assets of consolidated investment management funds	612	789	—	—	1,401
Total assets	$17,784	$79,359	$ —	$(11,115)	$ 86,145
Percentage of assets prior to netting	18 %	82 %	— %		

Notes to Consolidated Financial Statements (continued)

Liabilities measured at fair value on a recurring basis at Dec. 31, 2015

(dollar amounts in millions)	Level 1	Level 2	Level 3	Netting (a)	Total carrying value
Trading liabilities:					
Debt and equity instruments	$422	$152	$ —	$—	$ 574
Derivative liabilities not designated as hedging:					
Interest rate	5	9,957	—	(8,235)	1,727
Foreign exchange	—	4,682	—	(2,567)	2,115
Equity and other contracts	5	147	—	(67)	85
Total derivative liabilities not designated as hedging	10	14,786	—	(10,869)	3,927
Total trading liabilities	432	14,938	—	(10,869)	4,501
Long-term debt (b)	—	359	—	—	359
Other liabilities - derivative liabilities designated as hedging:					
Interest rate	—	372	—	—	372
Foreign exchange	—	20	—	—	20
Total other liabilities - derivative liabilities designated as hedging	—	392	—	—	392
Subtotal liabilities of operations at fair value	432	15,689	—	(10,869)	5,252
Percentage of liabilities prior to netting	3 %	97 %	— %		
Liabilities of consolidated investment management funds:					
Trading liabilities	—	229	—	—	229
Other liabilities	1	16	—	—	17
Total liabilities of consolidated investment management funds	1	245	—	—	246
Total liabilities	$433	$15,934	$ —	$(10,869)	$ 5,498
Percentage of liabilities prior to netting	3 %	97 %	— %		

(a) ASC 815 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 certain interests in securitizations.

(c) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

(d) Includes private equity investments and seed capital.

Notes to Consolidated Financial Statements (continued)

Details of certain items measured at fair value on a recurring basis (dollar amounts in millions)	June 30, 2016					Dec. 31, 2015				
		Ratings					Ratings			
	Total carrying value (a)	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Total carrying value (a)	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower
Non-agency RMBS, originated in:										
2007	$64	— %	— %	— %	100 %	$66	— %	— %	— %	100 %
2006	105	—	—	—	100	115	—	—	—	100
2005	206	25	2	12	61	234	19	9	13	59
2004 and earlier	333	5	3	25	67	378	4	4	26	66
Total non-agency RMBS	$708	10 %	2 %	16 %	72 %	$793	8 %	4 %	16 %	72 %
Commercial MBS - Domestic, originated in:										
2009-2015	$628	83 %	17 %	— %	— %	$626	83 %	17 %	— %	— %
2008	15	100	—	—	—	16	100	—	—	—
2007	291	77	6	17	—	304	62	22	16	—
2006	124	74	26	—	—	384	76	24	—	—
Total commercial MBS - Domestic	$1,058	80 %	15 %	5 %	— %	$1,330	76 %	20 %	4 %	— %
Foreign covered bonds:										
Canada	$1,368	100 %	— %	— %	— %	$1,014	100 %	— %	— %	— %
United Kingdom	366	100	—	—	—	363	100	—	—	—
Norway	179	100	—	—	—	191	100	—	—	—
Other	389	100	—	—	—	600	100	—	—	—
Total foreign covered bonds	$2,302	100 %	— %	— %	— %	$2,168	100 %	— %	— %	— %
European floating rate notes - available-for-sale:										
United Kingdom	$628	83 %	17 %	— %	— %	$780	85 %	15 %	— %	— %
Netherlands	181	100	—	—	—	222	100	—	—	—
Ireland	113	—	46	54	—	121	—	45	55	—
Other	1	100	—	—	—	—	—	—	—	—
Total European floating rate notes - available-for-sale	$923	76 %	17 %	7 %	— %	$1,123	79 %	15 %	6 %	— %
Sovereign debt/sovereign guaranteed:										
United Kingdom	$2,986	100 %	— %	— %	— %	$2,941	100 %	— %	— %	— %
France	2,128	100	—	—	—	2,008	100	—	—	—
Spain	2,008	—	—	100	—	1,955	—	—	100	—
Germany	1,963	100	—	—	—	1,683	100	—	—	—

Italy	1,382	—	—	100	—		1,398	—	—	100	—	
Netherlands	1,077	100	—	—	—		1,055	100	—	—	—	
Belgium	971	100	—	—	—		1,108	100	—	—	—	
Ireland	786	—	100	—	—		772	—	—	100	—	
Other (b)	302	75	—	—	25		297	68	—	32	—	
Total sovereign debt/sovereign guaranteed	$13,603	68	%	6	%	25	%	1	%	$13,217	68	%	—	%	32	%	—	%
Non-agency RMBS (c), originated in:																		
2007	$427	—	%	—	%	—	%	100	%	$502	—	%	—	%	—	%	100	%
2006	440	—		—		—		100		530	—		1		—		99	
2005	504	—		2		1		97		580	—		2		1		97	
2004 and earlier	158	—		3		9		88		177	—		3		9		88	
Total non-agency RMBS (c)	$1,529	—	%	1	%	1	%	98	%	$1,789	—	%	1	%	1	%	98	%

(a) At June 30, 2016 and Dec. 31, 2015, foreign covered bonds and sovereign debt 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.

(b) Includes $76 million of noninvestment grade sovereign debt at June 30, 2016 and $95 million of investment grade sovereign debt at Dec. 31, 2015 related to Brazil.

(c) Previously included in the Grantor Trust. The Grantor Trust was dissolved in 2011.

Changes in Level 3 fair value measurements

Our classification of a financial instrument in Level 3 of the valuation hierarchy is based on the significance of the unobservable factors to the overall fair value measurement. However, these instruments generally include other observable components that are actively quoted or validated to third-party sources; accordingly, the gains and losses in the table below include changes in fair value due to observable parameters as well as the unobservable parameters in our valuation methodologies. We also frequently

manage the risks of Level 3 financial instruments using securities and derivatives positions that are Level 1 or 2 instruments which are not included in the table; accordingly, the gains or losses below do not reflect the effect of our risk management activities related to the Level 3 instruments.

The Company has a Level 3 Pricing Committee which evaluates the valuation techniques used in determining the fair value of Level 3 assets and liabilities.

Notes to Consolidated Financial Statements (continued)

The tables below include a roll forward of the balance sheet amounts for the three and six months ended June 30, 2016 and 2015 (including the change in fair value), for financial instruments classified in Level 3 of the valuation hierarchy.

Fair value measurements for assets using significant unobservable inputs for the three months ended June 30, 2016

(in millions)	Loans	
Fair value at March 31, 2016	$69	
Transfers into Level 3	—	
Total gains or (losses) for the period:		
Included in earnings (or changes in net assets)	—	(a)
Purchases and sales:		
Purchases	65	
Sales	(33)	
Fair value at June 30, 2016	$101	
Change in unrealized gains or (losses) for the period included in earnings (or changes in net assets) for assets held at the end of the reporting period	$—	

(a) Reported in investment and other income.

Fair value measurements for assets using significant unobservable inputs for the three months ended June 30, 2015

	Available-for-sale securities	Trading assets		
(in millions)	State and political subdivisions	Derivative assets (a)	Other assets	Total assets
Fair value at March. 31, 2015	$ 11	$ 6	$ 29	$ 46
Transfers out of Level 3	—	(3)	—	(3)
Total gains or (losses) for the period:				
Included in earnings (or changes in net assets)	—	(b) —	(c) 3	(d) 3
Sales and settlements:				
Sales	—	—	(4)	(4)
Settlements	—	(2)	—	(2)
Fair value at June 30, 2015	$ 11	$ 1	$ 28	$ 40
Change in unrealized gains or (losses) for the period included in earnings (or changes in net assets) for assets held at the end of the reporting period		$ —	$ 3	$ 3

(a) Derivative assets are reported on a gross basis.

(b) Realized gains (losses) are reported in securities gains (losses). Unrealized gains (losses) are reported in accumulated other comprehensive income (loss) except for the credit portion of OTTI losses which are recorded in securities gains (losses).

(c) Reported in foreign exchange and other trading revenue.

(d) Reported in investment and other income.

Fair value measurements for liabilities using significant unobservable inputs for the three months ended June 30, 2015

	Trading liabilities	
(in millions)	Derivative liabilities	(a)
Fair value at March 31, 2015	$ 6	
Transfers out of Level 3	(3)	

Total (gains) or losses for the period:		
Included in earnings (or changes in net liabilities)	—	(b)
Settlements	(2	)
Fair value at June 30, 2015	$ 1	
Change in unrealized (gains) or losses for the period included in earnings (or changes in net assets) for liabilities held at the end of the reporting period	$ —	

(a) Derivative liabilities are reported on a gross basis.
(b) Reported in foreign exchange and other trading revenue.

Notes to Consolidated Financial Statements (continued)

Fair value measurements for assets using significant unobservable inputs for the six months ended June 30, 2016

(in millions)	Loans	
Fair value at Dec. 31, 2015	$—	
Transfers into Level 3	19	
Total gains or (losses) for the period:		
Included in earnings (or changes in net assets)	2	(a)
Purchases and sales:		
Purchases	113	
Sales	(33)	
Fair value at June 30, 2016	$101	
Change in unrealized gains or (losses) for the period included in earnings (or changes in net assets) for assets held at the end of the reporting period	$2	

(a) Reported in investment and other income.

