# The Bank of New York Mellon Corporation 

Quarterly Financial Trends
January 19, 2017

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## THE BANK OF NEW YORK MELLON CORPORATION

CONSOLIDATED CORPORATE EARNINGS - 12 Quarter Trend
201
Revenue:
Asset servicing
Issuer services
Clearing services
Treasury services
Total investment services fees
nvestment management and performance fees (a)
oreign exchange \& other trading revenue
Distribution and servicing
Financing-related fees
nvestment and other income (a)(b)
Total fee revenue (a)(b)
Net securities gains
Total fee and other revenue (a)(b)
ncome (loss) from consolidated investment management funds (a) Net interest revenue
Total revenue (a)(b)
Provision for credit losses
Noninterest expense
Amortization of intangible assets
Merger \& integration, litigation and restructuring charges
Total noninterest expens
ncome before taxes (b)
Provision for income taxes (b)
Net income (b)
Net income (loss) attributable to noncontrolling interest (a)(c)

## Preferred stock dividends

Net income applicable to common shareholders of The Bank of New York Mellon Corporation (b)
Earnings per share (b)(d)
Pre-tax operating margin (a)
Adjusted pre-tax operating margin - Non-GAAP (a)(e)
Return on common equity (annualized) - GAAP
Return on tangible common equity (annualized) - Non-GAAP (e)
Percent of non-US total revenue 3rd Qtr

| \$ | 1,009 | \$ | 1,022 | \$ | 1,025 | \$ | 1,019 | \$ | 1,038 | \$ | 1,060 | \$ | 1,057 | \$ | 1,032 | \$ | 1,040 | \$ | 1,069 | \$ | 1,067 | \$ | 1,068 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 229 |  | 231 |  | 315 |  | 193 |  | 232 |  | 234 |  | 313 |  | 199 |  | 244 |  | 234 |  | 337 |  | 211 |
|  | 325 |  | 326 |  | 337 |  | 347 |  | 344 |  | 347 |  | 345 |  | 339 |  | 350 |  | 350 |  | 349 |  | 355 |
|  | 136 |  | 141 |  | 142 |  | 145 |  | 137 |  | 144 |  | 137 |  | 137 |  | 131 |  | 139 |  | 137 |  | 140 |
|  | 1,699 |  | 1,720 |  | 1,819 |  | 1,704 |  | 1,751 |  | 1,785 |  | 1,852 |  | 1,707 |  | 1,765 |  | 1,792 |  | 1,890 |  | 1,774 |
|  | 843 |  | 883 |  | 881 |  | 885 |  | 867 |  | 878 |  | 829 |  | 864 |  | 812 |  | 830 |  | 860 |  | 848 |
|  | 136 |  | 130 |  | 153 |  | 151 |  | 229 |  | 187 |  | 179 |  | 173 |  | 175 |  | 182 |  | 183 |  | 161 |
|  | 43 |  | 43 |  | 44 |  | 43 |  | 41 |  | 39 |  | 41 |  | 41 |  | 39 |  | 43 |  | 43 |  | 41 |
|  | 38 |  | 44 |  | 44 |  | 43 |  | 40 |  | 58 |  | 71 |  | 51 |  | 54 |  | 57 |  | 58 |  | 50 |
|  | 102 |  | 142 |  | 890 |  | 78 |  | 60 |  | 104 |  | 59 |  | 93 |  | 105 |  | 74 |  | 92 |  | 70 |
|  | 2,861 |  | 2,962 |  | 3,831 |  | 2,904 |  | 2,988 |  | 3,051 |  | 3,031 |  | 2,929 |  | 2,950 |  | 2,978 |  | 3,126 |  | 2,944 |
|  | 22 |  | 18 |  | 20 |  | 31 |  | 24 |  | 16 |  | 22 |  | 21 |  | 20 |  | 21 |  | 24 |  | 10 |
|  | 2,883 |  | 2,980 |  | 3,851 |  | 2,935 |  | 3,012 |  | 3,067 |  | 3,053 |  | 2,950 |  | 2,970 |  | 2,999 |  | 3,150 |  | 2,954 |
|  | 36 |  | 46 |  | 39 |  | 42 |  | 52 |  | 40 |  | (22) |  | 16 |  | (6) |  | 10 |  | 17 |  | 5 |
|  | 728 |  | 719 |  | 721 |  | 712 |  | 728 |  | 779 |  | 759 |  | 760 |  | 766 |  | 767 |  | 774 |  | 831 |
|  | 3,647 |  | 3,745 |  | 4,611 |  | 3,689 |  | 3,792 |  | 3,886 |  | 3,790 |  | 3,726 |  | 3,730 |  | 3,776 |  | 3,941 |  | 3,790 |
|  | (18) |  | (12) |  | (19) |  | 1 |  | 2 |  | (6) |  | 1 |  | 163 |  | 10 |  | (9) |  | (19) |  | 7 |
|  | 2,676 |  | 2,749 |  | 2,673 |  | 2,651 |  | 2,637 |  | 2,603 |  | 2,603 |  | 2,610 |  | 2,555 |  | 2,554 |  | 2,564 |  | 2,564 |
|  | 75 |  | 75 |  | 75 |  | 73 |  | 66 |  | 65 |  | 66 |  | 64 |  | 57 |  | 59 |  | 61 |  | 60 |
|  | (12) |  | 122 |  | 220 |  | 800 |  | (3) |  | 59 |  | 11 |  | 18 |  | 17 |  | 7 |  | 18 |  | 7 |
|  | 2,739 |  | 2,946 |  | 2,968 |  | 3,524 |  | 2,700 |  | 2,727 |  | 2,680 |  | 2,692 |  | 2,629 |  | 2,620 |  | 2,643 |  | 2,631 |
|  | 926 |  | 811 |  | 1,662 |  | 164 |  | 1,090 |  | 1,165 |  | 1,109 |  | 871 |  | 1,091 |  | 1,165 |  | 1,317 |  | 1,152 |
|  | 232 |  | 217 |  | 556 |  | (93) |  | 280 |  | 276 |  | 282 |  | 175 |  | 283 |  | 290 |  | 324 |  | 280 |
|  | 694 |  | 594 |  | 1,106 |  | 257 |  | 810 |  | 889 |  | 827 |  | 696 |  | 808 |  | 875 |  | 993 |  | 872 |
|  | (20) |  | (17) |  | (23) |  | (24) |  | (31) |  | (36) |  | 6 |  | (3) |  | 9 |  | (2) |  | (6) |  | (2) |
|  | (13) |  | (23) |  | (13) |  | (24) |  | (13) |  | (23) |  | (13) |  | (56) |  | (13) |  | (48) |  | (13) |  | (48) |

(a) The first quarter of 2015 was restated to reflect the retrospective application of adopting new accounting guidance related to Consolidations (ASU 2015-02).
(b) In the first quarter of 2014, prior periods were restated to reflect the retrospective application of adopting new accounting guidance related to our investments in qualified affordable housing projects (ASU 2014-01).
(c) Primarily attributable to noncontrolling interests related to consolidated investment management funds.
(d) The second quarter of 2014 includes a $\$ 0.14$ charge related to severance and certain investment management funds. The third quarter of 2014 includes a $\$ 0.27$ gain related to the sale of an investment in Wing Hang, $\$ 0.18$ related to a gain on the sale of the One Wall Street building and a $\$ 0.16$ charge related to litigation and restructuring. The fourth quarter of 2014 includes a $\$ 0.13$ benefit primarily related to a tax carryback claim, and a $\$ 0.53$ charge related to litigation and restructuring The second quarter of 2015 includes a $\$ 0.03$ charge related to litigation and restructuring. The fourth quarter of 2015 includes an $\$ 0.11$ charge for the impairment charge related to a court decision regarding Sentinel, litigation and restructuring charges. The first quarter, second quarter and third quarter of 2016 each include a $\$ 0.01$ charge related to litigation and restructuring. The third quarter of 2016 also includes $\$ 0.01$ recovery of the previously impaired Sentinel loan.
(e) Non-GAAP excludes gain (loss) related to an equity investment, net (loss) income attributable to noncontrolling interests of consolidated investment management funds, the gains on the sales of our investment in Wing Hang and the One Wal Street building, M\&I, litigation and restructuring charges (recoveries), a charge (recovery) related to investment management funds, net of incentives, amortization of intangible assets, the impairment charge related to a court decision regarding Sentinel, a recovery of the previously impaired Sentinel loan, and the benefit primarily related to a tax carryback claim, if applicable. See "Supplemental information - Explanation of GAAP and Non-GAAP financial measures" beginning on page 24 of the Quarterly Earnings Release dated January 19, 2017, for the fourth quarter of 2016 (the "Quarterly Earnings Release"), furnished as an exhibit to the Current Report on Form 8-K to which these Quarterly Financial Trends are furnished as an exhibit. Also, see "Appendix - GAAP to Non-GAAP Reconciliations" beginning on page 17 for the reconciliation of Non-GAAP measures.
Note: See pages 4 through 7 for additional details of revenue/expense items impacting consolidated results.

## THE BANK OF NEW YORK MELLON CORPORATION <br> FEE AND OTHER REVENUE - 12 Quarter Trend

| (dollar amounts in millions unless otherwise noted) | 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  |
| Investment services fees: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Asset servicing | \$ | 971 | \$ | 976 | \$ | 988 | \$ | 982 | \$ | 995 | \$ | 1,011 | \$ | 1,019 | \$ | 986 | \$ | 990 | \$ | 1,017 | \$ | 1,016 | \$ | 1,014 |
| Securities lending |  | 38 |  | 46 |  | 37 |  | 37 |  | 43 |  | 49 |  | 38 |  | 46 |  | 50 |  | 52 |  | 51 |  | 54 |
| Issuer services |  | 229 |  | 231 |  | 315 |  | 193 |  | 232 |  | 234 |  | 313 |  | 199 |  | 244 |  | 234 |  | 337 |  | 211 |
| Clearing services |  | 325 |  | 326 |  | 337 |  | 347 |  | 344 |  | 347 |  | 345 |  | 339 |  | 350 |  | 350 |  | 349 |  | 355 |
| Treasury services |  | 136 |  | 141 |  | 142 |  | 145 |  | 137 |  | 144 |  | 137 |  | 137 |  | 131 |  | 139 |  | 137 |  | 140 |
| Total investment services fees |  | 1,699 |  | 1,720 |  | 1,819 |  | 1,704 |  | 1,751 |  | 1,785 |  | 1,852 |  | 1,707 |  | 1,765 |  | 1,792 |  | 1,890 |  | 1,774 |
| Investment management and performance fees (a) |  | 843 |  | 883 |  | 881 |  | 885 |  | 867 |  | 878 |  | 829 |  | 864 |  | 812 |  | 830 |  | 860 |  | 848 |
| Foreign exchange and other trading revenue |  | 136 |  | 130 |  | 153 |  | 151 |  | 229 |  | 187 |  | 179 |  | 173 |  | 175 |  | 182 |  | 183 |  | 161 |
| Distribution and servicing |  | 43 |  | 43 |  | 44 |  | 43 |  | 41 |  | 39 |  | 41 |  | 41 |  | 39 |  | 43 |  | 43 |  | 41 |
| Financing-related fees |  | 38 |  | 44 |  | 44 |  | 43 |  | 40 |  | 58 |  | 71 |  | 51 |  | 54 |  | 57 |  | 58 |  | 50 |
| Investment and other income (a) |  | 102 |  | 142 |  | 890 |  | 78 |  | 60 |  | 104 |  | 59 |  | 93 |  | 105 |  | 74 |  | 92 |  | 70 |
| Total fee revenue (a) |  | 2,861 |  | 2,962 |  | 3,831 |  | 2,904 |  | 2,988 |  | 3,051 |  | 3,031 |  | 2,929 |  | 2,950 |  | 2,978 |  | 3,126 |  | 2,944 |
| Net securities gains |  | 22 |  | 18 |  | 20 |  | 31 |  | 24 |  | 16 |  | 22 |  | 21 |  | 20 |  | 21 |  | 24 |  | 10 |
| Total fee and other revenue (a) | \$ | 2,883 | \$ | 2,980 | \$ | 3,851 | \$ | 2,935 | \$ | 3,012 | \$ | 3,067 | \$ | 3,053 | \$ | 2,950 | \$ | 2,970 | \$ | 2,999 | \$ | 3,150 | \$ | 2,954 |
| Fee revenue as a percentage of total revenue |  | 79 \% |  | 79 \% |  | 83 \% |  | 79 \% |  | 79 \% |  | 79 \% |  | 81 \% |  | 79 \% |  | 80 \% |  | 79 \% |  | 79 \% |  | 78 \% |

(a) The first quarter of 2015 was restated to reflect the retrospective application of adopting new accounting guidance related to Consolidations (ASU 2015-02).