Fair value measurements for assets using significant unobservable inputs for the six months ended June 30, 2015

	Available-for-sale securities	Trading assets		
(in millions)	State and political subdivisions	Derivative assets (a)	Other assets	Total assets
Fair value at Dec. 31, 2014	$ 11	$ 9	$ 35	$ 55
Transfers out of Level 3	—	(3)	—	(3)
Total gains or (losses) for the period:				
Included in earnings (or changes in net assets)	—	(b) (1)	(c) —	(d) (1)
Purchases, sales and settlements:				
Purchases	—	—	3	3
Sales	—	—	(10)	(10)
Settlements	—	(4)	—	(4)
Fair value at June 30, 2015	$ 11	$ 1	$ 28	$ 40
Change in unrealized gains or (losses) for the period included in earnings (or changes in net assets) for assets held at the end of the reporting period		$ (1)	$ —	$ (1)

(a) Derivative assets are reported on a gross basis.

(b) Realized gains (losses) are reported in securities gains (losses). Unrealized gains (losses) are reported in accumulated other comprehensive income (loss) except for the credit portion of OTTI losses which are recorded in securities gains (losses).

(c) Reported in foreign exchange and other trading revenue.

(d) Reported in investment and other income.

Fair value measurements for liabilities using significant unobservable inputs for the six months ended June 30, 2015

	Trading liabilities	
(in millions)	Derivative liabilities (a)	
Fair value at Dec. 31, 2014	$ 9	
Transfers out of Level 3	(3)	
Total (gains) or losses for the period:		
Included in earnings (or changes in net liabilities)	(1)	(b)

Settlements	(4)
Fair value at June 30, 2015	$ 1
Change in unrealized (gains) or losses for the period included in earnings (or changes in net assets) for liabilities held at the end of the reporting period	$ 1

(a) Derivative liabilities are reported on a gross basis.
(b) Reported in foreign exchange and other trading revenue.

Notes to Consolidated Financial Statements (continued)

Assets and liabilities measured at fair value on a nonrecurring basis

Under certain circumstances, we make adjustments to fair value our assets, liabilities and unfunded lending-related commitments although they are not measured at fair value on an ongoing basis. An example would be the recording of an impairment of an asset.

The following tables present the financial instruments carried on the consolidated balance sheet by caption and by level in the fair value hierarchy as of June 30, 2016 and Dec. 31, 2015, for which a nonrecurring change in fair value has been recorded during the quarters ended June 30, 2016 and Dec. 31, 2015.

Assets measured at fair value on a nonrecurring basis at June 30, 2016				Total
(in millions)	Level 1	Level 2	Level 3	carrying value
Loans (a)	$ —	$ 90	$ 177	$ 267
Other assets (b)	—	5	—	5
Total assets at fair value on a nonrecurring basis	$ —	$ 95	$ 177	$ 272

Assets measured at fair value on a nonrecurring basis at Dec. 31, 2015				Total
(in millions)	Level 1	Level 2	Level 3	carrying value
Loans (a)	$ —	$ 97	$ 174	$ 271
Other assets (b)	—	6	—	6
Total assets at fair value on a nonrecurring basis	$ —	$ 103	$ 174	$ 277

(a) During the quarters ended June 30, 2016 and Dec. 31, 2015, the fair value of these loans decreased less than $1 million and $1 million, respectively, based on the fair value of the underlying collateral as allowed by ASC 310, Accounting by Creditors for Impairment of a loan, with an offset to the allowance for credit losses.

(b) Includes other assets received in satisfaction of debt.

Level 3 unobservable inputs

The following tables present the unobservable inputs used in the valuation of assets and liabilities classified as Level 3 within the fair value hierarchy.

Quantitative information about Level 3 fair value measurements of assets

(dollars in millions)	Fair value at June 30, 2016	Valuation techniques	Unobservable input	Range
Measured on a recurring basis:				
Loans:				
Home Equity Conversion Mortgages	$ 101	Discounted cash flow	Discount Spreads	76-145 bps
			Prepayment Rates	7% -100% CPR
			Line of Credit Draw Rates	0% - 20%

CPR - Conditional prepayment rate.

Estimated fair value of financial instruments

The following tables present the estimated fair value and the carrying amount of financial instruments not carried at fair value on the consolidated balance sheet at June 30, 2016 and Dec. 31, 2015, by caption on the consolidated balance sheet and by the valuation

hierarchy. See Note 20 of the Notes to Consolidated Financial Statements in our 2015 Annual Report for additional information regarding the financial instruments within the scope of this disclosure, and the methods and significant assumptions used to estimate their fair value.

Notes to Consolidated Financial Statements (continued)

Summary of financial instruments	June 30, 2016				
(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	$—	$88,080	$—	$88,080	$88,080
Interest-bearing deposits with banks	—	13,307	—	13,307	13,303
Federal funds sold and securities purchased under resale agreements	—	28,060	—	28,060	28,060
Securities held-to-maturity	11,246	30,558	—	41,804	41,053
Loans	—	62,540	—	62,540	62,259
Other financial assets	5,809	1,084	—	6,893	6,893
Total	$17,055	$223,629	$—	$240,684	$239,648
Liabilities:					
Noninterest-bearing deposits	$—	$99,035	$—	$99,035	$99,035
Interest-bearing deposits	—	159,449	—	159,449	160,643
Federal funds purchased and securities sold under repurchase agreements	—	7,611	—	7,611	7,611
Payables to customers and broker-dealers	—	21,172	—	21,172	21,172
Borrowings	—	1,272	—	1,272	1,272
Long-term debt	—	24,014	—	24,014	23,195
Total	$—	$312,553	$—	$312,553	$312,928

Summary of financial instruments	Dec. 31, 2015				
(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	$—	$113,203	$—	$113,203	$113,203
Interest-bearing deposits with banks	—	15,150	—	15,150	15,146
Federal funds sold and securities purchased under resale agreements	—	24,373	—	24,373	24,373
Securities held-to-maturity	11,376	31,828	—	43,204	43,312
Loans	—	61,421	—	61,421	61,267
Other financial assets	6,537	1,096	—	7,633	7,633
Total	$17,913	$247,071	$—	$264,984	$264,934
Liabilities:					
Noninterest-bearing deposits	$—	$96,277	$—	$96,277	$96,277
Interest-bearing deposits	—	182,410	—	182,410	183,333
Federal funds purchased and securities sold under repurchase agreements	—	15,002	—	15,002	15,002
Payables to customers and broker-dealers	—	21,900	—	21,900	21,900
Borrowings	—	698	—	698	698
Long-term debt	—	21,494	—	21,494	21,188
Total	$—	$337,781	$—	$337,781	$338,398

The table below summarizes the carrying amount of the hedged financial instruments, the notional amount of the hedge and the unrealized gain (loss) (estimated fair value) of the derivatives.

Hedged financial instruments (in millions)	Carrying amount	Notional amount of hedge	Unrealized Gain	(Loss)
June 30, 2016				
Securities available-for-sale	$ 8,762	$ 7,992	$—	$(1,074)
Long-term debt	20,825	19,950	969	(31)
Dec. 31, 2015				
Securities available-for-sale	$ 7,978	$ 7,918	$16	$(359)
Long-term debt	18,231	17,850	479	(14)

Notes to Consolidated Financial Statements (continued)

Note 15 - Fair value option

We elected fair value as an alternative measurement for selected financial assets, financial liabilities, unrecognized firm commitments and written loan commitments.

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

Assets and liabilities of consolidated investment management funds, at fair value

(in millions)	June 30, 2016	Dec. 31, 2015
Assets of consolidated investment management funds:		
Trading assets	$ 959	$ 1,228
Other assets	124	173
Total assets of consolidated investment management funds	$ 1,083	$ 1,401
Liabilities of consolidated investment management funds:		
Trading liabilities	$ 214	$ 229
Other liabilities	23	17
Total liabilities of consolidated investment management funds	$ 237	$ 246

BNY Mellon values the assets and liabilities of its consolidated asset 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 asset management funds. Changes in the value of the assets and liabilities are recorded in the 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 $301 million and $419 million of loans at June 30, 2016 and Dec. 31, 2015, respectively. The fair value of these loans was $318 million at June 30, 2016 and $422 million at Dec. 31, 2015. A portion of these loans were valued using observable market inputs to discount expected loan cash flows and are included in Level 2 of the valuation hierarchy. The remaining loans were valued using a discounted cash flow methodology that incorporates both observable and unobservable inputs, with prepayment and draw behavior forecast

at the loan-level. These loans are included in Level 3 of the valuation hierarchy.

We have elected the fair value option on $240 million of long-term debt. The fair value of this long-term debt was $378 million at June 30, 2016 and $359 million at Dec. 31, 2015. 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 the loans and long-term debt and the location of the changes in the consolidated income statement.

Impact of changes in fair value in the income statement (a)

	Quarter ended	Year-to-date

(in millions)	June 30, 2016	March 31, 2016	June 30, 2015	June 30, 2016	June 30, 2015
Loans:					
Investment and other income	$5	$ 9	$ (3)	$ 14	$ (1)
Long-term debt:					
Foreign exchange and other trading revenue	$(6)	$ (13)	$ 4	$ (19)	$ (4)

(a) The changes in fair value of the loans and long-term debt are approximately offset by economic hedges included in foreign exchange and other trading revenue.

Note 16 - Derivative instruments

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

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

Use of derivative financial instruments involves reliance on counterparties. Failure of a counterparty to honor its obligation under a derivative contract is a risk we assume whenever we engage in a derivative contract. There were no counterparty default losses in the second quarter of 2016 or the second quarter of 2015.

Notes to Consolidated Financial Statements (continued)

Hedging derivatives

We utilize interest rate swap agreements to manage our exposure to interest rate fluctuations. For hedges of available-for-sale investment securities, deposits and long-term debt, the hedge documentation specifies the terms of the hedged items and the interest rate swaps and indicates that the derivative is hedging a fixed rate item and is a fair value hedge, that the hedge exposure is to the changes in the fair value of the hedged item due to changes in benchmark interest rates, and that the strategy is to eliminate fair value variability by converting fixed rate interest payments to LIBOR.

The available-for-sale investment securities hedged consist of sovereign debt, U.S. Treasury bonds, agency commercial mortgage-backed securities and covered bonds that had original maturities of 30 years or less at initial purchase. The swaps on all of these investment securities are not callable. All of these securities are hedged with “pay fixed rate, receive variable rate” swaps of similar maturity, repricing and fixed rate coupon. At June 30, 2016, $7.9 billion face amount of securities were hedged with interest rate swaps that had notional values of $8.0 billion.

The fixed rate long-term debt instruments hedged generally have original maturities of five to 30 years. We issue both callable and non-callable debt. The non-callable debt is hedged with “receive fixed rate, pay variable rate” swaps with similar maturity, repricing and fixed rate coupon. Callable debt is hedged with callable swaps where the call dates of the swaps exactly match the call dates of the debt. At June 30, 2016, $20.0 billion par value of debt was hedged with interest rate swaps that had notional values of $20.0 billion.

In addition, we enter into foreign exchange hedges. We use forward foreign exchange contracts with maturities of nine months or less to hedge our British pound, euro, Hong Kong dollar, Indian rupee and Singapore dollar foreign exchange exposure with respect to foreign currency forecasted revenue and expense transactions in entities that have the U.S. dollar as their functional currency. As of June 30, 2016, the hedged forecasted foreign currency

transactions and designated forward foreign exchange contract hedges were $382 million (notional), with a pre-tax gain of $10 million recorded in accumulated other comprehensive income. This gain will be reclassified to income or expense over the next nine months.

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 two years. The derivatives employed are designated as hedges of changes in value of our foreign investments due to exchange rates. Changes in the value of the forward foreign exchange contracts offset the changes in value of the foreign investments due to changes in foreign exchange rates. The change in fair market value of these forward foreign exchange contracts is deferred and reported within accumulated translation adjustments in shareholders’ equity, net of tax. At June 30, 2016, forward foreign exchange contracts with notional amounts totaling $7.1 billion were designated as hedges.

We use forward foreign exchange contracts with remaining maturities of two months or less as hedges against our foreign exchange exposure with respect to certain short-term borrowings in currencies other than the functional currency of the issuing entity. These hedges are designated as cash flow hedges and are effected such that their maturities and notional values match those of the corresponding transactions. As of June 30, 2016, the hedged balance sheet items and designated foreign exchange contract hedges were $1.1 billion (notional), with a pre-tax gain of $1 million recorded in accumulated other comprehensive income. This gain will be reclassified to net interest revenue over the next two months.

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 in various currencies, and, at June 30, 2016, had a combined U.S. dollar equivalent value of $438 million.

Notes to Consolidated Financial Statements (continued)

Ineffectiveness related to derivatives and hedging relationships was recorded in income as follows:

Ineffectiveness (in millions)	Six months ended June 30, 2016	Six months ended June 30, 2015
Fair value hedges of securities	$(12.7)	$ 6.5
Fair value hedges of long-term debt	(9.8)	(1.7)
Cash flow hedges	—	—
Other (a)	—	—
Total	$(22.5)	$ 4.8

(a) Includes ineffectiveness recorded on foreign exchange hedges.

The following table summarizes the notional amount and credit exposure of our total derivative portfolio at June 30, 2016 and Dec. 31, 2015.

Impact of derivative instruments on the balance sheet (in millions)	Notional value		Asset derivatives fair value		Liability derivatives fair value	
	June 30, 2016	Dec. 31, 2015	June 30, 2016	Dec. 31, 2015	June 30, 2016	Dec. 31, 2015
Derivatives designated as hedging instruments: (a)						
Interest rate contracts	$27,942	$25,768	$971	$497	$1,105	$372
Foreign exchange contracts	8,581	6,839	470	219	73	20
Total derivatives designated as hedging instruments			$1,441	$716	$1,178	$392
Derivatives not designated as hedging instruments: (b)						
Interest rate contracts	$467,408	$519,428	$13,625	$10,044	$13,567	$9,962
Foreign exchange contracts	593,881	576,253	8,045	4,905	7,942	4,682
Equity contracts	1,263	1,923	60	127	116	151
Credit contracts	316	319	7	8	3	1
Total derivatives not designated as hedging instruments			$21,737	$15,084	$21,628	$14,796
Total derivatives fair value (c)			$23,178	$15,800	$22,806	$15,188
Effect of master netting agreements (d)			(16,404)	(11,115)	(16,033)	(10,869)
Fair value after effect of master netting agreements			$6,774	$4,685	$6,773	$4,319

(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 balance sheet.

(b) 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 balance sheet.

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

(d) Effect of master netting agreements includes cash collateral received and paid of $1,181 million and $810 million, respectively, at June 30, 2016, and $792 million and $546 million, respectively, at Dec. 31, 2015.

Impact of derivative instruments on the income statement
(in millions)

Derivatives in fair value hedging relationships	Location of gain or (loss) recognized in income on derivatives	Gain or (loss) recognized in income on derivatives			Location of gain or(loss) recognized in income on hedged item	Gain or (loss) recognized in hedged item		
		2Q16	1Q16	2Q15		2Q16	1Q16	2Q15
Interest rate contracts	Net interest revenue	$(123)	$(148)	$255	Net interest revenue	$115	$134	$(248)

Notes to Consolidated Financial Statements (continued)

Derivatives in cash flow hedging relationships	Gain or (loss) recognized in accumulated OCI on derivatives (effective portion)			Location of gain or (loss) reclassified from accumulated OCI into income (effective portion)	Gain or (loss) reclassified from accumulated OCI into income (effective portion)			Location of gain or (loss) recognized in income on derivatives (ineffective portion and amount excluded from effectiveness testing)	Gain or (loss) recognized in income on derivatives (ineffectiveness portion and amount excluded from effectiveness testing)		
	2Q16	1Q16	2Q15		2Q16	1Q16	2Q15		2Q16	1Q16	2Q15
FX contracts	$ (15)	$ 6	$ —	Net interest revenue	$ (15)	$ 5	$ —	Net interest revenue	$ —	$ —	$ —
FX contracts	—	—	—	Other revenue	—	—	—	Other revenue	—	—	—
FX contracts	19	(89)	(3)	Trading revenue	19	(89)	(3)	Trading revenue	—	—	—
FX contracts	(14)	2	4	Salary expense	—	(2)	(8)	Salary expense	—	—	—
Total	$ (10)	$ (81)	$ 1		$ 4	$ (86)	$ (11)		$ —	$ —	$ —

Derivatives in net investment hedging relationships	Gain or (loss) recognized in accumulated OCI on derivatives (effective portion)			Location of gain or (loss) reclassified from accumulated OCI into income (effective portion)	Gain or (loss) reclassified from accumulated OCI into income (effective portion)			Location of gain or (loss) recognized in income on derivative (ineffective portion and amount excluded from effectiveness testing)	Gain or (loss) recognized in income on derivatives (ineffectiveness portion and amount excluded from effectiveness testing)		
	2Q16	1Q16	2Q15		2Q16	1Q16	2Q15		2Q16	1Q16	2Q15
FX contracts	$ 331	$ (58)	$ (255)	Net interest revenue	$ —	$ —	$ —	Other revenue	$ —	$ —	$ —

Impact of derivative instruments on the income statement
(in millions)

Derivatives in fair value hedging relationships	Location of gain or (loss) recognized in income on derivatives	Gain or (loss) recognized in income on derivatives		Location of gain or (loss) recognized in income on hedged item	Gain or (loss) recognized in hedged item	
		YTD16	YTD15		YTD16	YTD15
Interest rate contracts	Net interest revenue	$ (271)	$ 104	Net interest revenue	$ 249	$ (99)

Derivatives in cash flow hedging relationships	Gain or (loss) recognized in accumulated	Location of gain or (loss) reclassified from accumulated OCI into income	Gain or (loss) reclassified from accumulated	Location of gain or (loss) recognized in income on derivatives (ineffective portion and	Gain or (loss) recognized in income on derivatives