## the bank of new york mellon corporation

Average Balances and Interest Rates - 12 Quarter Trend

| (dollar amounts in millions) | 2014 |  |  |  |  |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | March 31 |  |  | June 30 |  |  | Sept. 30 |  |  | Dec. 31 |  |  | March 31 |  |  | June 30 |  |  |
| Assets <br> Interest-earning assets: | Average balance |  | Average rate | Average balance |  | Average rate | Average balance |  | Average rate | Average balance |  | Average rate | Average balance |  | Average rate | Average balance |  | Average rate |
| Interest-bearing deposits with banks (primarily foreign) | \$ | 41,617 | 0.71\% | \$ | 41,424 | 0.74\% | \$ | 34,882 | 0.66\% | \$ | 24,623 | 0.49\% | \$ | 22,071 | 0.56\% | \$ | 20,235 | 0.56\% |
| Interest-bearing deposits with Federal Reserve \& other central banks |  | 74,399 | 0.25 |  | 85,546 | 0.26 |  | 88,713 | 0.23 |  | 97,440 | 0.22 |  | 81,160 | 0.23 |  | 81,846 | 0.21 |
| Federal funds sold and securities purchased under resale agreements |  | 11,118 | 0.61 |  | 13,387 | 0.58 |  | 15,683 | 0.61 |  | 18,536 | 0.56 |  | 20,416 | 0.59 |  | 23,545 | 0.61 |
| Margin loans |  | 15,840 | 1.07 |  | 17,050 | 1.05 |  | 18,108 | 1.04 |  | 18,897 | 1.01 |  | 20,051 | 1.00 |  | 20,467 | 1.01 |
| Non-margin loans: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Domestic offices |  | 22,002 | 2.31 |  | 22,566 | 2.30 |  | 23,826 | 2.20 |  | 25,103 | 2.20 |  | 25,256 | 2.14 |  | 26,716 | 2.06 |
| Foreign offices |  | 13,805 | 1.26 |  | 13,833 | 1.34 |  | 12,901 | 1.30 |  | 12,844 | 1.21 |  | 12,628 | 1.24 |  | 13,893 | 1.19 |
| Total non-margin loans |  | 35,807 | 1.90 |  | 36,399 | 1.94 |  | 36,727 | 1.88 |  | 37,947 | 1.86 |  | 37,884 | 1.84 |  | 40,609 | 1.77 |
| Securities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. government obligations |  | 17,213 | 1.61 |  | 17,462 | 1.63 |  | 23,067 | 1.38 |  | 24,331 | 1.48 |  | 27,454 | 1.38 |  | 28,331 | 1.42 |
| U.S. government agency obligations |  | 42,710 | 1.87 |  | 43,167 | 1.67 |  | 46,186 | 1.67 |  | 49,106 | 1.70 |  | 52,744 | 1.68 |  | 56,332 | 1.77 |
| Obligations of states and political subdivisions |  | 6,691 | 2.50 |  | 6,473 | 2.58 |  | 5,830 | 2.54 |  | 5,305 | 2.61 |  | 5,213 | 2.64 |  | 5,021 | 2.67 |
| Other securities |  | 33,920 | 1.64 |  | 34,318 | 1.55 |  | 36,972 | 1.37 |  | 38,501 | 1.23 |  | 38,065 | 1.33 |  | 38,957 | 1.24 |
| Trading securities |  | 5,217 | 2.60 |  | 5,532 | 2.19 |  | 5,435 | 2.36 |  | 3,922 | 2.64 |  | 3,046 | 2.46 |  | 3,253 | 2.63 |
| Total securities |  | 105,751 | 1.83 |  | 106,952 | 1.71 |  | 117,490 | 1.59 |  | 121,165 | 1.58 |  | 126,522 | 1.57 |  | 131,894 | 1.59 |
| Total interest-earning assets |  | 284,532 | 1.17 |  | 300,758 | 1.10 |  | 311,603 | 1.05 |  | 318,608 | 1.02 |  | 308,104 | 1.07 |  | 318,596 | 1.08 |
| Allowance for loan losses |  | (210) |  |  | (197) |  |  | (187) |  |  | (186) |  |  | (191) |  |  | (190) |  |
| Cash and due from banks |  | 5,886 |  |  | 5,064 |  |  | 6,225 |  |  | 4,715 |  |  | 6,204 |  |  | 6,785 |  |
| Other assets |  | 53,430 |  |  | 52,182 |  |  | 52,526 |  |  | 52,472 |  |  | 51,966 |  |  | 50,808 |  |
| Assets of consolidated investment funds (a) |  | 11,354 |  |  | 11,405 |  |  | 10,242 |  |  | 9,623 |  |  | 2,328 |  |  | 2,280 |  |
| Total Assets (a) | \$ | 354,992 |  | \$ | 369,212 |  | \$ | 380,409 |  | \$ | 385,232 |  | \$ | 368,411 |  | \$ | 378,279 |  |

## iabilities and total equity

Interest-bearing liabilities:

| Money market rate accounts and demand deposit accounts | \$ | 9,333 | 0.11\% | \$ | 7,583 | 0.13\% | \$ | 7,886 | 0.14\% | \$ | 8,869 | 0.12\% | \$ | 10,021 | 0.12\% | \$ | 10,322 | 0.13\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Savings |  | 1,034 | 0.25 |  | 1,185 | 0.27 |  | 1,258 | 0.28 |  | 1,262 | 0.30 |  | 1,429 | 0.30 |  | 1,326 | 0.27 |
| Other time deposits |  | 41,544 | 0.04 |  | 42,824 | 0.04 |  | 41,248 | 0.04 |  | 41,507 | 0.04 |  | 43,259 | 0.04 |  | 46,807 | 0.03 |
| Foreign offices |  | 101,075 | 0.06 |  | 111,082 | 0.06 |  | 113,841 | 0.05 |  | 111,511 | 0.02 |  | 104,811 | 0.03 |  | 112,261 | - |
| Total interest-bearing deposits |  | 152,986 | 0.06 |  | 162,674 | 0.06 |  | 164,233 | 0.06 |  | 163,149 | 0.03 |  | 159,520 | 0.04 |  | 170,716 | 0.02 |
| Federal funds purchased and securities sold under repurchase agreements |  | 14,505 | (0.13) |  | 19,030 | (0.05) |  | 20,620 | (0.07) |  | 20,285 | (0.05) |  | 13,877 | (0.09) |  | 16,732 | (0.02) |
| Trading Liabilities |  | 1,978 | 1.59 |  | 2,993 | 0.97 |  | 2,806 | 0.84 |  | 1,024 | 1.44 |  | 795 | 1.07 |  | 632 | 1.84 |
| Other borrowed funds |  | 1,137 | 0.47 |  | 3,242 | 0.23 |  | 4,587 | 0.15 |  | 5,270 | 0.25 |  | 2,108 | 0.50 |  | 3,795 | 0.37 |
| Payables to customers and broker-dealers |  | 8,883 | 0.09 |  | 8,916 | 0.09 |  | 9,705 | 0.10 |  | 10,484 | 0.08 |  | 10,932 | 0.07 |  | 11,234 | 0.07 |
| Long-term debt |  | 20,420 | 1.09 |  | 20,361 | 1.16 |  | 20,429 | 1.12 |  | 21,187 | 1.27 |  | 20,199 | 1.21 |  | 20,625 | 0.99 |
| Total interest-bearing liabilities |  | 199,909 | 0.17 |  | 217,216 | 0.17 |  | 222,380 | 0.16 |  | 221,399 | 0.16 |  | 207,431 | 0.15 |  | 223,734 | 0.12 |
| Total noninterest-bearing deposits |  | 81,430 |  |  | 77,820 |  |  | 82,334 |  |  | 85,330 |  |  | 89,592 |  |  | 84,890 |  |
| Other liabilities |  | 24,608 |  |  | 24,854 |  |  | 27,369 |  |  | 30,743 |  |  | 32,341 |  |  | 29,840 |  |
| Liabilities and obligations of consolidated investment funds (a) |  | 10,128 |  |  | 10,180 |  |  | 8,879 |  |  | 8,101 |  |  | 1,004 |  |  | 857 |  |
| Total The Bank of New York Mellon Corporation Shareholders' |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Equity |  | 37,851 |  |  | 38,127 |  |  | 38,313 |  |  | 38,421 |  |  | 37,048 |  |  | 37,829 |  |
| Noncontrolling interest (a) |  | 1,066 |  |  | 1,015 |  |  | 1,134 |  |  | 1,238 |  |  | 995 |  |  | 1,129 |  |
| Total liabilities and shareholders' equity (a) | \$ | 354,992 |  | \$ | 369,212 |  | \$ | 380,409 |  | \$ | 385,232 |  | \$ | 368,411 |  | \$ | 378,279 |  |
| Net interest margin - Taxable equivalent basis |  |  | 1.05\% |  |  | 0.98\% |  |  | 0.94\% |  |  | 0.91\% |  |  | 0.97\% |  |  | 1.00\% |

(a) The first quarter of 2015 was restated to reflect the retrospective application of adopting new accounting guidance related to Consolidations (ASU 2015-02).