	OCI on derivatives (effective portion)		OCI into income (effective portion)		amount excluded from effectiveness testing)	(ineffectiveness portion and amount excluded from effectiveness testing)	
	YTD16	YTD15	YTD16	YTD15		YTD16	YTD15
FX contracts	$ (9)	$ (1)	Net interest revenue	$ (10)	$ (1)	Net interest revenue	$ —	$ —
FX contracts	—	—	Other revenue	—	—	Other revenue	—	—
FX contracts	(70)	9	Trading revenue	(70)	9	Trading revenue	—	—
FX contracts	(12)	(5)	Salary expense	(2)	(16)	Salary expense	—	—
Total	$ (91)	$ 3		$ (82)	$ (8)		$ —	$ —

Derivatives in net investment hedging relationships	Gain or (loss) recognized in accumulated OCI on derivatives (effective portion)		Location of gain or (loss) reclassified from accumulated OCI into income (effective portion)	Gain or (loss) reclassified from accumulated OCI into income (effective portion)		Location of gain or (loss) recognized in income on derivative (ineffective portion and amount excluded from effectiveness testing)	Gain or (loss) recognized in income on derivatives (ineffectiveness portion and amount excluded from effectiveness testing)	
	YTD16	YTD15		YTD16	YTD15		YTD16	YTD15
FX contracts	$ 273	$ 113	Net interest revenue	$ —	$ —	Other revenue	$ —	$ —

Trading activities (including trading derivatives)

We manage trading risk through a system of position limits, a VaR methodology based on Monte Carlo simulations and other market sensitivity measures. Risk is monitored and reported to senior management by a separate unit 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 for most instruments, utilizes a 99% confidence level and incorporates the non-linear characteristics of options. The VaR model is one of

several statistical models used to develop economic capital results, which is allocated to lines of business for computing risk-adjusted performance.

As the VaR methodology does not evaluate risk attributable to extraordinary financial, economic or other occurrences, 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, by their design, incorporate the impact of reduced liquidity and the breakdown of observed correlations. The results of these stress tests are reviewed weekly with senior management.

Revenue from foreign exchange and other trading included the following:

Foreign exchange and other trading revenue

				Year-to-date	
(in millions)	2Q16	1Q16	2Q15	2016	2015
Foreign exchange	$ 166	$ 171	$ 181	$ 337	$ 398
Other trading revenue	16	4	6	20	18
Total foreign exchange and other trading revenue	$ 182	$ 175	$ 187	$ 357	$ 416

Foreign exchange includes income from purchasing and selling foreign currencies and currency forwards, futures and options. Other trading revenue reflects results from futures and forward contracts, interest rate swaps, structured foreign currency swaps, options, equity derivatives and fixed income and equity securities.

Counterparty credit risk and collateral

We assess 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 or highly liquid government securities. Collateral requirements are monitored and adjusted daily.

Additional disclosures concerning derivative financial instruments are provided in Note 14 of the Notes to Consolidated Financial Statements.

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

Certain OTC derivative contracts and/or collateral agreements of The Bank of New York Mellon, our largest banking subsidiary and the subsidiary through which BNY Mellon enters into the substantial majority of its OTC derivative contracts and/or collateral agreements, contain provisions that may require us to take certain actions if The Bank of New York Mellon's public debt rating fell to a certain level. Early termination provisions, or "close-out" agreements, in those contracts could trigger immediate payment of outstanding contracts that are in net liability positions. Certain collateral agreements would require The Bank of New York Mellon to immediately post additional collateral to cover some or all of The Bank of New York Mellon's liabilities to a counterparty.

The following table shows the fair value of contracts falling under early termination provisions that were in net liability positions as of June 30, 2016 for three key ratings triggers:

If The Bank of New York Mellon's rating was changed to (Moody's/S&P)	Potential close-out exposures (fair value) (a)	
A3/A-	$ 391	million
Baa2/BBB	$ 1,226	million
Ba1/BB+	$ 3,461	million

(a) The amounts represent potential total close-out values if The Bank of New York Mellon's rating were to immediately drop to the indicated levels.

The aggregated fair value of contracts impacting potential trade close-out amounts and collateral obligations can fluctuate from quarter to quarter due to changes in market conditions, changes in the composition of counterparty trades, new business or changes to the agreement definitions establishing close-out or collateral obligations.

Additionally, if The Bank of New York Mellon's debt rating had fallen below investment grade on June 30, 2016, existing collateral arrangements would have required us to have posted an additional $255 million of collateral.

Notes to Consolidated Financial Statements (continued)

Offsetting assets and liabilities

The following tables present derivative instruments and financial instruments that are either subject to an enforceable netting agreement or offset by collateral arrangements. There were no derivative instruments or financial instruments subject to a netting agreement for which we are not currently netting.

Offsetting of derivative assets and financial assets at June 30, 2016

(in millions)	Gross assets recognized	Gross amounts offset in the balance sheet		Net assets recognized on the balance sheet	Gross amounts not offset in the balance sheet		Net amount
					Financial instruments	Cash collateral received	
Derivatives subject to netting arrangements:							
Interest rate contracts	$ 13,386	$ 11,724		$ 1,662	$ 411	$ —	$ 1,251
Foreign exchange contracts	6,386	4,626		1,760	120	—	1,640
Equity and other contracts	65	54		11	—	—	11
Total derivatives subject to netting arrangements	19,837	16,404		3,433	531	—	2,902
Total derivatives not subject to netting arrangements	3,341	—		3,341	—	—	3,341
Total derivatives	23,178	16,404		6,774	531	—	6,243
Reverse repurchase agreements	22,499	1,332	(b)	21,167	21,166	—	1
Securities borrowing	6,888	—		6,888	6,727	—	161
Total	$ 52,565	$ 17,736		$ 34,829	$ 28,424	$ —	$ 6,405

(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, 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, 2015

(in millions)	Gross assets recognized	Gross amounts offset in the balance sheet		Net assets recognized on the balance sheet	Gross amounts not offset in the balance sheet		Net amount
					Financial instruments	Cash collateral received	
Derivatives subject to netting arrangements:							
Interest rate contracts	$ 9,554	$ 8,071		$ 1,483	$ 432	$ —	$ 1,051
Foreign exchange contracts	3,981	2,981		1,000	63	—	937
Equity and other contracts	123	63		60	—	—	60
Total derivatives subject to netting arrangements	13,658	11,115		2,543	495	—	2,048
Total derivatives not subject to netting arrangements	2,142	—		2,142	—	—	2,142
Total derivatives	15,800	11,115		4,685	495	—	4,190
Reverse repurchase agreements	17,088	357	(b)	16,731	16,726	—	5
Securities borrowing	7,630	—		7,630	7,373	—	257
Total	$ 40,518	$ 11,472		$ 29,046	$ 24,594	$ —	$ 4,452

(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, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

Notes to Consolidated Financial Statements (continued)

Offsetting of derivative liabilities and financial liabilities at June 30, 2016

(in millions)	Gross liabilities recognized	Gross amounts offset in the balance sheet	Net liabilities recognized on the balance sheet	Gross amounts not offset in the balance sheet		Net amount
				Financial instruments	Cash collateral pledged	
Derivatives subject to netting arrangements:						
Interest rate contracts	$ 14,509	$ 11,548	$ 2,961	$ 2,724	$ —	$ 237
Foreign exchange contracts	6,541	4,434	2,107	883	—	1,224
Equity and other contracts	109	51	58	54	—	4
Total derivatives subject to netting arrangements	21,159	16,033	5,126	3,661	—	1,465
Total derivatives not subject to netting arrangements	1,647	—	1,647	—	—	1,647
Total derivatives	22,806	16,033	6,773	3,661	—	3,112
Repurchase agreements	7,323	1,332	(b) 5,991	5,989	—	2
Securities lending	1,396	—	1,396	1,332	—	64
Total	$ 31,525	$ 17,365	$ 14,160	$ 10,982	$ —	$ 3,178

(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 Fixed Income Clearing Corporation, 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, 2015

(in millions)	Gross liabilities recognized	Gross amounts offset in the balance sheet	Net liabilities recognized on the balance sheet	Gross amounts not offset in the balance sheet		Net amount
				Financial instruments	Cash collateral pledged	
Derivatives subject to netting arrangements:						
Interest rate contracts	$ 10,188	$ 8,235	$ 1,953	$ 1,795	$ —	$ 158
Foreign exchange contracts	3,409	2,567	842	274	—	568
Equity and other contracts	145	67	78	71	—	7
Total derivatives subject to netting arrangements	13,742	10,869	2,873	2,140	—	733
Total derivatives not subject to netting arrangements	1,446	—	1,446	—	—	1,446
Total derivatives	15,188	10,869	4,319	2,140	—	2,179
Repurchase agreements	7,737	357	(b) 7,380	7,380	—	—
Securities lending	1,801	—	1,801	1,727	—	74
Total	$ 24,726	$ 11,226	$ 13,500	$ 11,247	$ —	$ 2,253

(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 Fixed Income Clearing Corporation, where we settle government securities transactions on a net basis for payment and delivery through the Fedwire system.