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

## THE BANK OF NEW YORK MELLON CORPORATION

Average Balances and Interest Rates - 12 Quarter Trend

| (dollar amounts in millions) | 2015 |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sept. 30 |  |  | Dec. 31 |  |  | March 31 |  |  | June 30 |  |  | Sept. 30 |  |  | Dec. 31 |  |  |
| Assets <br> Interest-earning assets: | Average balance |  | Average rate | Average balance |  | Average rate | Average balance |  | Average <br> rate | Average balance |  | Average rate | Average balance |  | Average rate | Average balance |  | Average rate |
| Interest-bearing deposits with banks (primarily foreign) | \$ | 20,549 | 0.45\% | \$ | 19,301 | 0.45\% | \$ | 14,909 | 0.69\% | \$ | 14,394 | 0.68\% | \$ | 14,066 | 0.74\% | \$ | 15,447 | 0.71\% |
| Interest-bearing deposits with Federal Reserve \& other central banks |  | 84,175 | 0.20 |  | 84,880 | 0.18 |  | 89,092 | 0.28 |  | 97,788 | 0.30 |  | 74,102 | 0.20 |  | 61,672 | 0.18 |
| Federal funds sold and securities purchased under resale agreements |  | 25,366 | 0.61 |  | 24,147 | 0.69 |  | 23,623 | 0.84 |  | 25,813 | 0.87 |  | 26,376 | 0.93 |  | 27,233 | 0.97 |
| Margin loans |  | 19,839 | 1.05 |  | 19,321 | 1.09 |  | 18,907 | 1.34 |  | 18,226 | 1.40 |  | 18,132 | 1.48 |  | 17,547 | 1.61 |
| Non-margin loans: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Domestic offices |  | 27,411 | 2.15 |  | 27,751 | 2.06 |  | 28,506 | 2.21 |  | 29,413 | 2.25 |  | 30,534 | 2.22 |  | 32,730 | 2.23 |
| Foreign offices |  | 14,407 | 1.13 |  | 14,892 | 1.17 |  | 13,783 | 1.39 |  | 12,645 | 1.57 |  | 12,912 | 1.45 |  | 13,370 | 1.58 |
| Total non-margin loans |  | 41,818 | 1.80 |  | 42,643 | 1.75 |  | 42,289 | 1.95 |  | 42,058 | 2.04 |  | 43,446 | 1.99 |  | 46,100 | 2.04 |
| Securities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. government obligations |  | 23,935 | 1.52 |  | 23,955 | 1.53 |  | 24,479 | 1.50 |  | 24,571 | 1.50 |  | 25,279 | 1.49 |  | 25,953 | 1.54 |
| U.S. government agency obligations |  | 55,624 | 1.76 |  | 55,441 | 1.81 |  | 55,966 | 1.79 |  | 56,050 | 1.68 |  | 56,464 | 1.70 |  | 57,049 | 1.82 |
| Obligations of states and political subdivisions |  | 4,465 | 2.81 |  | 4,164 | 2.80 |  | 3,979 | 2.89 |  | 3,778 | 2.90 |  | 3,598 | 2.98 |  | 3,461 | 3.08 |
| Other securities |  | 37,164 | 1.28 |  | 35,972 | 1.25 |  | 34,114 | 1.22 |  | 33,603 | 1.24 |  | 33,064 | 1.23 |  | 31,197 | 1.36 |
| Trading securities |  | 2,737 | 2.74 |  | 2,786 | 2.79 |  | 3,320 | 2.16 |  | 2,152 | 2.45 |  | 2,176 | 2.62 |  | 2,288 | 3.17 |
| Total securities |  | 123,925 | 1.63 |  | 122,318 | 1.65 |  | 121,858 | 1.62 |  | 120,154 | 1.57 |  | 120,581 | 1.58 |  | 119,948 | 1.70 |
| Total interest-earning assets |  | 315,672 | 1.08 |  | 312,610 | 1.08 |  | 310,678 | 1.16 |  | 318,433 | 1.14 |  | 296,703 | 1.19 |  | 287,947 | 1.30 |
| Allowance for loan losses |  | (184) |  |  | (181) |  |  | (157) |  |  | (163) |  |  | (165) |  |  | (148) |  |
| Cash and due from banks |  | 6,140 |  |  | 5,597 |  |  | 3,879 |  |  | 4,141 |  |  | 4,189 |  |  | 5,017 |  |
| Other assets |  | 49,700 |  |  | 48,849 |  |  | 48,845 |  |  | 50,563 |  |  | 49,463 |  |  | 50,322 |  |
| Assets of consolidated investment funds (a) |  | 2,125 |  |  | 1,715 |  |  | 1,309 |  |  | 1,246 |  |  | 1,040 |  |  | 1,004 |  |
| Total Assets (a) | \$ | 373,453 |  | \$ | 368,590 |  | \$ | 364,554 |  | \$ | 374,220 |  | \$ | 351,230 |  | \$ | 344,142 |  |
| Liabilities and total equity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest-bearing liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Money market rate accounts and demand deposit accounts | \$ | 10,623 | 0.13\% | \$ | 9,292 | 0.12\% | \$ | 8,249 | 0.11\% | \$ | 9,070 | 0.13\% | \$ | 10,027 | 0.14\% | \$ | 13,821 | 0.08\% |
| Savings |  | 1,279 | 0.27 |  | 1,217 | 0.27 |  | 1,235 | 0.27 |  | 1,175 | 0.39 |  | 1,201 | 0.41 |  | 1,152 | 0.42 |
| Other time deposits |  | 43,529 | 0.04 |  | 43,061 | 0.03 |  | 42,678 | 0.04 |  | 46,629 | 0.06 |  | 45,186 | 0.07 |  | 37,766 | 0.07 |
| Foreign offices |  | 114,322 | - |  | 106,764 | - |  | 109,855 | 0.03 |  | 108,248 | 0.01 |  | 98,695 | (0.08) |  | 92,942 | (0.07) |
| Total interest-bearing deposits |  | 169,753 | 0.02 |  | 160,334 | 0.01 |  | 162,017 | 0.04 |  | 165,122 | 0.03 |  | 155,109 | (0.02) |  | 145,681 | (0.01) |
| Federal funds purchased and securities sold under repurchase agreements |  | 14,796 | (0.04) |  | 20,349 | (0.03) |  | 18,689 | 0.20 |  | 18,204 | 0.28 |  | 9,585 | 0.24 |  | 11,567 | 0.30 |
| Trading Liabilities |  | 475 | 1.42 |  | 638 | 1.34 |  | 551 | 1.43 |  | 662 | 0.66 |  | 735 | 1.11 |  | 892 | 0.54 |
| Other borrowed funds |  | 2,823 | 0.35 |  | 733 | 1.13 |  | 781 | 0.96 |  | 4,628 | 0.48 |  | 2,047 | 0.53 |  | 1,286 | 0.77 |
| Payables to customers and broker-dealers |  | 11,504 | 0.06 |  | 12,904 | 0.06 |  | 16,801 | 0.09 |  | 16,935 | 0.05 |  | 16,873 | 0.07 |  | 17,091 | 0.07 |
| Long-term debt |  | 21,070 | 1.21 |  | 21,418 | 1.19 |  | 21,556 | 1.57 |  | 22,838 | 1.54 |  | 23,930 | 1.54 |  | 24,986 | 1.36 |
| Total interest-bearing liabilities |  | 220,421 | 0.14 |  | 216,376 | 0.14 |  | 220,395 | 0.21 |  | 228,389 | 0.21 |  | 208,279 | 0.19 |  | 201,503 | 0.19 |
| Total noninterest-bearing deposits |  | 85,046 |  |  | 85,878 |  |  | 82,944 |  |  | 84,033 |  |  | 81,619 |  |  | 82,267 |  |
| Other liabilities |  | 27,880 |  |  | 26,530 |  |  | 22,300 |  |  | 22,345 |  |  | 21,343 |  |  | 20,760 |  |
| Liabilities and obligations of consolidated investment funds (a) |  | 841 |  |  | 629 |  |  | 259 |  |  | 253 |  |  | 238 |  |  | 229 |  |
| Total The Bank of New York Mellon Corporation Shareholders' |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Equity |  | 38,140 |  |  | 38,216 |  |  | 37,804 |  |  | 38,379 |  |  | 39,051 |  |  | 38,713 |  |
| Noncontrolling interest (a) |  | 1,125 |  |  | 961 |  |  | 852 |  |  | 821 |  |  | 700 |  |  | 670 |  |
| Total liabilities and shareholders' equity (a) | \$ | 373,453 |  | \$ | 368,590 |  | \$ | 364,554 |  | \$ | 374,220 |  | \$ | 351,230 |  | \$ | 344,142 |  |
| Net interest margin - Taxable equivalent basis |  |  | 0.98\% |  |  | 0.99\% |  |  | 1.01\% |  |  | 0.98\% |  |  | 1.06\% |  |  | 1.17\% |

(a) The first quarter of 2015 was restated to reflect the retrospective application of adopting new accounting guidance related to Consolidations (ASU 2015-02).

[^0]
## THE BANK OF NEW YORK MELLON CORPORATION

## NONINTEREST EXPENSE - 12 Quarter Trend

| (dollar amounts in millions) | 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  |
| Staff | \$ | 1,511 | \$ | 1,439 | \$ | 1,477 | \$ | 1,418 | \$ | 1,485 | \$ | 1,434 | \$ | 1,437 | \$ | 1,481 | \$ | 1,459 | \$ | 1,412 | \$ | 1,467 | \$ | 1,395 |
| Professional, legal and other purchased services |  | 312 |  | 314 |  | 323 |  | 390 |  | 302 |  | 299 |  | 301 |  | 328 |  | 278 |  | 290 |  | 292 |  | 325 |
| Software and equipment |  | 237 |  | 236 |  | 234 |  | 235 |  | 228 |  | 228 |  | 226 |  | 225 |  | 219 |  | 223 |  | 215 |  | 237 |
| Net occupancy |  | 154 |  | 152 |  | 154 |  | 150 |  | 151 |  | 149 |  | 152 |  | 148 |  | 142 |  | 152 |  | 143 |  | 153 |
| Distribution and servicing |  | 107 |  | 112 |  | 107 |  | 102 |  | 98 |  | 96 |  | 95 |  | 92 |  | 100 |  | 102 |  | 105 |  | 98 |
| Business development |  | 64 |  | 68 |  | 61 |  | 75 |  | 61 |  | 72 |  | 59 |  | 75 |  | 57 |  | 65 |  | 52 |  | 71 |
| Sub-custodian |  | 68 |  | 81 |  | 67 |  | 70 |  | 70 |  | 75 |  | 65 |  | 60 |  | 59 |  | 70 |  | 59 |  | 57 |
| Other |  | 223 |  | 347 |  | 250 |  | 211 |  | 242 |  | 250 |  | 268 |  | 201 |  | 241 |  | 240 |  | 231 |  | 228 |
| Amortization of intangible assets |  | 75 |  | 75 |  | 75 |  | 73 |  | 66 |  | 65 |  | 66 |  | 64 |  | 57 |  | 59 |  | 61 |  | 60 |
| Merger \& integration, litigation and restructuring charges |  | (12) |  | 122 |  | 220 |  | 800 |  | (3) |  | 59 |  | 11 |  | 18 |  | 17 |  | 7 |  | 18 |  | 7 |
| Total noninterest expense | \$ | 2,739 | \$ | 2,946 | \$ | 2,968 | \$ | 3,524 | \$ | 2,700 | \$ | 2,727 | \$ | 2,680 | \$ | 2,692 | \$ | 2,629 | \$ | 2,620 | \$ | 2,643 | \$ | 2,631 |

## Memo:

Total noninterest expense excluding amortization of intangible
assets and M\&I, litigation and restructuring charges
(recoveries), and the charge (recovery) related to investment management funds, net of incentives - Non-GAAP (a)