BNY Mellon 99

Notes to Consolidated Financial Statements (continued)

Secured borrowings

The following tables present 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 at June 30, 2016

	Remaining contractual maturity of the agreements			
(in millions)	Overnight and continuous	Up to 30 days	30 days or more	Total
Repurchase agreements:				
U.S. Treasury	$2,252	$—	$—	$2,252
U.S. Government agencies	291	—	—	291
Agency RMBS	2,893	—	—	2,893
Corporate bonds	217	—	786	1,003
Other debt securities	247	—	229	476
Equity securities	373	—	35	408
Total	$6,273	$—	$1,050	$7,323
Securities lending:				
U.S. Government agencies	$32	$—	$—	$32
Other debt securities	332	—	—	332
Equity securities	1,032	—	—	1,032
Total	$1,396	$—	$—	$1,396
Total borrowings	$7,669	$—	$1,050	$8,719

Repurchase agreements and securities lending transactions accounted for as secured borrowings at Dec. 31, 2015

	Remaining contractual maturity of the agreements			
(in millions)	Overnight and continuous	Up to 30 days	30 days or more	Total
Repurchase agreements:				
U.S. Treasury	$2,226	$—	$—	$2,226
U.S. Government agencies	319	42	5	366
Agency RMBS	3,158	—	—	3,158
Corporate bonds	372	—	665	1,037
Other debt securities	106	—	149	255
Equity securities	664	—	31	695
Total	$6,845	$42	$850	$7,737
Securities lending:				

U.S. Government agencies	$35	$ —	$ —	$35
Other debt securities	254	—	—	254
Equity securities	1,512	—	—	1,512
Total	$1,801	$ —	$ —	$1,801
Total borrowings	$8,646	$ 42	$ 850	$9,538

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, additional collateral could be required to

be provided 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.

Notes to Consolidated Financial Statements (continued)

Note 17 - Commitments and contingent liabilities

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 risk not recognized in the balance sheet. Our off-balance sheet risks are managed and monitored in manners similar to those used for on-balance sheet risks. Significant industry concentrations related to credit exposure at June 30, 2016 are disclosed in the financial institutions portfolio exposure table and the commercial portfolio exposure table below.

Financial institutions portfolio exposure (in billions)	June 30, 2016		
	Loans	Unfunded commitments	Total exposure
Securities industry	$3.7	$ 20.2	$ 23.9
Banks	7.4	2.1	9.5
Asset managers	1.6	5.8	7.4
Insurance	0.1	3.9	4.0
Government	0.1	1.2	1.3
Other	1.3	1.4	2.7
Total	$14.2	$ 34.6	$ 48.8

Commercial portfolio exposure (in billions)	June 30, 2016		
	Loans	Unfunded commitments	Total exposure
Services and other	$1.0	$ 6.1	$ 7.1
Manufacturing	0.8	5.7	6.5
Energy and utilities	0.6	4.7	5.3
Media and telecom	0.3	1.3	1.6
Total	$2.7	$ 17.8	$ 20.5

Major concentrations in securities lending are primarily to broker-dealers and are generally collateralized with cash. Securities lending transactions are discussed below.

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

Off-balance sheet credit risks (in millions)	June 30, 2016	Dec. 31, 2015
Lending commitments	$52,936	$54,505
Standby letters of credit (a)	4,389	4,915
Commercial letters of credit	148	303
Securities lending indemnifications (b)	302,030	294,108

(a) Net of participations totaling $752 million at June 30, 2016 and $809 million at Dec. 31, 2015.

(b) Excludes the indemnification for securities for which BNY Mellon acts as an agent on behalf of CIBC Mellon clients, which totaled $55 billion at June 30, 2016 and $54 billion at Dec. 31, 2015.

Also included in lending commitments are facilities that provide liquidity for variable rate tax-exempt securities wrapped by monoline insurers. The credit approval for these facilities is based on an assessment of the underlying tax-exempt issuer and considers factors other than the financial strength of the monoline insurer.

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 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: $30.7 billion in less than one year, $21.7 billion in one to five years and $570 million over five years.

Standby letters of credit (“SBLC”) principally support corporate obligations and were collateralized with cash and securities of $406 million and $299 million at June 30, 2016 and Dec. 31, 2015, respectively. At June 30, 2016, $2.7 billion of the SBLCs will expire within one year and $1.7 billion in one to 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.

Notes to Consolidated Financial Statements (continued)

The estimated liability for losses related to these commitments and SBLCs, if any, is included in the allowance for lending-related commitments. The allowance for lending-related commitments was $122 million at June 30, 2016 and $118 million at Dec. 31, 2015.

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

Standby letters of credit	June 30, 2016		Dec. 31, 2015	
Investment grade	86	%	86	%
Non-investment grade	14	%	14	%

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 $148 million at June 30, 2016 compared with $303 million at Dec. 31, 2015.

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, which normally matures in less than 90 days.

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 $315 billion at June 30, 2016 and $306 billion at Dec. 31, 2015.

CIBC Mellon, a joint venture between BNY Mellon and the Canadian Imperial Bank of Commerce ("CIBC"), engages in securities lending activities. CIBC Mellon, BNY Mellon, and CIBC jointly and severally indemnify securities lenders against specific types of borrower default. At June 30, 2016 and Dec. 31, 2015, $55 billion and $54 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 $58 billion and $56 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.

We expect many of these guarantees 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.

Exposure for certain administrative errors

In connection with certain offshore tax-exempt funds that we manage, we may be liable to the funds for certain administrative errors. The errors relate to the resident status of such funds, potentially exposing the Company to a tax liability related to the funds' earnings. The Company is in discussions with tax authorities regarding the funds. With the charge recorded in 2014 for this matter, we believe we are appropriately accrued and the additional reasonably possible exposure is not significant.

Indemnification arrangements

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

indemnifications. We are unable to develop an estimate of the maximum payout under these indemnifications for several reasons. In addition to the lack of a stated or notional amount in a majority of such indemnifications, we are unable to predict the nature of events that would trigger indemnification or the level of indemnification for a certain event. We believe, however, that the possibility that we will have to make any material payments for these indemnifications is remote. At June 30, 2016 and Dec. 31, 2015, 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 or to provide financial 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. In addition, any ancillary costs that occur as a result of any mark-to-market loss cannot be quantified. At June 30, 2016 and Dec. 31, 2015, we have not recorded any material liabilities under these arrangements.

Legal proceedings

In the ordinary course of business, BNY Mellon 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 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 net income in a given period.

In view of the inherent unpredictability of outcomes in litigation and governmental 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 governmental 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, BNY Mellon establishes accruals for litigation and governmental 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. BNY Mellon will continue to 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, BNY Mellon does not establish an accrual and the matter will continue to be monitored for any developments that would make the loss contingency both probable and reasonably estimable. BNY Mellon believes that its 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 net income in a given

period.

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.

Notes to Consolidated Financial Statements (continued)

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

Sentinel Matters

On Jan. 18, 2008, The Bank of New York Mellon filed a proof of claim in the Chapter 11 bankruptcy proceeding of Sentinel Management Group, Inc. ("Sentinel") pending in federal court in the Northern District of Illinois, seeking to recover approximately $312 million loaned to Sentinel and secured by securities and cash in an account maintained by Sentinel at The Bank of New York Mellon. On March 3, 2008, the bankruptcy trustee filed an adversary complaint against The Bank of New York Mellon seeking to disallow The Bank of New York Mellon's claim and seeking damages for The Bank of New York Mellon's allegedly aiding and abetting Sentinel insiders in misappropriating customer assets and improperly using those assets as collateral for the loan. In a decision dated Nov. 3, 2010, the court found for The Bank of New York Mellon and against the bankruptcy trustee, holding that The Bank of New York Mellon's loan to Sentinel was valid, fully secured and not subject to equitable subordination. The bankruptcy trustee appealed this decision, and on Aug. 9, 2012, the United States Court of Appeals for the Seventh Circuit issued a decision affirming the trial court's judgment. On Sept. 7, 2012, the bankruptcy trustee filed a petition for rehearing and, on Nov. 30, 2012, the Court of Appeals withdrew its opinion and vacated its judgment. On Aug. 26, 2013, the Court of Appeals reversed its own prior decision and the district court's decision, and remanded the case to the district court for further proceedings. On Dec. 10, 2014, the district court issued a decision in favor of The Bank of New York Mellon holding that the transfers from Sentinel cannot be reversed and that The Bank of New York Mellon's lien was valid and not subject to equitable subordination. The bankruptcy trustee appealed the decision. On Jan. 8, 2016, the Court of Appeals invalidated The Bank of New York Mellon's lien but rejected the trustee's request for equitable subordination. On July 13, 2016, the bankruptcy court approved a settlement between The Bank of New York Mellon and the bankruptcy trustee, under which both parties will dismiss all litigation between them and The Bank of New York Mellon will be granted an unsecured claim for the amount of the loan. We expect to receive a distribution later this year, and to share pro rata with other unsecured creditors in any future distributions.

In November 2009, the Division of Enforcement of the U.S. Commodities Futures Trading Commission ("CFTC") indicated that it is considering a recommendation to the CFTC that it file a civil enforcement action against The Bank of New York Mellon for possible violations of the Commodity Exchange Act and CFTC regulations in connection with its relationship to Sentinel. The Bank of New York Mellon responded in writing to the CFTC on Jan. 29, 2010 and provided an explanation as to why an enforcement action is unwarranted.