Full-time employees at period-end
(a) See "Appendix - GAAP to Non-GAAP Reconciliations" beginning on page 17 for the reconciliation of Non-GAAP measures

| (dollar amounts in billions unless otherwise noted) | 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  |
| Assets under management at period end: (a) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Institutional | \$ | 1,092 | \$ | 1,084 | \$ | 1,106 | \$ | 1,164 | \$ | 1,188 | \$ | 1,163 | \$ | 1,129 | \$ | 1,127 | \$ | 1,155 | \$ | 1,182 | \$ | 1,234 | \$ | 1,182 |
| Mutual Funds |  | 415 |  | 440 |  | 430 |  | 438 |  | 445 |  | 454 |  | 419 |  | 420 |  | 405 |  | 398 |  | 396 |  | 381 |
| Private Client |  | 85 |  | 85 |  | 84 |  | 84 |  | 84 |  | 83 |  | 77 |  | 78 |  | 79 |  | 84 |  | 85 |  | 85 |
| Assets under management | \$ | 1,592 | \$ | 1,609 | \$ | 1,620 | \$ | 1,686 | \$ | 1,717 | \$ | 1,700 | \$ | 1,625 | \$ | 1,625 | \$ | 1,639 | \$ | 1,664 | \$ | 1,715 | \$ | 1,648 (b) |
| AUM at period end, by product type: (a) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Equity |  | 17 \% |  | 17 \% |  | 16 \% |  | 15 \% |  | 15 \% |  | 15 \% |  | 14 \% |  | 14 \% |  | 14 \% |  | 14 \% |  | 13 \% |  | 14 \% |
| Fixed income |  | 13 \% |  | 13 \% |  | 13 \% |  | 12 \% |  | 12 \% |  | 13 \% |  | 13 \% |  | 13 \% |  | 13 \% |  | 13 \% |  | 14 \% |  | 13 \% |
| Index |  | 21 \% |  | 22 \% |  | 21 \% |  | 21 \% |  | 22 \% |  | 21 \% |  | 20 \% |  | 20 \% |  | 19 \% |  | 18 \% |  | 18 \% |  | 19 \% |
| Liability-driven investments (c) |  | 27 \% |  | 27 \% |  | 28 \% |  | $30 \%$ |  | $30 \%$ |  | 30 \% |  | 32 \% |  | 32 \% |  | 33 \% |  | 34 \% |  | 35 \% |  | 34 \% |
| Alternative investments |  | 4 \% |  | 4 \% |  | 4 \% |  | 4 \% |  | 4 \% |  | 4 \% |  | 4 \% |  | 4 \% |  | 4 \% |  | 4 \% |  | 4 \% |  | 4 \% |
| Cash |  | 18 \% |  | 17 \% |  | 18 \% |  | 18 \% |  | 17 \% |  | 17 \% |  | 17 \% |  | 17 \% |  | 17 \% |  | 17 \% |  | 16 \% |  | 16 \% |
| Total AUM |  | $100 \%$ |  | $100 \%$ |  | 100 \% |  | 100 \% |  | 100 \% |  | 100 \% |  | $100 \%$ |  | 100 \% |  | 100 \% |  | $100 \%$ |  | 100 \% |  | $100 \%$ (b) |
| Assets under custody and/or administration at period end (in trillions) (d) | \$ | 27.9 | \$ | 28.5 | \$ | 28.3 | \$ | 28.5 | \$ | 28.5 | \$ | 28.6 | \$ | 28.5 | \$ | 28.9 | \$ | 29.1 | \$ | 29.5 | \$ | 30.5 | \$ | 29.9 (b) |
| Market value of securities on loan at period end (e) | \$ | 264 | \$ | 280 | \$ | 282 | \$ | 289 | \$ | 291 | \$ | 283 | \$ | 288 | \$ | 277 | \$ | 300 | \$ | 278 | \$ | 288 | \$ | 296 |
| Key Market Metrics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S\&P 500 Index (f) |  | 1872 |  | 1960 |  | 1972 |  | 2059 |  | 2068 |  | 2063 |  | 1920 |  | 2044 |  | 2060 |  | 2099 |  | 2168 |  | 2239 |
| S\&P 500 Index - daily average |  | 1835 |  | 1900 |  | 1976 |  | 2009 |  | 2064 |  | 2102 |  | 2027 |  | 2052 |  | 1951 |  | 2075 |  | 2162 |  | 2185 |
| FTSE 100 Index (f) |  | 6598 |  | 6744 |  | 6623 |  | 6566 |  | 6773 |  | 6521 |  | 6062 |  | 6242 |  | 6175 |  | 6504 |  | 6899 |  | 7143 |
| FTSE 100 Index-daily average |  | 6680 |  | 6764 |  | 6756 |  | 6526 |  | 6793 |  | 6920 |  | 6399 |  | 6271 |  | 5988 |  | 6204 |  | 6765 |  | 6923 |
| MSCI EAFE (f) |  | 1916 |  | 1972 |  | 1846 |  | 1775 |  | 1849 |  | 1842 |  | 1644 |  | 1716 |  | 1652 |  | 1608 |  | 1702 |  | 1684 |
| MSCI EAFE-daily average |  | 1893 |  | 1942 |  | 1922 |  | 1796 |  | 1818 |  | 1905 |  | 1785 |  | 1732 |  | 1593 |  | 1648 |  | 1677 |  | 1660 |
| Barclays Capital Global Aggregate Bond ${ }^{\text {SM }}$ Index $(f)(g)$ |  | 465 |  | 476 |  | 461 |  | 457 |  | 448 |  | 442 |  | 446 |  | 442 |  | 468 |  | 482 |  | 486 |  | 451 |
| NYSE \& NASDAQ Share Volume (in billions) |  | 196 |  | 187 |  | 173 |  | 198 |  | 187 |  | 185 |  | 206 |  | 198 |  | 218 |  | 203 |  | 186 |  | 189 |
| JP Morgan G7 Volatility Index - daily average ( $h$ ) |  | 7.80 |  | 6.22 |  | 6.21 |  | 8.54 |  | 10.40 |  | 10.06 |  | 9.93 |  | 9.49 |  | 10.60 |  | 11.12 |  | 10.19 |  | 10.24 |
| Average Fed Funds effective rate |  | 0.07 \% |  | 0.09 \% |  | 0.09 \% |  | 0.10 \% |  | 0.11 \% |  | 0.13 \% |  | 0.13 \% |  | 0.16 \% |  | 0.36 \% |  | 0.37 \% |  | 0.39 \% |  | 0.45 \% |
| Foreign exchange rates vs. U.S. dollar: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| British pound (f) | \$ | 1.67 | \$ | 1.71 | \$ | 1.62 | \$ | 1.56 | \$ | 1.48 | \$ | 1.57 | \$ | 1.52 | \$ | 1.48 | \$ | 1.44 | \$ | 1.34 | \$ | 1.30 | \$ | 1.23 |
| British pound - average rate |  | 1.66 |  | 1.68 |  | 1.67 |  | 1.58 |  | 1.51 |  | 1.53 |  | 1.55 |  | 1.52 |  | 1.43 |  | 1.43 |  | 1.31 |  | 1.24 |
| Euro (f) |  | 1.38 |  | 1.37 |  | 1.26 |  | 1.22 |  | 1.07 |  | 1.11 |  | 1.12 |  | 1.09 |  | 1.14 |  | 1.11 |  | 1.12 |  | 1.05 |
| Euro - average rate |  | 1.37 |  | 1.37 |  | 1.33 |  | 1.25 |  | 1.13 |  | 1.11 |  | 1.11 |  | 1.10 |  | 1.10 |  | 1.13 |  | 1.12 |  | 1.08 |

 from the Investment Management business to the Other segment.
(b) Preliminary
(c) Includes currency overlay assets under management
 Dec. 31, 2014, March 31, 2015, and June 30, 2015, $\$ 1.0$ trillion at Sept. 30, 2015 and Dec. 31, 2015, and $\$ 1.1$ trillion at March 31, 2016 and June 30, 2016 , and $\$ 1.2$ trillion at Sept. 30 , 2016 and Dec. 31, 2016.

 $\$ 64$ billion at Sept. 30, 2016 and $\$ 63$ billion at Dec. 31, 2016
(f) Period end.
(g) Unhedged in U.S. dollar terms.
(h) The JP Morgan G7 Volatility Index is based on the implied volatility in 3-month currency options.

## THE BANK OF NEW YORK MELLON CORPORATION

## ASSETS UNDER MANAGEMENT NET FLOWS - 12 Quarter Trend

| (dollar amounts in billions) | 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  |
| Assets under management at beginning of period (a) | \$ | 1,557 | \$ | 1,592 | \$ | 1,609 | \$ | 1,620 | \$ | 1,686 | \$ | 1,717 | \$ | 1,700 | \$ | 1,625 | \$ | 1,625 | \$ | 1,639 | \$ | 1,664 | \$ | 1,715 |
| Net inflows (outflows): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Long-term: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Equity |  | (1) |  | (5) |  | (2) |  | (5) |  | (5) |  | (13) |  | (4) |  | (9) |  | (3) |  | (2) |  | (3) |  | (4) |
| Fixed income |  | - |  | - |  | - |  | 4 |  | 3 |  | (2) |  | (3) |  | 1 |  | - |  | (2) |  | - |  | (1) |
| Liability-driven investments (b) |  | 20 |  | (17) |  | 19 |  | 24 |  | 8 |  | 5 |  | 11 |  | 11 |  | 14 |  | 15 |  | 4 |  | (7) |
| Alternative investments |  | 2 |  | 2 |  | - |  | 2 |  | 1 |  | 3 |  | 1 |  | 2 |  | 1 |  | 1 |  | 2 |  | 2 |
| Total long-term active inflows (outflows) |  | 21 |  | (20) |  | 17 |  | 25 |  | 7 |  | (7) |  | 5 |  | 5 |  | 12 |  | 12 |  | 3 |  | (10) |
| Index |  | - |  | 7 |  | (3) |  | 1 |  | 8 |  | (9) |  | (10) |  | (16) |  | (11) |  | (17) |  | (2) |  | (1) |
| Total long-term inflows (outflows) |  | 21 |  | (13) |  | 14 |  | 26 |  | 15 |  | (16) |  | (5) |  | (11) |  | 1 |  | (5) |  | 1 |  | (11) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash |  | (7) |  | (17) |  | 18 |  | 6 |  | 1 |  | (11) |  | (10) |  | 2 |  | (9) |  | 4 |  | (1) |  | (3) |
| Total net inflows (outflows) |  | 14 |  | (30) |  | 32 |  | 32 |  | 16 |  | (27) |  | (15) |  | (9) |  | (8) |  | (1) |  | - |  | (14) |
| Net market impact / Other |  | 17 |  | 31 |  | 15 |  | 59 |  | 32 |  | (29) |  | (35) |  | 24 |  | 41 |  | 71 |  | 80 |  | (11) |
| Net currency impact |  | 4 |  | 16 |  | (36) |  | (25) |  | (35) |  | 39 |  | (25) |  | (15) |  | (19) |  | (47) |  | (29) |  | (42) |
| Acquisitions |  | - |  | - |  | - |  | - |  | 18 |  | - |  | - |  | - |  | - |  | 2 |  | - |  | - |
| Assets under management at period end (a) | \$ | 1,592 | \$ | 1,609 | \$ | 1,620 | \$ | 1,686 | \$ | 1,717 | \$ | 1,700 | \$ | 1,625 | \$ | 1,625 | \$ | 1,639 | \$ | 1,664 | \$ | 1,715 | \$ | 1,648 |

 Meriten from the Investment Management business to the Other segment.
(b) Includes currency overlay assets under management.
(c) Preliminary.