Standing Instruction Matters

Beginning in December 2009, government authorities conducted inquiries seeking information relating primarily to standing instruction foreign exchange transactions in connection with custody services BNY Mellon provides to custody clients. On various dates beginning in 2009, BNY Mellon was named as a defendant in lawsuits by various government and private entities alleging BNY Mellon's pricing of standing instruction foreign exchange transactions was improper.

On March 19, 2015, BNY Mellon announced that it had resolved substantially all of the pending standing instruction-related actions, resulting in a total of $714 million in settlement payments. On May 21, 2015, BNY Mellon settled a putative class action lawsuit asserting securities law violations. With these settlements, which are now all final, BNY Mellon has effectively resolved virtually all of the standing instruction FX-related actions, with the exception of several lawsuits brought by individual customers or shareholders asserting derivative claims.

Tax Litigation

On Aug. 17, 2009, BNY Mellon received a Statutory Notice of Deficiency disallowing tax benefits for the 2001 and 2002 tax years in connection with a 2001 transaction that involved the payment of UK corporate income taxes that

were credited against BNY Mellon's U.S. corporate income tax liability. The Notice alleged that the transaction lacked economic substance and business purpose. On Nov. 10, 2009, BNY Mellon filed a petition with the U.S. Tax Court contesting the disallowance of the benefits. Following a trial, the Tax Court upheld the IRS's Notice of Deficiency and disallowed BNY Mellon's tax credits and associated transaction costs on Feb. 11, 2013. On Sept. 23, 2013, the Tax Court issued a supplemental opinion, partially reducing the tax implications to BNY Mellon of its earlier decision.

Notes to Consolidated Financial Statements (continued)

The Tax Court entered a decision formally implementing its prior rulings on Feb. 20, 2014. BNY Mellon appealed the decision to the Second Circuit Court of Appeals. On Sept. 9, 2015, the Second Circuit affirmed the Tax Court decision. BNY Mellon sought review by the United States Supreme Court, but that review was denied on March 7, 2016.

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. These actions include a lawsuit brought in New York State court on June 18, 2014, and later re-filed in federal court, by a group of institutional investors who purport to sue on behalf of 260 MBS trusts.

Matters Related to R. Allen Stanford

In late December 2005, Pershing LLC 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 International Bank ("SIB"), also controlled by Stanford, issued certificates of deposit ("CDs"). Some investors allegedly wired funds from their SGC accounts to purchase CDs. In 2009, the SEC 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 15 lawsuits against Pershing that are pending in Texas, including two putative class actions. 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 addition, one FINRA arbitration matter brought by alleged purchasers remains pending.

Brazilian Postalis Litigation

BNY Mellon Servicos Financeiros DTVM S.A. ("DTVM"), a subsidiary that provides a number of asset services in Brazil, acts as administrator for certain investment funds in which the exclusive investor is a public pension fund for postal workers called Postalis-Instituto de Seguridade Social dos Correios e Telégrafos ("Postalis"). On Aug. 22, 2014, Postalis sued DTVM in Brazil for losses related to a Postalis investment fund for which DTVM serves as fund administrator. Postalis alleges that DTVM

failed to properly perform alleged duties, including duties to conduct due diligence of and exert control over the fund manager, Atlântica Administração de Recursos ("Atlântica"), and Atlântica's investments. On March 12, 2015, Postalis filed a lawsuit in Brazil against DTVM and BNY Mellon Administração de Ativos Ltda. ("Ativos") alleging failure to properly perform alleged duties relating to another fund of which DTVM is administrator and Ativos is investment manager. On Dec. 14, 2015, Associacão Dos Profissionais Dos Correiros, a Brazilian postal workers association, filed a lawsuit in Brazil against DTVM and other defendants alleging that DTVM improperly contributed to investment losses in the Postalis portfolio. On Dec. 17, 2015, Postalis filed three additional lawsuits in Brazil against DTVM and Ativos alleging failure to properly perform alleged duties and liabilities for losses with respect to investments in several other funds. On Feb. 4, 2016, Postalis filed another lawsuit in Brazil against DTVM, Ativos and BNY Mellon Alocação de Patrimônio Ltda., an investment management subsidiary, alleging failure to properly perform duties and liability for losses with respect to investments in various other funds of which the defendants were administrator and/or manager.

Depositary Receipt Matters

Between late December 2015 and February 2016, four putative class action lawsuits were filed against BNY Mellon asserting claims relating to BNY Mellon's foreign exchange pricing when converting dividends and other distributions from non-U.S. companies in its role as depositary bank to Depositary Receipt issuers. The primary claims are for breach of contract and violations of ERISA. The lawsuits are all pending in federal court in the Southern District of New York and are all in their early stages.

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.

Notes to Consolidated Financial Statements (continued)

Note 18 - 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.

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 when improvements are made in the measurement principles.

Beginning in the first quarter of 2016, we revised the net interest revenue for our business to reflect adjustments to our transfer pricing methodology to better reflect the value of certain deposits. Also beginning in the first quarter of 2016, we refined the expense allocation process for indirect expenses to simplify the expenses recorded in the Other segment to include only expenses not directly attributable to the Investment Management and Investment Services operations. These changes did not impact the consolidated results.

The accounting policies of the businesses are the same as those described in Note 1 of the Notes to Consolidated Financial Statements in our 2015 Annual Report.

The primary types of revenue for our two principal businesses and the Other segment are presented below:

Business	Primary types of revenue
Investment Management	• Investment management and performance fees from: Mutual funds Institutional clients Private clients High net worth individuals and families, endowments and foundations and related entities • Distribution and servicing fees • Asset servicing fees, including institutional trust and custody fees, broker-dealer services, global collateral services and securities lending • Issuer services fees, including Corporate Trust and Depositary Receipts
Investment Services	• Clearing services fees, including broker-dealer services, registered investment advisor services and prime brokerage services • Treasury services fees, including global payment services and working capital solutions • Foreign exchange • Credit-related activities • Leasing operations • Corporate treasury activities
Other segment	• Derivatives business • Global markets • Business exits

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. 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 allocated to 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.

Notes to Consolidated Financial Statements (continued)

- Incentive expense related to restricted stock is allocated to the businesses.
- Support and other indirect expenses are allocated to businesses based on internally developed methodologies.
- 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 investment 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 included in the Other segment.
- Client deposits serve as the primary funding source for our investment securities portfolio.

We typically allocate all interest revenue to the businesses generating the deposits. Accordingly, accretion related to the portion of the investment securities portfolio restructured in 2009 has been included in the results of the businesses.

- M&I expense is a corporate level item and is recorded in the Other segment.
- Restructuring charges relate to corporate-level initiatives and were therefore recorded in the Other segment.
- 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 show the contribution of our businesses to our overall profitability.

For the quarter ended June 30, 2016 (dollar amounts in millions)	Investment Management		Investment Services		Other	Consolidated	
Fee and other revenue	$ 856	(a)	$ 2,054		$95	$ 3,005	(a)
Net interest revenue	82		690		(5)	767	
Total revenue	938	(a)	2,744		90	3,772	(a)
Provision for credit losses	1		(7)		(3)	(9)	
Noninterest expense	703		1,859		56	2,618	(b)
Income before taxes	$ 234	(a)	$ 892		$37	$ 1,163	(a)(b)
Pre-tax operating margin (c)	25	%	33	%	N/M	31	%
Average assets	$ 30,229		$ 277,225		$66,766	$ 374,220	

(a) Both fee and other revenue and total revenue include the net income from consolidated investment management funds of $6 million, representing $10 million of income and noncontrolling interests of $4 million. Income before taxes is net of noncontrolling interests of $4 million.

(b) Noninterest expense includes a loss attributable to noncontrolling interest of $2 million related to other consolidated subsidiaries.

(c) Income before taxes divided by total revenue.

N/M - Not meaningful.

For the quarter ended March 31, 2016 (dollar amounts in millions)	Investment Management		Investment Services		Other	Consolidated	
Fee and other revenue	$ 812	(a)	$ 2,030		$129	$ 2,971	(a)
Net interest revenue	83		679		4	766	
Total revenue	895	(a)	2,709		133	3,737	(a)
Provision for credit losses	(1)		14		(3)	10	
Noninterest expense	679		1,808		140	2,627	(b)
Income (loss) before taxes	$ 217	(a)	$ 887		$(4)	$ 1,100	(a)(b)
Pre-tax operating margin (c)	24	%	33	%	N/M	29	%

Average assets	$ 29,971	$ 273,289	$ 61,294	$ 364,554

(a) Both fee and other revenue and total revenue include the net income from consolidated investment management funds of $1 million, representing $6 million of losses and a loss attributable to noncontrolling interests of $7 million. Income (loss) before taxes is net of a loss attributable to noncontrolling interests of $7 million.

(b) Noninterest expense includes a loss attributable to noncontrolling interest of $2 million related to other consolidated subsidiaries.

(c) Income before taxes divided by total revenue.

N/M - Not meaningful.

Notes to Consolidated Financial Statements (continued)

For the quarter ended June 30, 2015 (dollar amounts in millions)	Investment Management		Investment Services		Other	Consolidated	
Fee and other revenue	$ 910	(a)	$ 2,057		$ 103	$ 3,070	(a)
Net interest revenue	77		667		35	779	
Total revenue	987	(a)	2,724		138	3,849	(a)
Provision for credit losses	3		6		(15)	(6)	
Noninterest expense	725		1,914		87	2,726	(b)
Income before taxes	$ 259	(a)	$ 804		$ 66	$ 1,129	(a)(b)
Pre-tax operating margin (c)	26	%	30	%	N/M	29	%
Average assets	$ 30,414		$ 292,264		$ 55,601	$ 378,279	

(a) Both fee and other revenue and total revenue include net income from consolidated investment management funds of $3 million, representing $40 million of income and noncontrolling interests of $37 million. Income before taxes is net of noncontrolling interests of $37 million.

(b) Noninterest expense includes a loss attributable to noncontrolling interest of $1 million related to other consolidated subsidiaries.

(c) Income before taxes divided by total revenue.

N/M - Not meaningful.

For the six months ended June 30, 2016 (dollar amounts in millions)	Investment Management		Investment Services		Other	Consolidated	
Fee and other revenue	$ 1,668	(a)	$ 4,084		$ 224	$ 5,976	(a)
Net interest revenue	165		1,369		(1)	1,533	
Total revenue	1,833	(a)	5,453		223	7,509	(a)
Provision for credit losses	—		7		(6)	1	
Noninterest expense	1,382		3,667		196	5,245	(b)
Income before taxes	$ 451	(a)	$ 1,779		$ 33	$ 2,263	(a)(b)
Pre-tax operating margin (c)	25	%	33	%	N/M	30	%
Average assets	$ 29,874		$ 275,257		$ 64,256	$ 369,387	

(a) Both total fee and other revenue and total revenue include the net income from consolidated investment management funds of $7 million, representing $4 million of income and a loss attributable to noncontrolling interests of $3 million. Income before taxes is net of a loss attributable to noncontrolling interests of $3 million.

(b) Noninterest expense includes a loss attributable to noncontrolling interest of $4 million related to other consolidated subsidiaries.

(c) Income before taxes divided by total revenue.

N/M - Not meaningful.

For the six months ended June 30, 2015 (dollar amounts in millions)	Investment Management		Investment Services		Other	Consolidated	
Fee and other revenue	$ 1,829	(a)	$ 4,086		$ 188	$ 6,103	(a)
Net interest revenue	152		1,296		59	1,507	
Total revenue	1,981	(a)	5,382		247	7,610	(a)
Provision for credit losses	2		13		(19)	(4)	
Noninterest expense	1,457		3,777		192	5,426	(b)
Income before taxes	$ 522	(a)	$ 1,592		$ 74	$ 2,188	(a)(b)
Pre-tax operating margin (c)	26	%	30	%	N/M	29	%
Average assets	$ 30,885		$ 289,806		$ 52,681	$ 373,372	

(a) Both total fee and other revenue and total revenue include net income from consolidated investment management funds of $24 million, representing $92 million of income and noncontrolling interests of $68 million. Income before taxes is net of noncontrolling interests of $68 million.

(b) Noninterest expense includes a loss attributable to noncontrolling interest of $1 million related to other consolidated subsidiaries.

(c) Income before taxes divided by total revenue.

N/M - Not meaningful.

Notes to Consolidated Financial Statements (continued)

Note 19 - Supplemental information to the Consolidated Statement of Cash Flows

Noncash investing and financing transactions that, appropriately, are not reflected in the Consolidated Statement of Cash Flows are listed below.

Noncash investing and financing transactions	Six months ended June 30,	
(in millions)	2016	2015
Transfers from loans to other assets for other real estate owned ("OREO")	$ 3	$ 3
Change in assets of consolidated VIEs	318	7,051
Change in liabilities of consolidated VIEs	9	6,787
Change in nonredeemable noncontrolling interests of consolidated investment management funds	172	123
Securities purchased not settled	940	124
Securities sales not settled	332	30
Available-for-sale securities transferred to held-to-maturity	—	11,602
Held-to-maturity securities transferred to available-for-sale	10	—
Premises and equipment/capitalized software funded by capital lease obligations	4	48

Item 4. Controls and Procedures

Disclosure controls and procedures

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

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

Changes in internal control over financial reporting

In the ordinary course of business, we may routinely modify, upgrade or enhance our internal controls and procedures for financial reporting. There have not been any changes in our internal controls over financial reporting as defined in Rule 13a-15(f) of the Exchange Act during the second quarter of 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Forward-looking Statements

Some statements in this document 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, goals, strategies, outlook, objectives, expectations (including those regarding our performance results, regulatory, market, economic or accounting developments, legal proceedings and other contingencies), effective tax rate, estimates (including those regarding capital ratios), intentions, targets, opportunities and initiatives.

In this report, any other report, any press release or any written or oral statement that BNY Mellon or its executives may make, words, such as “estimate,” “forecast,” “project,” “anticipate,” “target,” “expect,” “intend,” “continue,” “seek,” “beli “goal,” “could,” “should,” “would,” “may,” “will,” “strategy,” “synergies,” “opportunities,” “trends” and words of similar mea 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 the “Risk Factors” section of our 2015 Annual Report and this Form 10-Q, such as: an information security event or technology disruption that results in a loss of confidential information or impacts our ability to provide services to our clients and any material adverse effect on our business and results of operations; failure of our technology or that of a third party or vendor, or if we neglect to update our technology, develop and market new technology to meet clients’ needs or protect our intellectual property and any material adverse effect on our business; extensive government regulation and supervision and the impact of the significant amount of rulemaking since the 2008 financial crisis, which have, and in the future may, compel us to change how we manage our businesses, could have a material adverse effect on our business, financial condition and results of operations and have increased our compliance and operational risks and costs; failure to satisfy regulatory standards, including “well capitalized” and “well managed” status or capital adequacy and liquidity rules, and any resulting limitations on our activities, or adverse effects on our business and financial condition; our preferred resolution strategy and any adverse effects on our liquidity, financial condition and security holders; regulatory actions or litigation and any adverse effect on our results of

operations or harm to our businesses or reputation; adverse publicity, government scrutiny or other reputational harm and any negative effect on our businesses; the risks relating to new lines of business, new products and services or strategic project initiatives and the failure to implement these initiatives, which could affect our results of operations; the risks and uncertainties relating to our strategic transactions and any adverse effect on our business, results of operations and financial condition; operational risk and any material adverse effect on our business; failure or circumvention of our controls and procedures and any material adverse effect on our business, reputation, results of operations and financial condition; competition in all aspects of our business and any negative effect on our ability to maintain or increase our profitability; failure of our risk management framework to be effective in mitigating risk and reducing the potential for losses; change or uncertainty in monetary, tax and other governmental policies and the impact on our businesses, profitability and ability to compete; political, economic, legal, operational and other risks inherent in operating globally and any material adverse effect on our business; failure to attract and retain employees and any adverse effect on our business; acts of terrorism, natural disasters, pandemics and global conflicts and any negative impact on our business and operations; weakness in financial markets and the economy generally and any material adverse effect on our business, results of operations and financial condition; market volatility and any adverse impact on our business, financial condition and results of operations and our ability to manage risk; ongoing concerns about the financial stability of certain countries, the failure or instability of any of our significant global counterparties, or a breakup of the European Union or Eurozone and any material adverse effect on our business and results of operations; the UK referendum and any negative effects on global economic conditions, global financial markets, and our business and results of operations; continuing low or volatile interest rates and any material adverse effect on our profitability; write-downs of securities that we own and other losses related to volatile and illiquid market conditions and any reduction in our earnings or impact on our financial condition; our dependence on

fee-based business for a substantial majority of our revenue and the potential adverse effects of a slowing in market activity, weak financial markets, underperformance and/or negative trends in savings rates or in investment preferences; any adverse effect

Forward-looking Statements (continued)

on our foreign exchange revenues from decreased market volatility or cross-border investment activity of our clients; the failure or perceived weakness of any of our significant counterparties, and our assumption of credit and counterparty risk, which could expose us to loss and adversely affect our business; credit, regulatory and reputational risks as a result of our tri-party repo collateral agency services, which could adversely affect our business and results of operations; any material reduction in our credit ratings or the credit ratings of our principal bank subsidiaries, which 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; any adverse effect on our business, financial condition and results of operations of not effectively managing our liquidity; inadequate reserves for credit losses, including loan reserves, and any resulting charges through provision expense; tax law changes or challenges to our tax positions and any adverse effect on our net income, effective tax rate and overall results of operations and financial condition; changes in accounting standards and any material impact on our reported financial condition, results of operations, cash flows and other financial data; risks associated with being a non-operating holding company, including our dependence on dividends from our subsidiaries to meet obligations, to provide funds for payment of dividends and for stock repurchases; and the impact of provisions of U.S. banking laws and regulations, including those governing capital and the approval of our capital plan, applicable provisions of Delaware law or failure to pay full and timely dividends on our preferred stock, on our ability to return capital to shareholders.

Investors should consider all risks in our 2015 Annual Report and any subsequent reports filed with the SEC by BNY Mellon pursuant to the Exchange Act, including this Form 10-Q. 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 websites referenced herein are not part of this report.