## THE BANK OF NEW YORK MELLON CORPORATION

INVESTMENT MANAGEMENT BUSINESS - 12 Quarter Trend

|  | 2014 |  |  |  | 2015 |  |  |  | 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollar amounts in millions unless otherwise noted) | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | 1st Qtr | 2nd Qtr |  | 4th Qtr | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr |

Revenue:
Investment management fees
Mutual funds
Institutional clients
Wealth management
otal investment management fees (a)
Performance fees
Investment management and performance fees
Distribution and servicing
Other (a)
Total fee and other revenue (a)
Net interest revenue
Total revenue
Provision for credit losses


Total noninterest expe

Income before taxes (ex. intangible amortization and the charge (recovery) elated to investment management funds, net of incentives) - Non-GAAP
\$ 272
Average assets
Assets under management at period end (in billions) (b)
Pre-tax operating margin
Adjusted pre-tax operating margin - Non-GAAP (d)
Noninterest expense (ex. intangible amortization and the charge (recovery) related to investment management funds, net of incentives) Charge (recovery) related to investment management funds, net of incentives
Amortization of intangible assets
otal noninterest expense

| \$ | 299 | \$ | 311 | \$ | 315 | \$ | 306 | \$ | 301 | \$ | 312 | \$ | 301 | \$ | 294 | \$ | 300 | \$ | 304 | \$ | 309 | \$ | $\begin{aligned} & 297 \\ & 340 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 359 |  | 373 |  | 370 |  | 364 |  | 365 |  | 363 |  | 347 |  | 350 |  | 334 |  | 344 |  | 362 |  |  |
|  | 153 |  | 156 |  | 158 |  | 157 |  | 159 |  | 160 |  | 156 |  | 155 |  | 152 |  | 160 |  | 166 |  | 164 |
|  | 811 |  | 840 |  | 843 |  | 827 |  | 825 |  | 835 |  | 804 |  | 799 |  | 786 |  | 808 |  | 837 |  | 801 |
|  | 20 |  | 29 |  | 22 |  | 40 |  | 15 |  | 20 |  | 7 |  | 55 |  | 11 |  | 9 |  | 8 |  | 32 |
|  | 831 |  | 869 |  | 865 |  | 867 |  | 840 |  | 855 |  | 811 |  | 854 |  | 797 |  | 817 |  | 845 |  | 833 |
|  | 39 |  | 39 |  | 40 |  | 39 |  | 38 |  | 38 |  | 37 |  | 39 |  | 46 |  | 49 |  | 49 |  | 48 |
|  | 12 |  | 43 |  | 11 |  | 2 |  | 41 |  | 17 |  | (5) |  | 22 |  | (31) |  | (10) |  | (18) |  | (1) |
|  | 882 |  | 951 |  | 916 |  | 908 |  | 919 |  | 910 |  | 843 |  | 915 |  | 812 |  | 856 |  | 876 |  | 880 |
|  | 69 |  | 67 |  | 69 |  | 69 |  | 75 |  | 77 |  | 83 |  | 84 |  | 83 |  | 82 |  | 82 |  | 80 |
|  | 951 |  | 1,018 |  | 985 |  | 977 |  | 994 |  | 987 |  | 926 |  | 999 |  | 895 |  | 938 |  | 958 |  | 960 |
|  | (1) |  | 1 |  | - |  | - |  | (1) |  | 3 |  | 1 |  | (4) |  | (1) |  | 1 |  | - |  | 6 |
|  | 680 |  | 711 |  | 712 |  | 714 |  | 708 |  | 700 |  | 665 |  | 689 |  | 660 |  | 684 |  | 680 |  | 672 |
|  | (5) |  | 109 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
|  | 30 |  | 30 |  | 30 |  | 28 |  | 24 |  | 25 |  | 24 |  | 24 |  | 19 |  | 19 |  | 22 |  | 22 |
|  | 705 |  | 850 |  | 742 |  | 742 |  | 732 |  | 725 |  | 689 |  | 713 |  | 679 |  | 703 |  | 702 |  | 694 |
|  | 247 |  | 167 |  | 243 |  | 235 |  | 263 |  | 259 |  | 236 |  | 290 |  | 217 |  | 234 |  | 256 |  | 260 |
| \$ | 272 | \$ | 306 | \$ | 273 | \$ | 263 | \$ | 287 | \$ | 284 | \$ | 260 | \$ | 314 | \$ | 236 | \$ | 253 | \$ | 278 | \$ | 282 |
| \$ | 39,333 | \$ | 37,619 | \$ | 36,542 | \$ | 37,163 | \$ | 31,361 | \$ | 30,414 | \$ | 30,960 | \$ | 30,982 | \$ | 29,971 | \$ | 30,229 | \$ | 30,392 | \$ | 30,532 |
| \$ | 1,592 | \$ | 1,609 | \$ | 1,620 | \$ | 1,686 | \$ | 1,717 | \$ | 1,700 | \$ | 1,625 | \$ | 1,625 | \$ | 1,639 | \$ | 1,664 | \$ | 1,715 | \$ | 1,648 (c) |
|  | 26 \% |  | 16 \% |  | 25 \% |  | 24 \% |  | 26 \% |  | 26 \% |  | 25 \% |  | 29 \% |  | 24 \% |  | 25 \% |  | 27 \% |  | 27 \% |
|  | 32 \% |  | 34 \% |  | 31 \% |  | $30 \%$ |  | 32 \% |  | 32 \% |  | $31 \%$ |  | 34 \% |  | $30 \%$ |  | $30 \%$ |  | 33 \% |  | 33 \% |

 ncome.
 usiness to the Other segment
(c) Preliminary.
 measures" beginning on page 24 of the Quarterly Earnings Release for the reconciliation of Non-GAAP measures. Also, see "Appendix - GAAP to Non-GAAP Reconciliations" beginning on page 17 for the reconciliation of Non-GAAP measures.

## THE BANK OF NEW YORK MELLON CORPORATION

## INVESTMENT SERVICES BUSINESS - 12 Quarter Trend

|  | 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollar amounts in millions unless otherwise noted) | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  |
| Revenue: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment services fees: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Asset servicing - ex. securities lending | \$ | 955 | \$ | 958 | \$ | 971 | \$ | 964 | \$ | 979 | \$ | 995 | \$ | 1,001 | \$ | 970 | \$ | 974 | \$ | 1,001 | \$ | 997 | \$ | 999 |
| Securities lending revenue |  | 33 |  | 39 |  | 31 |  | 32 |  | 38 |  | 43 |  | 33 |  | 39 |  | 42 |  | 42 |  | 42 |  | 44 |
| Issuer services |  | 228 |  | 231 |  | 314 |  | 193 |  | 231 |  | 234 |  | 312 |  | 199 |  | 244 |  | 233 |  | 336 |  | 211 |
| Clearing services |  | 323 |  | 324 |  | 336 |  | 346 |  | 342 |  | 346 |  | 345 |  | 337 |  | 348 |  | 350 |  | 347 |  | 354 |
| Treasury services |  | 134 |  | 140 |  | 139 |  | 142 |  | 135 |  | 141 |  | 135 |  | 135 |  | 129 |  | 137 |  | 136 |  | 139 |
| Total investment services fees |  | 1,673 |  | 1,692 |  | 1,791 |  | 1,677 |  | 1,725 |  | 1,759 |  | 1,826 |  | 1,680 |  | 1,737 |  | 1,763 |  | 1,858 |  | 1,747 |
| Foreign exchange and other trading revenue |  | 164 |  | 148 |  | 164 |  | 167 |  | 212 |  | 181 |  | 179 |  | 150 |  | 168 |  | 161 |  | 177 |  | 157 |
| Other (a) |  | 86 |  | 117 |  | 90 |  | 113 |  | 92 |  | 117 |  | 129 |  | 127 |  | 125 |  | 130 |  | 148 |  | 128 |
| Total fee and other revenue |  | 1,923 |  | 1,957 |  | 2,045 |  | 1,957 |  | 2,029 |  | 2,057 |  | 2,134 |  | 1,957 |  | 2,030 |  | 2,054 |  | 2,183 |  | 2,032 |
| Net interest revenue |  | 625 |  | 630 |  | 613 |  | 600 |  | 629 |  | 667 |  | 662 |  | 664 |  | 679 |  | 690 |  | 715 |  | 713 |
| Total revenue |  | 2,548 |  | 2,587 |  | 2,658 |  | 2,557 |  | 2,658 |  | 2,724 |  | 2,796 |  | 2,621 |  | 2,709 |  | 2,744 |  | 2,898 |  | 2,745 |
| Provision for credit losses |  | (7) |  | (8) |  | (16) |  | 10 |  | 7 |  | 6 |  | 7 |  | 8 |  | 14 |  | (7) |  |  |  | - |
| Noninterest expense (ex. intangible amortization) |  | 1,815 |  | 1,856 |  | 1,863 |  | 2,532 |  | 1,822 |  | 1,874 |  | 1,853 |  | 1,791 |  | 1,770 |  | 1,819 |  | 1,812 |  | 1,786 |
| Amortization of intangible assets |  | 44 |  | 44 |  | 44 |  | 43 |  | 41 |  | 40 |  | 41 |  | 40 |  | 38 |  | 40 |  | 39 |  | 38 |
| Total noninterest expense |  | 1,859 |  | 1,900 |  | 1,907 |  | 2,575 |  | 1,863 |  | 1,914 |  | 1,894 |  | 1,831 |  | 1,808 |  | 1,859 |  | 1,851 |  | 1,824 |
| Income before taxes | \$ | 696 | \$ | 695 | \$ | 767 | \$ | (28) | \$ | 788 | \$ | 804 | \$ | 895 | \$ | 782 | \$ | 887 | \$ | 892 | \$ | 1,046 | \$ | 921 |
| Income before taxes (ex. intangible amortization) - Non-GAAP | \$ | 740 | \$ | 739 | \$ | 811 | \$ | 15 | \$ | 829 | \$ | 844 | \$ | 936 | \$ | 822 | \$ | 925 | \$ | 932 | \$ | 1,085 | \$ | 959 |
| Average loans |  | 38,077 |  | 39,737 |  | 40,344 |  | 42,342 |  | 45,071 |  | 45,822 |  | 46,222 |  | 45,844 |  | 45,004 |  | 43,786 |  | 44,329 |  | 45,832 |
| Average assets |  | 264,875 |  | 269,636 |  | 272,331 |  | 278,902 |  | 287,321 |  | 292,264 |  | 285,195 |  | 281,766 |  | 273,289 |  | 277,225 |  | 275,714 |  | 269,036 |
| Average deposits |  | 220,393 |  | 225,316 |  | 226,576 |  | 229,613 |  | 235,524 |  | 238,404 |  | 232,250 |  | 229,241 |  | 215,707 |  | 221,998 |  | 220,316 |  | 213,531 |
| Pre-tax operating margin |  | 27 \% |  | 27 \% |  | $29 \%$ |  | (1)\% |  | $30 \%$ |  | $30 \%$ |  | 32 \% |  | $30 \%$ |  | $33 \%$ |  | $33 \%$ |  | $36 \%$ |  | $34 \%$ |
| Adjusted pre-tax operating margin (ex. provision for credit losses and intangible amortization) - Non-GAAP |  | 29 \% |  | 28 \% |  | $30 \%$ |  | $1 \%$ |  | $31 \%$ |  | $31 \%$ |  | $34 \%$ |  | 32 \% |  | $35 \%$ |  | $34 \%$ |  | $37 \%$ |  | $35 \%$ |
| Investment services fees as a percentage of noninterest expens (ex. intangible amortization) (b) |  | 92 \% |  | $91 \%$ |  | $96 \%$ |  | 66 \% |  | $95 \%$ |  | $94 \%$ |  | $99 \%$ |  | $94 \%$ |  | $98 \%$ |  | $97 \%$ |  | $103 \%$ |  | $98 \%$ |
| Assets under custody and/or administration at period end (in trillions) (c) |  | 27.9 |  | 28.5 |  | 28.3 |  | 28.5 |  | 28.5 |  | 28.6 |  | 28.5 |  | 28.9 |  | 29.1 |  | 29.5 |  | 30.5 |  | 29.9 |
| Market value of securities on loan at period end (in billions) (e) | \$ | 264 | \$ | 280 | \$ | 282 | \$ | 289 | \$ | 291 | \$ | 283 | \$ | 288 | \$ | 277 | \$ | 300 | \$ | 278 | \$ | 288 | \$ | 296 |