Part II - Other Information

Item 1. Legal Proceedings

The information required by this Item is set forth in the “Legal proceedings” section in Note 17 of the Notes to Consolidated Financial Statements, which portion is incorporated herein by reference in response to this item.

Item 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 95 through 121 of our 2015 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 2015 Annual Report or other of our reports filed with or furnished to the SEC, also could adversely affect our business or results. 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 application of our preferred resolution strategy could adversely affect our liquidity and financial condition and our security holders.

Following the receipt of feedback from the Federal Reserve and the FDIC in April 2016 on our 2015 resolution plan, we determined that, in the event of our material financial distress or failure, our preferred resolution strategy under Title I of the Dodd-Frank Act would be a single point of entry strategy. Under this strategy, before commencing proceedings in a U.S. Bankruptcy Court, we would recapitalize and provide liquidity to certain major subsidiaries with the goal of enabling these subsidiaries to continue operating. Following the recapitalizations and provision of liquidity, we would be resolved under the U.S. Bankruptcy Code.

If we were to become subject to a bankruptcy proceeding and our single point of entry strategy is successful, creditors of some or all of the major subsidiaries would receive full recoveries on their

claims, while our security holders could face significant losses, potentially including the loss of their entire investment. In this way, a single point of entry strategy under Title I resembles the single point of entry strategy under Title II’s Orderly Liquidation Authority. If this strategy is not successful, our liquidity and financial condition would be adversely affected and our security holders may, as a consequence, be in a worse position than if the strategy had not been implemented.

The result of the United Kingdom’s referendum on whether to remain part of the European Union has had and may continue to have negative effects on global economic conditions, global financial markets, and our business and results of operations.

On June 23, 2016, the UK held a referendum on whether the UK should remain part of the EU, the outcome of which was a vote in favor of withdrawing from the EU. The result of the referendum has created an uncertain political and economic environment in the UK and may create such environments in other EU member states. Political and economic uncertainty has in the past led to, and the outcome of the referendum and the withdrawal of the UK from the EU could lead to, declines in market liquidity and activity levels, volatile market conditions, a contraction of available credit, lower or negative interest rates, weaker economic growth and reduced business confidence. Market disruptions, as well as adverse market and economic conditions, could, among other things, have a negative effect on our fee revenues and lead to a “flight to safety,” which could result in increases in our client deposits and assets, altering the size

and composition of our balance sheet and adversely affecting our leverage-based regulatory capital ratios.

The result of the referendum means that the long-term nature of the UK's relationship with the EU is unclear (including with respect to the laws and regulations that will apply as the UK determines which EU laws to replicate or replace), and there is considerable uncertainty as to when the framework for any such relationship governing both the access of the UK to European markets and the access of EU Member States to the UK's markets will be determined and implemented. As a result of the referendum, we, including our EU affiliates, may face additional operational, regulatory and compliance costs. In addition, the regulatory, tax and supervisory regimes applicable to our UK operations and those of its EU

Part II - Other Information (continued)

affiliates and their dealings with other EU member states are expected to change; however, the nature and timing of such changes are uncertain and cannot be predicted. Certain of our EU operations are conducted through a UK branch of The Bank of New York Mellon and subsidiaries located in the UK and other EU member states. If our UK subsidiaries are not able to retain their EU financial services "passport," which permits cross-border services and activities throughout the single EU market without needing to obtain local authorizations, we may incur costs to move operations and, potentially, personnel from our UK branch and subsidiaries to our subsidiaries based in other EU member states. The outcome of the referendum has also created uncertainty with regard to the regulation of data protection in the UK and the transfer of data to and from the UK.

Following the referendum, volatility in the exchange rate for the British pound has increased. The decrease in the British pound compared to the U.S. dollar since the referendum has had, and may continue to have, a negative effect on our Investment Management business, which typically has more non-U.S. dollar denominated revenues than expenses. Volatility in exchange rates may also have a negative effect on our Investment Services business, which typically has more non-U.S. dollar denominated expenses than revenues.

The effects of the result of the referendum, including those described above, could adversely affect our business, results of operations and financial condition.

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

The following table discloses repurchases of our common stock made in the second quarter of 2016. All of the (c) Company's preferred stock outstanding has preference over the Company's common stock with respect to the payment of dividends.

Issuer purchases of equity securities

Share repurchases - second quarter of 2016

(dollars in millions, except per share information; common shares in thousands)	Total shares repurchased	Average price per share	Total shares repurchased as part of a publicly announced plan or program	Maximum approximate dollar value of shares that may yet be purchased under the publicly announced plans or programs at June 30, 2016	
April 2016	6,029	$ 40.44	6,029	$ 272	
May 2016	11	40.12	11	272	
June 2016	6,426	41.13	6,426	8	
Second quarter of 2016 (a)	12,466	40.80	12,466	2,706	(b)

Includes 63 thousand shares repurchased at a purchase price of $3 million from employees, primarily in connection (a) with the employees' payment of taxes upon the vesting of restricted stock. The average price per share of open market purchases was $40.80.

(b) Represents the maximum value of the shares authorized to be repurchased through the second quarter of 2017, including employee benefit plan repurchases, in connection with the Federal Reserve's non-objection to our 2016 capital plan.

On March 11, 2015, in connection with the Federal Reserve's non-objection to our 2015 capital plan, BNY Mellon announced a stock purchase program providing for the repurchase of an aggregate of $3.1 billion of common stock. The 2015 capital plan began in the second quarter of 2015 and continued through the second quarter of 2016.

On June 29, 2016, in connection with the Federal Reserve's non-objection to our 2016 capital plan, BNY Mellon announced a stock purchase program providing for the repurchase of an aggregate of $2.14

billion of common stock and the repurchase of up to an additional $560 million of common stock contingent upon the issuance of $750 million of preferred stock. The 2016 capital plan began in the third quarter of 2016 and continues through the second quarter of 2017.

In conjunction with our 2016 capital plan, in August 2016, BNY Mellon issued $1 billion of noncumulative perpetual preferred stock, $750 million of which satisfied the contingency for the repurchase of up to $560 million of common stock.

Part II - Other Information (continued)

Share repurchases may be executed through repurchase plans designed to comply with Rule 10b5-1 and through derivative, accelerated share repurchase and other structured transactions.

Item 6. Exhibits

Pursuant to the rules and regulations of the SEC, BNY Mellon has filed certain agreements as exhibits to this Quarterly Report on Form 10-Q. These agreements may contain representations and warranties by the parties. These representations and warranties have been made solely for the benefit of the other party or parties to such agreements and (i) may have been qualified by disclosures made to such other party or parties, (ii) were made only as of the date of such agreements or such other date(s) as may be specified in such agreements and are subject to more recent developments, which may not be fully reflected in BNY Mellon's public disclosure, (iii) may reflect the allocation of risk among the parties to such agreements and, (iv) may apply materiality standards different from what may be viewed as material to investors. Accordingly, these representations and warranties may not describe our actual state of affairs at the date hereof and should not be relied upon.

The list of exhibits required to be filed as exhibits to this report appears on page 117 hereof, under "Index to Exhibits," which is incorporated herein by reference.

SIGNATURE

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

THE BANK OF NEW YORK MELLON CORPORATION
(Registrant)

Date: August 8, 2016 By: /s/ Kurtis R. Kurimsky
Kurtis R. Kurimsky
Corporate Controller
(Duly Authorized Officer and
Principal Accounting Officer of
the Registrant)

Index to Exhibits

Exhibit No.	Description	Method of Filing
2.1	Amended and Restated Agreement and Plan of Merger, dated as of Dec. 3, 2006, as amended and restated as of Feb. 23, 2007, and as further amended and restated as of March 30, 2007, between The Bank of New York Company, Inc., Mellon Financial Corporation and The Bank of New York Mellon Corporation (the "Company").	Previously filed as Exhibit 2.1 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.
3.1	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	Amended and Restated By-Laws of The Bank of New York Mellon Corporation, as amended and restated on Oct. 13, 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 Oct. 19, 2015, and incorporated herein by reference.

Index to Exhibits (continued)

Exhibit No.	Description	Method of Filing
4.1	None of the instruments defining the rights of holders of long-term debt of the Parent or any of its subsidiaries represented long-term debt in excess of 10% of the total assets of the Company as of June 30, 2016. The Company hereby agrees to furnish to the Commission, upon request, a copy of any such instrument.	N/A
10.1*	Form of Amended and Restated Indemnification Agreement with Directors of The Bank of New York Mellon Corporation.	Filed herewith.
10.2*	Form of Amended and Restated Indemnification Agreement with Executive Officers of The Bank of New York Mellon Corporation.	Filed herewith.
10.3*	2016 Form of Restricted Share Unit Agreement.	Filed herewith.
10.4*	2016 Form of Performance Share Unit Agreement.	Filed herewith.
12.1	Computation of Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends.	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	XBRL Instance Document.	Filed herewith.
101.SCH	XBRL Taxonomy Extension Schema Document.	Filed herewith.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.	Filed herewith.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.	Filed herewith.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.	Filed herewith.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.	Filed herewith.

*Management contract or compensatory plan, contract or arrangement.