(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. intangible amortization) was lower in 4Q14 primarily reflecting litigation expense.
 2015, \$1.0 trillion at Sept. 30, 2015 and Dec. 31, 2015, \$1.1 trillion at March 31, 2016 and June 30, 2016, and $\$ 1.2$ trillion at Sept. 30,2016 and Dec. 31, 2016 (d) Preliminary
 30,2014 and Dec. 31, 2014, $\$ 69$ billion at March 31, 2015, $\$ 68$ billion at June 30, 2015, $\$ 61$ billion at Sept. 30, 2015, $\$ 55$ billion at Dec. 31, 2015, $\$ 56$ billion at March 31, 2016 and at June 30 , $2016, \$ 64$ billion at Sept. 30,2016 and $\$ 63$ billion at Dec. 31,2016

## THE BANK OF NEW YORK MELLON CORPORATION

## OTHER SEGMENT- 12 Quarter Trend

| (dollar amounts in millions) | 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  |
| Revenue: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fee and other revenue | \$ | 94 | \$ | 101 | \$ | 906 | \$ | 88 | \$ | 85 | \$ | 103 | \$ | 59 | \$ | 89 | \$ | 129 | \$ | 95 | \$ | 100 | \$ | 42 |
| Net interest revenue (expense) |  | 34 |  | 22 |  | 39 |  | 43 |  | 24 |  | 35 |  | 14 |  | 12 |  | 4 |  | (5) |  | (23) |  | 38 |
| Total revenue |  | 128 |  | 123 |  | 945 |  | 131 |  | 109 |  | 138 |  | 73 |  | 101 |  | 133 |  | 90 |  | 77 |  | 80 |
| Provision for credit losses |  | (10) |  | (5) |  | (3) |  | (9) |  | (4) |  | (15) |  | (7) |  | 159 |  | (3) |  | (3) |  | (20) |  | 1 |
| Noninterest expense (ex. amortization of intangible assets, M\&I and restructuring (recoveries) charges) |  | 174 |  | 75 |  | 261 |  | 205 |  | 108 |  | 79 |  | 97 |  | 150 |  | 141 |  | 53 |  | 88 |  | 108 |
| Amortization of intangible assets |  | 1 |  | 1 |  | 1 |  | 2 |  | 1 |  | - |  | 1 |  | - |  | - |  | - |  | - |  | - |
| M\&l and restructuring (recoveries) charges |  | - |  | 120 |  | 57 |  | - |  | (4) |  | 8 |  | (2) |  | (4) |  | (1) |  | 3 |  | - |  | 2 |
| Total noninterest expense |  | 175 |  | 196 |  | 319 |  | 207 |  | 105 |  | 87 |  | 96 |  | 146 |  | 140 |  | 56 |  | 88 |  | 110 |
| Income (loss) before taxes | \$ | (37) | \$ | (68) | \$ | 629 | \$ | (67) | \$ | 8 | \$ | 66 | \$ | (16) | \$ | (204) | \$ | (4) | \$ | 37 | \$ | 9 | \$ | (31) |
| Income (loss) before taxes (ex. amortization of intangible assets, M\&I and restructuring (recoveries) charges) - NonGAAP | \$ | (36) | \$ | 53 | \$ | 687 | \$ | (65) | \$ | 5 | \$ | 74 | \$ | (17) | \$ | (208) | \$ | (5) | \$ | 40 | \$ | 9 | \$ | (29) |
| Average loans and leases | \$ | 3,495 | \$ | 3,340 | \$ | 3,719 | \$ | 3,378 | \$ | 1,230 | \$ | 2,956 | \$ | 2,656 | \$ | 2,673 | \$ | 1,917 | \$ | 1,703 | \$ | 1,941 | \$ | 2,142 |
| Average assets | \$ | 50,784 | \$ | 61,957 | \$ | 71,536 | \$ | 69,167 | \$ | 49,729 | \$ | 55,601 | \$ | 57,298 | \$ | 55,842 | \$ | 61,294 | \$ | 66,766 | \$ | 45,124 | \$ | 44,577 |


| businesses <br> (dollar amounts in millions unless otherwise noted) | Investment Management |  |  |  |  |  | Investment Services |  |  |  |  |  | Other |  |  |  |  |  | Consolidated Results |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 |  | 2015 |  | 2014 |  | 2016 |  | 2015 |  | 2014 |  | 2016 |  | 2015 |  | 2014 |  | 2016 |  | 2015 |  |  | 2014 |  |
| Revenue: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment services fees |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Asset servicing | \$ | 102 | \$ | 89 | \$ | 91 | \$ | 4,141 | \$ | 4,098 | \$ | 3,983 | \$ | 1 | \$ | - | \$ | 1 | \$ | 4,244 | \$ | 4,187 |  | \$ | 4,075 |
| Issuer services |  | . |  | - |  | . |  | 1,024 |  | 976 |  | 966 |  | 2 |  | 2 |  | 2 |  | 1,026 |  | 978 |  |  | 968 |
| Clearing services |  | - |  | - |  | - |  | 1,399 |  | 1,370 |  | 1,329 |  | 5 |  | 5 |  | 6 |  | 1,404 |  | 1,375 |  |  | 1,335 |
| Treasury services |  | 6 |  | 9 |  | 9 |  | 541 |  | 546 |  | 555 |  | $-$ |  | - |  | $-$ |  | 547 |  | 555 |  |  | 564 |
| Total investment services fees |  | 108 |  | 98 |  | 100 |  | 7,105 |  | 6,990 |  | 6,833 |  | 8 |  | 7 |  | 9 |  | 7,221 |  | 7,095 |  |  | 6,942 |
| Investment management fees |  | 3,232 |  | 3,263 |  | 3,321 |  | 69 |  | 70 |  | 74 |  | - |  | 22 |  | 48 |  | 3,301 |  | 3,355 |  |  | 3,443 |
| Performance fees |  | 60 |  | 97 |  | 111 |  | - |  | - |  | - |  | - |  | 1 |  | 4 |  | 60 |  | 98 |  |  | 115 |
| Foreign exchange and other trading revenue |  | (81) |  | (13) |  | (23) |  | 663 |  | 722 |  | 643 |  | 119 |  | 59 |  | (50) |  | 701 |  | 768 |  |  | 570 |
| Distribution and servicing |  | 192 |  | 152 |  | 157 |  | (26) |  | 10 |  | 11 |  |  |  |  |  | 5 |  | 166 |  | 162 |  |  | 173 |
| Financing-related fees |  | (3) |  | (1) |  | 1 |  | 226 |  | 222 |  | 168 |  | (4) |  | (1) |  | - |  | 219 |  | 220 |  |  | 169 |
| Investment and other income |  | (84) |  | (10) |  | (11) |  | 262 |  | 163 |  | 153 |  | 168 (a) |  | $166{ }^{\text {(a) }}$ |  | 1,083 (a) |  | $346{ }^{\text {(a) }}$ |  | 319 |  |  | 1,225 ${ }^{\text {(a) }}$ |
| Total fee revenue |  | 3,424 |  | 3,586 |  | 3,656 |  | 8,299 |  | 8,177 |  | 7,882 |  | 291 (a)(b) |  | 254 (a)(b) |  | 1,099 (a)(b) |  | 12,014 (a)(b) |  | 12,017 | (a)(b) |  | 12,637 (a)(b) |
| Net securities gains (losses) |  | - |  | 1 |  | 1 |  | - |  | - |  | - |  | 75 |  | 82 |  | 90 |  | 75 |  | 83 |  |  | 91 |
| Total fee and other revenue |  | 3,424 |  | 3,587 |  | 3,657 |  | 8,299 |  | 8,177 |  | 7,882 |  | 366 (a)(b) |  | 336 (a)(b) |  | 1,189 (a)(b) |  | 12,089 (a)(b) |  | 12,100 | (a)(b) |  | 12,728 (a)(b) |
| Net interest revenue (expense) |  | 327 |  | 319 |  | 274 |  | 2,797 |  | 2,622 |  | 2,468 |  | 14 |  | 85 |  | 138 |  | 3,138 |  | 3,026 |  |  | 2,880 |
| Total revenue |  | 3,751 |  | 3,906 |  | 3,931 |  | 11,096 |  | 10,799 |  | 10,350 |  | 380 (a) |  | 421 (a) |  | 1,327 (a) |  | 15,227 (a) |  | 15,126 | (a) |  | 15,608 (a) |
| Provision for credit losses |  | 6 |  | (1) |  |  |  | 8 |  | 28 |  | (21) |  | (25) |  | 133 |  | (27) |  | (11) |  | 160 |  |  | (48) |
| Noninterest expenses (ex. intangible amortization) |  | 2,696 |  | 2,762 |  | 2,921 |  | 7,187 |  | 7,340 |  | 8,066 |  | 394 |  | 432 |  | 892 |  | 10,277 |  | 10,534 |  |  | 11,879 |
| Amortization of intangible assets |  | 82 |  | 97 |  | 118 |  | 155 |  | 162 |  | 175 |  | - |  | 2 |  | 5 |  | 237 |  | 261 |  |  | 298 |
| Total noninterest expense |  | 2,778 |  | 2,859 |  | 3,039 |  | 7,342 |  | 7,502 |  | 8,241 |  | 394 |  | 434 |  | 897 |  | 10,514 |  | 10,795 |  |  | 12,177 |
| Income (loss) before taxes and noncontrolling interest | \$ | 967 | \$ | 1,048 | \$ | 892 | \$ | 3,746 | \$ | 3,269 | \$ | 2,130 | \$ | 11 (a)(b) | \$ | (146) ${ }^{(a)(b)}$ | \$ | 457 (a)(b) | \$ | 4,724 ${ }^{\text {(a) (b) }}$ | \$ | 4,171 | (a)(b) | \$ | 3,479 ${ }^{\text {(a) (b) }}$ |
| Income (loss) before taxes (ex. intangible amortization) - Non-GAAP | \$ | 1,049 | \$ | 1,145 | \$ | 1,010 | \$ | 3,901 | \$ | 3,431 | \$ | 2,305 | \$ | 11 (a)(b) | \$ | (144) (a)(b) | \$ | 462 (a)(b) | \$ | 4,961 (a)(b) | \$ | 4,432 | (a)(b) | \$ | 3,777 (a)(b) |
| Average loans | \$ | 15,015 | \$ | 12,545 | \$ | 10,589 | \$ | 44,740 | \$ | 45,743 | \$ | 40,137 | \$ | 1,926 | \$ | 2,384 | \$ | 3,484 | \$ | 61,681 | \$ | 60,672 |  | \$ | 54,210 |
| Average assets | \$ | 30,170 | \$ | 30,928 | \$ | 37,655 | \$ | 273,808 | \$ | 286,617 | \$ | 271,477 | \$ | 54,500 | \$ | 54,642 | \$ | 63,434 | \$ | 358,478 | \$ | 372,187 |  | \$ | 372,566 |
| Average deposits | \$ | 15,650 | \$ | 15,160 | \$ | 14,154 | \$ | 217,882 | \$ | 233,833 | \$ | 225,503 | \$ | 6,127 | \$ | 2,441 | \$ | 2,882 | \$ | 239,659 | \$ | 251,434 |  | - | 242,539 |
| Assets under management at period end (in billions) (c) | \$ | 1,648 | \$ | 1,625 | \$ | 1,686 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 1,648 | \$ | 1,625 |  | \$ | 1,686 |
| Assets under custody and/or administration at period end (in trillions) (d) | \$ | . | \$ | . | \$ | . | \$ | 29.9 | \$ | 28.9 | \$ | 28.5 | \$ | . | \$ | . | \$ | . | \$ | 29.9 | \$ | 28.9 |  | \$ | 28.5 |
| Market value of securities on loan at period end (in billions) (e) | \$ | - | \$ | - | \$ | - | \$ | 296 | \$ | 277 | \$ | 289 | \$ | - | \$ | - | \$ | - | \$ | 296 | \$ | 277 |  | \$ | 289 |
| Pre-tax operating margin |  | 26 \% |  | 27 \% |  | $23 \%$ |  | $34 \%$ |  | $30 \%$ |  | $21 \%$ |  | N/M |  | N/M |  | N/M |  | $31 \%$ |  | 28 \% |  |  | 22 \% |
| Memo: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Securities lending revenue |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 207 | \$ | 176 |  | \$ | 158 |

Securities lending revenue
(a) In the first quarter of 2014, prior periods were restated to reflect the retrospective application of adopting new accounting guidance related to our investments in qualified affordable housing projects (ASU 2014-01).

 ubsidiaries.
 (d) 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 Dec. 31, 2014, \$1.0 trillion at Dec. 31,2015 and $\$ 1.2$ trillion at Dec. 31,2016
 Dec. 31, 2016.

10 through 12 for businesses results.
N/M - Not meaningful

## THE BANK OF NEW YORK MELLON CORPORATION

## NONPERFORMING ASSETS - 12 Quarter Trend

| (dollar amounts in millions) | 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | March 31 |  | June 30 |  | Sept. 30 |  | Dec. 31 |  | March 31 |  | June 30 |  | Sept. 30 |  | Dec. 31 |  | March 31 |  | June 30 |  | Sept. 30 |  | Dec. 31 |  |
| Nonperforming loans: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other residential mortgages | \$ | 107 | \$ | 105 | \$ | 113 | \$ | 112 | \$ | 111 | \$ | 110 | \$ | 103 | \$ | 102 | \$ | 99 | \$ | 97 | \$ | 93 | \$ | 91 |
| Wealth management loans and mortgages |  | 12 |  | 12 |  | 13 |  | 12 |  | 12 |  | 11 |  | 12 |  | 11 |  | 11 |  | 10 |  | 7 |  | 8 |
| Commercial real estate |  | 4 |  | 4 |  | 4 |  | 1 |  | 1 |  | 1 |  | 1 |  | 2 |  | 2 |  | 2 |  | 1 |  | - |
| Lease financing |  | 13 |  | 13 |  | 13 |  | - |  | - |  | - |  | - |  | - |  | 5 |  | 4 |  | 4 |  | 4 |
| Foreign |  | 7 |  | 4 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Financial institutions |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 171 |  | 171 |  | 171 |  | - |  | - |
| Total nonperforming loans |  | 143 |  | 138 |  | 143 |  | 125 |  | 124 |  | 122 |  | 116 |  | 286 |  | 288 |  | 284 |  | 105 |  | 103 |
| Other assets owned |  | 3 |  | 4 |  | 4 |  | 3 |  | 4 |  | 5 |  | 7 |  | 6 |  | 4 |  | 5 |  | 4 |  | 4 |
| Total nonperforming assets (a) | \$ | 146 | \$ | 142 | \$ | 147 | \$ | 128 | \$ | 128 | \$ | 127 | \$ | 123 | \$ | 292 | \$ | 292 | \$ | 289 | \$ | 109 | \$ | 107 |
| Nonperforming assets ratio |  | 0.27 \% |  | 0.24 \% |  | 0.26 \% |  | 0.22 \% |  | 0.21 \% |  | 0.20 \% |  | 0.20 \% |  | 0.46 \% |  | 0.48 \% |  | 0.45 \% |  | 0.17 \% |  | 0.17 \% |
| Nonperforming assets ratio excluding margin loans |  | 0.39 \% |  | 0.34 \% |  | 0.37 \% |  | 0.33 \% |  | 0.30 \% |  | 0.30 \% |  | 0.28 \% |  | 0.67 \% |  | 0.69 \% |  | 0.63 \% |  | 0.23 \% |  | 0.23 \% |
| Allowance for loan losses/nonperforming loans |  | 138.5\% |  | 135.5\% |  | 133.6\% |  | 152.8\% |  | 153.2\% |  | 150.0\% |  | 156.0\% |  | 54.9\% |  | 56.3\% |  | 55.6\% |  | 141.0\% |  | 164.1\% |
| Allowance for loan losses/nonperforming assets |  | 135.6\% |  | 131.7\% |  | 129.9\% |  | 149.2\% |  | 148.4\% |  | 144.1\% |  | 147.2\% |  | 53.8\% |  | 55.5\% |  | 54.7\% |  | 135.8\% |  | 157.9\% |
| Total allowance for credit losses/nonperforming loans |  | 228.0\% |  | 225.4\% |  | 201.4\% |  | 224.0\% |  | 228.2\% |  | 227.9\% |  | 241.4\% |  | 96.2\% |  | 99.7\% |  | 98.6\% |  | 261.0\% |  | 272.8\% |
| Total allowance for credit losses/nonperforming assets |  | 223.3\% |  | 219.0\% |  | 195.9\% |  | 218.8\% |  | 221.1\% |  | 218.9\% |  | 227.6\% |  | 94.2\% |  | 98.3\% |  | 96.9\% |  | 251.4\% |  | 262.6\% |



 investment management funds retroactively to Jan.1, 2015

## THE BANK OF NEW YORK MELLON CORPORATION

## ALLOWANCE FOR CREDIT LOSSES, PROVISION AND NET CHARGE-OFFS - 12 Quarter Trend

| (dollar amounts in millions) | 2014 |  |  |  |  |  |  |  | 201 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | March 31 |  | June 30 |  | Sept. 30 |  | Dec. 31 |  | March 31 |  | June 30 |  | Sept. 30 |  | Dec. 31 |  | March 31 |  | June 30 |  | Sept. 30 |  | Dec. 31 |  |
| Allowance for credit losses: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Allowance for credit losses | \$ | 210 | \$ | 198 | \$ | 187 | \$ | 191 | \$ | 191 | \$ | 190 | \$ | 183 | \$ | 181 | \$ | 157 | \$ | 162 | \$ | 158 | \$ | 148 |
| Allowance for lending-related commitments |  | 134 |  | 128 |  | 124 |  | 97 |  | 89 |  | 93 |  | 95 |  | 99 |  | 118 |  | 125 |  | 122 |  | 126 |
| Allowance for credit losses - beginning of period |  | 344 |  | 326 |  | 311 |  | 288 |  | 280 |  | 283 |  | 278 |  | 280 |  | 275 |  | 287 |  | 280 |  | 274 |
| Net (charge-offs) recoveries: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Charge-offs |  | (1) |  | (4) |  | (5) |  | (10) |  | - |  | - |  | - |  | (170) |  | - |  | - |  | (1) |  | (1) |
| Recoveries |  | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  | 2 |  | 2 |  | 2 |  | 14 |  | 1 |
| Total Net (charge-offs) recoveries |  | - |  | (3) |  | (4) |  | (9) |  | 1 |  | 1 |  | 1 |  | (168) |  | 2 |  | 2 |  | 13 |  | - |
| Provision for credit losses |  | (18) |  | (12) |  | (19) |  | 1 |  | 2 |  | (6) |  | 1 |  | 163 |  | 10 |  | (9) |  | (19) |  | 7 |
| Allowance for credit losses - end of period | \$ | 326 | \$ | 311 | \$ | 288 | \$ | 280 | \$ | 283 | \$ | 278 | \$ | 280 | \$ | 275 | \$ | 287 | \$ | 280 | \$ | 274 | \$ | 281 |
| Allowance for loan losses | \$ | 198 | \$ | 187 | \$ | 191 | \$ | 191 | \$ | 190 | \$ | 183 | \$ | 181 | \$ | 157 | \$ | 162 | \$ | 158 | \$ | 148 | \$ | 169 |
| Allowance for lending-related commitments |  | 128 |  | 124 |  | 97 |  | 89 |  | 93 |  | 95 |  | 99 |  | 118 |  | 125 |  | 122 |  | 126 |  | 112 |
| Allowance for credit losses - end of period | \$ | 326 | \$ | 311 | \$ | 288 | \$ | 280 | \$ | 283 | \$ | 278 | \$ | 280 | \$ | 275 | \$ | 287 | \$ | 280 | \$ | 274 | \$ | 281 |
| Allowance for loan losses as a percentage of total loans |  | 0.37 \% |  | 0.32 \% |  | 0.33 \% |  | 0.32 \% |  | 0.31 \% |  | 0.29 \% |  | 0.29 \% |  | 0.25 \% |  | 0.26 \% |  | 0.25 \% |  | 0.22 \% |  | 0.26 \% |

## THE BANK OF NEW YORK MELLON CORPORATION <br> Quarterly Financial Trends <br> January 19, 2017

## Notes:

## The following transactions/changes have impacted the reporting of our results:

In the first quarter of 2016, results of credit-related activities were reclassified from the Other segment to the Investment Services segment. Also, concurrent with this reclassification, the provision for credit losses associated with the respective credit portfolios is now reflected in each business segment. All prior periods have been restated.

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. This change did not impact the consolidated results.

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. This change did not impact the consolidated results.

In the third quarter of 2015, results of Meriten were reclassified from the Investment Management business to the Other segment. Meriten Investment Management was sold in July 2015

The first quarter of 2015 was restated to reflect the retrospective application of adopting new accounting guidance related to Consolidations (ASU 2015-02)

In the first quarter of 2014, prior periods were restated to reflect the retrospective application of adopting new accounting guidance related to our investments in qualified affordable housing projects (ASU 2014-01).

Restructuring charges in the second quarter of 2014 represent corporate initiatives and were recorded in the Other segment.

Certain immaterial reclassifications/revisions have been made to prior periods to place them on a basis comparable with the current period's presentation

In businesses where average deposits are greater than average loans, average assets include an allocation of investment securities equal to the difference

Quarterly return on common and tangible common equity ratios are annualized.

## Non-GAAP Measures:

Certain Non-GAAP measures are included in this document. These measures are used by management to monitor financial performance, both on a company-wide and on a business basis. These Non-GAAP measures relate to certain revenue/expense categories, impairment charge/(recovery) related to Sentinel, percentages and ratios as described in footnotes. For further information, see 'Supplemental information -- Explanation of GAAP and Non-GAAP Financial Measures' in the Quarterly Earnings Release. Also, see "Appendix - GAAP to Non-GAAP Reconciliations" beginning on page 17 for the reconciliation of Non-GAAP measures. Summations may not equal due to rounding. As a result of our rounding convention and reclassifications noted above, differences may exist between the business trends data versus business data in the Form 10-Q for the quarter ended September 30, 2016 or other reports filed with the SEC.

## Appendix - GAAP to Non-GAAP Reconciliations

## THE BANK OF NEW YORK MELLON CORPORATION

## SUPPLEMENTAL INFORMATION - EXPLANATION OF GAAP AND NON-GAAP FINANCIAL MEASURES

BNY Mellon has included in these Quarterly Financial Trends certain Non-GAAP financial measures based on tangible common shareholders' equity. BNY Mellon believes that the ratio of tangible common shareholders' equity to tangible assets of operations is a measure of capital strength that provides additional useful information to investors. 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. 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.

 related to Sentinel, are also presented. Operating margin measures may also exclude the provison for credit losses and distribution and servicing expense. BNY Mellon believes that these

 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
 with how management views the business.

The Quarterly Financial Trends revenue measures also exclude the gain on the sale of our equity investment in Wing Hang and the gain on the sale of our One Wall Street building. Expense measures also exclude the charge related to investment management funds, net of incentives.

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

## THE BANK OF NEW YORK MELLON CORPORATION

## PRE-TAX OPERATING MARGIN RATIO RECONCILIATION - 12 QUARTER TREND

## (dollar amounts in millions)

Income before income taxes - GAAP
Less: Net income (loss) attributable to noncontrolling interests of consolidated investment management funds
Gain on the sale of our equity investment in Wing Hang
Gain on the sale of our One Wall Street building
Add: Amortization of intangible assets
M\&I, litigation and restructuring charges (recoveries)
Impairment charge (recovery) related to Sentinel
Charge (recovery) related to investment management funds, net of incentives Income before income taxes, as adjusted - Non-GAAP (a)

Fee and other revenue - GAAP
Income (loss) from consolidated investment management funds - GAAP
Net interest revenue - GAAP
Total revenue - GAAP
Less: Net income (loss) attributable to noncontrolling interests of consolidated investment management funds
Gain on the sale of our equity investment in Wing Hang
Gain on the sale of our One Wall Street building
Total revenue, as adjusted - Non-GAAP (a)
Pre-tax operating margin- GAAP (b)(c)
Adjusted pre-tax operating margin - Non-GAAP (a)(b)(c)

| 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | t Qtr | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  |
| \$ | 926 | \$ | 811 | \$ | 1,662 | \$ | 164 | \$ | 1,090 | \$ | 1,165 | \$ | 1,109 | \$ | 871 | \$ | 1,091 | \$ | 1,165 | \$ | 1,317 | \$ | 1,152 |
|  | 20 |  | 17 |  | 23 |  | 24 |  | 31 |  | 37 |  | (5) |  | 5 |  | (7) |  | 4 |  | 9 |  | 4 |
|  | - |  | - |  | 490 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
|  | - |  | - |  | 346 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
|  | 75 |  | 75 |  | 75 |  | 73 |  | 66 |  | 65 |  | 66 |  | 64 |  | 57 |  | 59 |  | 61 |  | 60 |
|  | (12) |  | 122 |  | 220 |  | 800 |  | (3) |  | 59 |  | 11 |  | 18 |  | 17 |  | 7 |  | 18 |  | 7 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 170 |  | - |  | - |  | (13) |  | - |
|  | (5) |  | 109 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| \$ | 964 | \$ | 1,100 | \$ | 1,098 | \$ | 1,013 | \$ | 1,122 | \$ | 1,252 | \$ | 1,191 | \$ | 1,118 | \$ | 1,172 | \$ | 1,227 | \$ | 1,374 | \$ | 1,215 |
| \$ | 2,883 | \$ | 2,980 | \$ | 3,851 | \$ | 2,935 | \$ | 3,012 | \$ | 3,067 | \$ | 3,053 | \$ | 2,950 | \$ | 2,970 | \$ | 2,999 | \$ | 3,150 | \$ | 2,954 |
|  | 36 |  | 46 |  | 39 |  | 42 |  | 52 |  | 40 |  | (22) |  | 16 |  | (6) |  | 10 |  | 17 |  | 5 |
|  | 728 |  | 719 |  | 721 |  | 712 |  | 728 |  | 779 |  | 759 |  | 760 |  | 766 |  | 767 |  | 774 |  | 831 |
|  | 3,647 |  | 3,745 |  | 4,611 |  | 3,689 |  | 3,792 |  | 3,886 |  | 3,790 |  | 3,726 |  | 3,730 |  | 3,776 |  | 3,941 |  | 3,790 |
|  | 20 |  | 17 |  | 23 |  | 24 |  | 31 |  | 37 |  | (5) |  | 5 |  | (7) |  | 4 |  | 9 |  | 4 |
|  | - |  | - |  | 490 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
|  | - |  | - |  | 346 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| \$ | 3,627 | \$ | 3,728 | \$ | 3,752 | \$ | 3,665 | \$ | 3,761 | \$ | 3,849 | \$ | 3,795 | \$ | 3,721 | \$ | 3,737 | \$ | 3,772 | \$ | 3,932 | \$ | 3,786 |
|  | 25 \% |  | 22 \% |  | 36 \% |  | 4 \% |  | 29 \% |  | $30 \%$ |  | 29 \% |  | 23 \% |  | 29 \% |  | $31 \%$ |  | 33 \% |  | $30 \%$ |
|  | 27 \% |  | $30 \%$ |  | 29 \% |  | 28 \% |  | $30 \%$ |  | 33 \% |  | 31 \% |  | $30 \%$ |  | 31 \% |  | 33 \% |  | 35 \% |  | 32 \% |



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




## the bank of new york mellon corporation

RETURN ON TANGIBLE COMMON EQUITY RECONCILIATION - 12 QUARTER TREND

## (dollar amounts in millions)

Net income applicable to common shareholders of The Bank of New York Mellon Corporation - GAAP
Add: Amortization of intangible assets
Less: Tax impact of amortization of intangible assets
Net income applicable to common shareholders of The Bank of New York Mellon Corporation excluding amortization of intangible assets -Non-GAAP

Average common shareholders' equity
Less: Average goodwill
Average intangible assets
Add: Deferred tax liability - tax deductible goodwill (a)
Deferred tax liability - intangible assets (a)
Average tangible common shareholders' equity - Non-GAAP
Return on tangible common equity - Non-GAAP (b)
(a) Deferred tax liabilities are based on fully phased-in Basel III rules
(b) Annualized.

## THE BANK OF NEW YORK MELLON CORPORATION

## NONINTEREST EXPENSE RECONCILIATION - 12 QUARTER TREND

## (dollar amounts in millions)

Total noninterest expense -GAAP
Less: Amortization of intangible assets

| 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | t Qtr | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  |
| \$ | 2,739 | \$ | 2,946 | \$ | 2,968 | \$ | 3,524 | \$ | 2,700 | \$ | 2,727 | \$ | 2,680 | \$ | 2,692 | \$ | 2,629 | \$ | 2,620 | \$ | 2,643 | \$ | 2,631 |
|  | 75 |  | 75 |  | 75 |  | 73 |  | 66 |  | 65 |  | 66 |  | 64 |  | 57 |  | 59 |  | 61 |  | 60 |
|  | (12) |  | 122 |  | 220 |  | 800 |  | (3) |  | 59 |  | 11 |  | 18 |  | 17 |  | 7 |  | 18 |  | 7 |
|  | (5) |  | 109 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |

Total noninterest expense excluding amortization of intangible assets and M\&l, litigation and restructuring charges (recoveries), and the charge recovery) related to investment management funds, net of incentives Non-GAAP

## THE BANK OF NEW YORK MELLON CORPORATION

PRE-TAX OPERATING MARGIN - INVESTMENT MANAGEMENT BUSINESS - 12 QUARTER TREND

## dollar amounts in millions)

ncome before income taxes - GAAP
Add: Amortization of intangible assets
Provision for credit losses
Charge (recovery) related to investment management funds, net of incentives
Income before income taxes excluding amortization of intangible assets, provision for credit
losses and the charge (recovery) related to investment management funds, net of incentives - Non-GAAP

## Total revenue - GAAP

ess: Distribution and servicing expense
Total revenue net of distribution and servicing expense - Non-GAAP

Pre-tax operating margin - GAAP (a)

Adjusted pre-tax operating margin excluding amortization of intangible assets, provision fo credit losses, distribution and servicing expense, and the charge (recovery) related to investment management funds, net of incentives - Non-GAAP (a)

| 2014 |  |  |  |  |  |  |  | 2015 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Qtr | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  | 1st Qtr |  | 2nd Qtr |  | 3rd Qtr |  | 4th Qtr |  |
| \$ | 247 | \$ | 167 | \$ | 243 | \$ | 235 | \$ | 263 | \$ | 259 | \$ | 236 | \$ | 290 | \$ | 217 | \$ | 234 | \$ | 256 | \$ | 260 |
|  | 30 |  | 30 |  | 30 |  | 28 |  | 24 |  | 25 |  | 24 |  | 24 |  | 19 |  | 19 |  | 22 |  | 22 |
|  | (1) |  | 1 |  | - |  | - |  | (1) |  | 3 |  | 1 |  | (4) |  | (1) |  | 1 |  | - |  | 6 |
|  | (5) |  | 109 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| \$ | 271 | \$ | 307 | \$ | 273 | \$ | 263 | \$ | 286 | \$ | 287 | \$ | 261 | \$ | 310 | \$ | 235 | \$ | 254 | \$ | 278 | \$ | 288 |
| \$ | 951 | \$ | 1,018 | \$ | 985 | \$ | 977 | \$ | 994 | \$ | 987 | \$ | 926 | \$ | 999 | \$ | 895 | \$ | 938 | \$ | 958 | \$ | 960 |
|  | 106 |  | 111 |  | 105 |  | 101 |  | 97 |  | 95 |  | 94 |  | 92 |  | 100 |  | 102 |  | 104 |  | 98 |
| \$ | 845 | \$ | 907 | \$ | 880 | \$ | 876 | \$ | 897 | \$ | 892 | \$ | 832 | \$ | 907 | \$ | 795 | \$ | 836 | \$ | 854 | \$ | 862 |
|  | 26 \% |  | 16 \% |  | 25 \% |  | 24 \% |  | 26 \% |  | 26 \% |  | 25 \% |  | 29 \% |  | 24 \% |  | 25 \% |  | 27 \% |  | 27 \% |
|  | 32 \% |  | 34 \% |  | 31 \% |  | 30 \% |  | 32 \% |  | 32 \% |  | 31 \% |  | 34 \% |  | 30 \% |  | $30 \%$ |  | 33 \% |  | 33 \% |

(a) Income before taxes divided by total revenue.


[^0]:    Note: Interest and average rates were calculated on a taxable equivalent basis, at tax rates of approximately $35 \%$, using dollar amounts in thousands and the actual number of days in the year.

